BellSouth Telecommunications, Inc.
Alabama Legal Department
Room 304N
3196 Highway 280 South
Birmingham, AL 35243

francis.semmes@bellsouth.com

Francis B. Semmes
General Counsel - Alabama

205 972 2556
Fax 205 969 2285

March 24, 2004

VIA HAND DELIVERY

Walter Thomas, Secretary
Alabama Public Service Commission
100 N. Union Street – 8th Floor
RSA Union Building
Montgomery, AL 36104

Re: Implementation of Requirements Arising from Federal Communications Commission's Triennial Review Order – Docket No. 29054

Dear Mr. Thomas:

Enclosed are the original and ten (10) copies of *BellSouth Telecommunications, Inc.'s Surrebuttal Testimony and Exhibits for witnesses in the Phase II (Switching) and the Rebuttal Testimony and Exhibits for witnesses in Phase III (Loop/Transport)* of the above-referenced proceeding.

SURREBUTTAL (Phase II)	REBUTTAL (Phase III)
Ken L. Ainsworth	Dr. Aniruddha Banerjee
Dr. Debra Aron	Shelley W. Padgett
Dr. Randall S. Billingsley	
Eric Fogle	
A. Wayne Gray	
Alfred Heartley	
Milton McElroy, Jr.	
W. Keith Milner	
Ronald M. Pate	
Dr. Chris Pleatsikas	
John A. Ruscilli	
James W. Stegeman	
Pamela A. Tipton	
Alphonso J. Varner	

The public version of this filing is available on the BellSouth website via the following link: http://bellsouthcorp.com/policy/triennialreview/filings/2004-03-24. In addition, a ***proprietary version*** as well as a public version of the testimonies of Dr. Debra J. Aron and Ms. Pamela Tipton will be provided to those who have executed the Protective Agreement in this proceeding. In addition, certain exhibits for Mr. Stegeman and Ms. Tipton are ***proprietary*** and will be provided in accordance with the Protective Agreement.

Please distribute as needed and return a stamped copy of this cover letter to my office in the envelope provided. Thank you for your assistance in this matter.

Sincerely,

Francis B. Semmes

FBS/mhs
Enclosures

cc: Honorable John Garner, ALJ
Mr. Darrell A. Baker (via email)
Parties of Record

CERTIFICATE OF SERVICE

I hereby certify that I have served a copy of the foregoing *Surrebuttal Testimony and Exhibits – Phase II & Rebuttal Testimony and Exhibits – Phase III of BellSouth Telecommunications, Inc.* on the parties of record shown below by electronic mail and/or by placing a copy in the U.S. Mail, postage prepaid, on this the **24th** day of **March, 2004.**

Robin G. Laurie, Esq.
Counsel for CompSouth, AT&T, Covad, ITC^DeltaCom
BALCH & BINGHAM
2 Dexter Avenue
P. O. Box 78
Montgomery, AL 36101-0078
rlaurie@balch.com - Email

Edgar C. Gentle, III, Esq.
Counsel for CenturyTel of Alabama, LLC
Gentle, Pickens, Eliason, Turner & Ritondo
#2 North Twentieth Street
Suite 1200
Birmingham, AL 35203
escrowagen@aol.com - Email

Mark D. Wilkerson, Esq.
Counsel for Rural LECs
Brantley, Wilkerson & Bryan, PC
405 S. Hull Street
Montgomery, AL 36101
mark@brantleywilkerson.com - Email

Paul A. Brantley, Esq.
Counsel for KMC Telecom, Inc.
Brantley, Wilkerson & Bryan, PC
405 S. Hull Street
Montgomery, AL 36101
paul@brantleywilkerson.com – Email

Francis B. Semmes /mks
FRANCIS B. SEMMES

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Ken L. Ainsworth, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 17 pages and 1 exhibits.

Ken L. Ainsworth

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Micheale F. Bixler Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF KENNETH L. AINSWORTH

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054 (PHASE II)

MARCH 24, 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 AND REBUTTAL 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. James D. Webber and Ms. Sherry Lichtenberg on behalf of MCI, and Mr. Mark David Van de Water on behalf of AT&T.

The Hot Cut Process – General

Q. THE COMPETITIVE LOCAL EXCHANGE CARRIERS ("CLECS") HAVE CRITICIZED BELLSOUTH FOR BEING UNWILLING TO COLLABORATE (*See* Van de Water, at 8; 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 throw-back process if requested by the CLEC during the provisioning process;
- 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 in systems release 16.0 currently scheduled for July of this year;
- BellSouth will implement a scheduling tool similar to SBC'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 CLEC's alleged criticisms of the process. Exhibit KLA-7, filed with my rebuttal testimony, is the UNE-P to UNE-L Bulk Migration CLEC Information Package, which was updated and posted to the web on February 18, 2004. It contains many of the enhancements I just mentioned.

Q. MS. LICHTENBERG ALLEGES, ON PAGE 10 OF HER TESTIMONY, 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. There are ordering and provisioning efficiencies in the batch process and thereby it complies with the TRO.

The Batch Hot Cut Process – Specifics

Hot Cuts for EELs

Q. ON PAGES 2 AND 6 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. Webber 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. Exhibit KLA-6, filed with my rebuttal testimony, is a draft of the Market Service Description for this process.

Q. FURTHER ON PAGE 7 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 7 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 OF HER TESTIMONY, 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 OF HER TESTIMONY, 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 BellSouth witness Mr. Pate describes.

In an effort to be responsive to CLEC concerns, however unfounded 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. Exhibit KLA-5, filed with my rebuttal testimony, outlines specific details of this web-based application.

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 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, STATES "THE FOUR BUSINESS DAYS BELLSOUTH REQUIRES FOR INITIAL NEGOTIATION IS FAR TOO LONG; THE ENTIRE PROCESS FROM START TO FINISH SHOULD TAKE FIVE BUSINESS DAYS." 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 (5) business 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 has reduced that interval from seven (7) days to four (4) days as part of a batch interval reduction effort. This change was effective on February 18, 2004.

In addition, BellSouth, in conjunction with other planned enhancements, will reduce the 14-business day provisioning interval to eight (8) days. This change is currently scheduled to take place in systems release 16.0 in July of this year.

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. Exhibit KLA-4, filed with my rebuttal testimony, provides specific details and sample screen prints of information to be contained in the web-based system.

SBC's Process

Q. ON PAGES 8-9 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 10 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. As I discussed earlier, BellSouth has enhanced 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. ON PAGE 11 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. As I previously stated, BellSouth will include after hours and Saturday cuts in the batch process.

Retail-UNE-L Conversions

Q. ON PAGE 15 OF MR. VAN DE WATER'S TESTIMONY, HE CRITICIZES 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.

<u>Scalability Of The Batch Hot Cut Process</u>

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, REGARDING THE IMPACT OF INCREASED MANUAL ORDER PROCESSING REQUIRED FOR UNE-L ORDERS, MS. LICHTENBERG ALLEGES THAT BELLSOUTH'S FORCE MODEL "FAILS TO ADDRESS THE FUNDAMENTAL QUESTION OF WHETHER SIMPLY STAFFING UP CAN ADDRESS THE PROBLEM." 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 16 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 20 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 date referenced by Mr. Van de Water, 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 350 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; over 5400 in January 2004; and over 6600 in February 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 31, 2004.

Q. ON PAGE 21 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 21-month period to convert all of their UNE-Ps.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

UNE-P to UNE-L Order Summary
October 9, 2003 - January 31, 2004

	Date	Volume	% DD Complete
October	10/9/2003	61	100.0%
199	10/10/2003	91	100.0%
	10/16/2003	31	100.0%
	10/17/2003	2	100.0%
	10/21/2003	11	100.0%
	10/28/2003	2	100.0%
	10/29/2003	1	100.0%
November	11/4/2003	1	0.0%
1977	11/5/2003	1	100.0%
	11/6/2003	85	98.8%
	11/7/2003	90	98.9%
	11/10/2003	70	100.0%
	11/11/2003	62	100.0%
	11/12/2003	62	100.0%
	11/13/2003	69	98.6%
	11/14/2003	16	100.0%
	11/17/2003	98	99.0%
	11/18/2003	136	98.5%
	11/19/2003	98	100.0%
	11/20/2003	375	99.7%
	11/21/2003	167	98.8%
	11/24/2003	434	99.3%
	11/25/2003	202	100.0%
	11/26/2003	11	100.0%
December	12/1/2003	140	100.0%
3136	12/2/2003	319	99.4%
	12/3/2003	238	99.6%
	12/4/2003	114	98.2%
	12/5/2003	7	85.7%
	12/8/2003	23	95.7%
	12/10/2003	393	98.0%
	12/12/2003	85	100.0%
	12/15/2003	285	99.6%
	12/16/2003	3	66.7%
	12/17/2003	154	96.1%
	12/18/2003	9	100.0%
	12/19/2003	297	98.3%
	12/22/2003	642	98.9%
	12/23/2003	1	100.0%
	12/24/2003	415	98.6%
	12/26/2003	3	100.0%
	12/29/2003	8	100.0%

UNE-P to UNE-L Order Summary
October 9, 2003 - January 31, 2004

	Date	Volume	% DD Complete
January	1/2/2004	44	95.5%
5469	1/5/2004	671	98.8%
	1/6/2004	4	100.0%
	1/7/2004	1022	95.6%
	1/8/2004	900	99.9%
	1/9/2004	516	98.3%
	1/12/2004	298	99.7%
	1/14/2004	195	99.0%
	1/15/2004	239	97.5%
	1/16/2004	20	95.0%
	1/19/2004	186	98.4%
	1/21/2004	211	100.0%
	1/22/2004	343	98.0%
	1/23/2004	398	99.0%
	1/28/2004	237	100.0%
	1/29/2004	185	100.0%

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Cook
STATE OF Illinois

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Debra Aron, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed surrebuttal testimony consisting of 109 pages and 2 exhibits.

Debra Aron

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 17th DAY OF MARCH 2004

Notary Public

Official Seal
Lesley Bates
Notary Public State of Illinois
My Commission Expires 06/25/07

BELLSOUTH TELECOMMUNICATIONS, INC.

BEFORE THE

ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054 Phase II

SURREBUTTAL TESTIMONY OF

DR. DEBRA J. ARON

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME.

A. My name is Debra J. Aron.

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

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. My surrebuttal testimony rebuts the economic arguments made by Mr. Wood (AT&T), Dr. Bryant (MCI), Mr. Klick (AT&T), and Mr. Bradbury (AT&T) on a number of topics.

Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.

A. The arguments that I respond to typically are based on one of several themes. The first reflects a desire to re-write the TRO more to the witnesses' liking, or re-argue some of the positions that were considered and rejected by the FCC in its determination of its rules. For example, Dr. Bryant and Mr. Wood counsel this Authority to simply ignore the FCC's requirement to examine a "potential deployment" analysis. Mr. Wood argues that if potential deployment indicates "no impairment" in markets that do not pass the triggers tests, the results must be wrong, because we do not observe facilities deployment sufficient to pass the triggers tests, and because we have observed failure in the past. Besides being contrary to the directions provided by the FCC, and totally irrelevant to the task at hand, such arguments fail to consider the economic fact that CLECs select their method of competitive entry, such as UNE-P or UNE-L, *not* solely on the basis of unimpairment, which is the topic of this proceeding, but also on the basis of what is most profitable to the CLEC given the options available. It is therefore unreasonable from an economic perspective (as well as contrary to the plain

language of the TRO) to rely solely on actual deployment as a basis for determining unimpairment.

A second set of criticisms involves the structure of the BACE model. For example, there are subjective declarations by one witness that the model is overly sensitive, and by another witness that it is not sensitive enough. Such subjective criticisms are, of course, without merit. In other instances, Mr. Stegeman demonstrates that the basis of the criticisms is the result of a misinterpretation by the witness of the model structure or how one goes about implementing an assumption change, or some combination of these. As a result, nothing that I have seen, replicated, or attempted to replicate changes any of my conclusions regarding the markets in which we have found that CLECs are "unimpaired" without unbundled local switching, and to a large extent, these runs demonstrate that my results are robust to a variety of assumption changes.

The third general area of complaint pertains to the parameter estimates that I provided to the BACE model. In determining these estimates, I recognized that the FCC is very clear that the potential deployment analysis should be based on an efficient CLEC using the "most efficient network architecture available" and executing the "most efficient business model." (TRO 517.) The FCC also notes that it is appropriate to "weigh[ ] advantages and disadvantages" (TRO 517) that may be available to the efficient CLEC.

While these requirements provide substantial discretion, my approach is very conservative. We model a generic, new CLEC that seeks to enter the market without any customers or any real-world advantages such as a brand name. My parameter estimates, such as those regarding customer acquisition costs, General and Administrative ("G&A") expenses, and churn are developed from existing ILEC, CLEC, or industry data, which means that these estimates may be more conservative than what an efficient CLEC could attain. Moreover, where appropriate data were available, I based my estimates on averages and midpoints rather than on best-of-class (or better-than-existing) ILEC, CLEC, or industry figures, even though these best-in-class figures might arguably better represent the prospects of an efficient CLEC executing the most efficient business model.

The criticisms of my parameter value estimates either point to actual CLEC performance, or they seek to perversely handicap the hypothetical CLEC, depending on whichever contributes toward a finding of "impairment." For example, several of the witnesses claim that the assumed market penetration in the first year for residential customers is too high. Notwithstanding the fact that they misinterpret how the BACE model uses this data (it essentially cuts the market penetration in half when computing revenues for the year), even a casual glance at reality would demonstrate that real-world firms already have an existing base of UNE-P customers and that they do not start from a base of zero, as the modeled

CLEC does. According to the FCC, penetration in Alabama is at least 10 percent. (I say "at least," because the FCC's estimate understates the market share, as I explain at length later in my testimony.) Consistent with the FCC's directions, we could have modeled a CLEC that begins with some level of UNE-P-based customers (and revenues). Instead, we adopted the conservative approach that the CLEC starts with no customers at all. Witnesses such as Mr. Wood and Mr. Klick essentially argue that this is not conservative enough for them. As I have noted, the fact that BACE models a startup reflects substantial conservatism on our part. We legitimately could have modeled a CLEC as an existing, going concern with an existing base of UNE-P customers. That we did not means that there may be more real-world "non-impairment" than what is indicated by our BACE results.

As another example, there are criticisms of my recommended residential customer acquisition costs. These costs were developed from *actual CLEC expenses* as reported to investment analysts. Dr. Bryant recommends that customer acquisition costs be developed partly on the basis of what *wireless* companies incur, even though these costs may include the cost of the handset. This is unreasonable. In addition, as I describe later in my testimony, the use of actual CLEC data to determine customer acquisition costs is conservative because UNE-P-based CLECs can have the incentive to spend inefficiently high amounts to acquire customers.

There are also criticisms of the prices that I recommend for use in the BACE model. The FCC foresaw that price would be a contentious issue, and instructed us to base the modeled prices on existing prices. I therefore developed prices on the basis of existing CLEC bundle prices and discounts from BellSouth's prices for *a la carte* services. Consistent with the FCC's directions, we kept prices constant over the entire time horizon of the model. Although not required by the TRO, to be consistent, we kept costs constant as well, and did not adjust them downward for any gains in productivity that an efficient CLEC might arguably attain. In another example of trying to re-write the TRO, several of the witnesses recommend that we put prices on a downward trend based on speculation about the future (though none noted or complained about our declining to impose a productivity factor on costs over time).

In sum, the model that we present takes a cautious, conservative approach to switch-based CLEC entry. The services that the CLEC is assumed to offer are services that CLECs offer today, and the prices are based on prevailing prices. The costs associated with customer acquisition, G&A, and the like also are based on industry data. Our approach implements the FCC's requirement to consider an efficient CLEC, but it does not come close to testing the limits of that requirement. Our results therefore should provide the Alabama Public Service Commission ("APSC" or "Commission") with a reasonable indication of the prospects for

successful economic entry by a switch-based CLEC in the BellSouth territory in Alabama.

Q. HOW IS YOUR SURREBUTTAL TESTIMONY ORGANIZED?

A. In section II, I respond to interpretations that other witnesses seek to ascribe to the TRO. In section III, I respond to issues related to competition. In section IV, I respond to criticisms and misrepresentations of the operations of the BACE model. In section V, I respond to testimony regarding the implementation of the "efficient CLEC" requirement of the TRO. Finally, in section VI, I respond to criticisms of the various parameter values that I provided in the BACE model.

II. REBUTTAL OF ISSUES RELATED TO THE INTERPRETATION OF THE TRIENNIAL REVIEW ORDER

Q. DR. ARON, PLEASE GENERALLY DESCRIBE THE CONTENTS OF THIS SECTION OF YOUR TESTIMONY.

A. Several of the witnesses offer recommendations that amount to re-writing the requirements of the TRO. I will discuss why these recommendations are in error and should be rejected.

Q. MR. WOOD ARGUES THAT THE "POTENTIAL DEPLOYMENT" ANALYSIS CAN IDENTIFY CAUSES OF IMPAIRMENT, BUT THAT IT MAY NOT BE VALID TO DETERMINE WHETHER THERE IS ANY IMPAIRMENT. (WOOD REBUTTAL 17-18.) PLEASE COMMENT.

A. Mr. Wood's argument is directly contrary to the express language of the FCC's rules and the intent of its TRO. Mr. Wood repeats a similar erroneous argument that Mr. Gillan made in his direct testimony. (Gillan Direct 17-19.) The erroneous argument is that if there is insufficient actual deployment to satisfy the triggers test, any potential deployment analysis that indicates "no impairment" must, in some way, be flawed. As a result, the business case approach can only be used to identify possible reasons for impairment, and not impairment itself. (Wood Rebuttal 8-9, 17-18.) This is nonsense.

A plain reading of the FCC's rule (51.319(d)(2)(iii)(B)) and paragraphs 515 to 520 of the TRO (which describe the factors that the state commission should consider in its potential deployment analysis) shows that there is no support for Mr. Wood's argument. It is clear from those paragraphs and from the rules themselves that the purpose of the potential deployment test is to help the Commission identify markets where CLECs are not impaired without access to the switching UNE precisely in situations where the triggers are not met.

There is a valid economic reason that the FCC provided for such a test. A CLEC's decision about switching deployment depends not only on what is feasible, but also on what is most profitable under the relevant market conditions. The rational CLEC selects the most profitable method of entry from the set of feasible methods. Thus, while the existence of actual CLEC self-deployment (or wholesaling) of switching clearly demonstrates that there is no impairment in that geographic market, *an observed lack of deployment sufficient to satisfy the triggers test cannot by itself indicate that there is impairment* for two reasons. First, as I explained in my rebuttal testimony, failure to satisfy the triggers test does not mean that there is no facilities-based competition. For example, a market may have two, robust switch-based CLECs serving the mass market and others serving the enterprise market. Such a situation would fail the triggers test. The FCC noted that the existence of such competition is nevertheless relevant to the analysis of impairment. Second, a rational CLEC may select UNE-P, and the use of the ILEC's network, *even if there is no impairment associated with self-provisioning*.

For example, suppose a CLEC could generate a net present value (discounted profits) of $100 using its own infrastructure to enter a market, but that it can generate $200 of value using the incumbent's infrastructure. The positive NPV from self-provisioning means, by definition, that the CLEC is unimpaired without access to unbundled switching. Nevertheless, a rational firm would select the second alternative because it is more profitable.

Q. MR. WOOD CLAIMS THAT ACTUAL DEPLOYMENT (OR LACK THEREOF) SHOULD BE A REALITY CHECK TO A POTENTIAL DEPLOYMENT ANALYSIS BECAUSE CLECS WILL DEPLOY THEIR OWN SWITCHES WHENEVER IT IS FEASIBLE. (WOOD REBUTTAL 10.) PLEASE COMMENT.

A. Mr. Wood's argument is profoundly mistaken. As I discussed, a CLEC rationally will select its entry method based not only on feasibility but also on relative profitability.

Q. DOES THE POTENTIAL DEPLOYMENT ANALYSIS ASK THE COMMISSION TO IDENTIFY AN "AS-YET HIDDEN FORMULA FOR *POTENTIAL* SUCCESS" AS CLAIMED BY MR. WOOD? (WOOD REBUTTAL 18.)

A. No. The purpose of the analysis is to identify situations where it is economic for an efficient CLEC to serve mass-market customers without access to the switching UNE. As I explained, in situations where actual deployment is feasible, CLECs may nevertheless use UNE-P if UNE-P is more profitable. That is why a simple review of actual deployment is insufficient for determining impairment.

Moreover, the existence of UNE-P in markets where there is no genuine impairment can harm switch-based firms, and reduce their survival prospects. One reason (among others) is described in a paper by Hazlett and Havenner, which I described in my direct testimony. UNE-P-based firms that operate in areas where there is no genuine impairment have the incentive to spend inefficiently high amounts of money on customer acquisition. In areas where there is no genuine impairment, UNE-P provides CLECs with the ability to maintain flexibility and lack of commitment to a market because the CLEC need not invest in its own switching. UNE-P-based CLECs have the incentive to dissipate this value by competing against the ILEC and against one another on the only dimension that they fully control, which is marketing and customer acquisition. This inefficiently high spending harms switch-based CLECs that seek to operate in the same market but which do not have the windfall that is available to UNE-P-based CLECs. Accordingly, the market is distorted away from UNE-L-based firms. As a result, the Commission cannot rely on whether switch-based CLECs have exited the market or have become UNE-P firms. It is not a matter of finding any hidden formulas, but rather of accounting for the distortions that exist in markets where UNE-P is offered but where there is no genuine impairment.

Q. DR. BRYANT ARGUES THAT BECAUSE OF UNCERTAINTY REGARDING THE PARAMETER ESTIMATES, THE COMMISSION SHOULD NOT DRAW ANY CONCLUSIONS ABOUT IMPAIRMENT IN

ANY MARKET IN ALABAMA ON THE BASIS OF THE POTENTIAL DEPLOYMENT ANALYSIS. (BRYANT REBUTTAL 40.) PLEASE COMMENT.

A. This is another example of an attempt to re-write the TRO. The potential deployment analysis necessarily requires judgment in making the estimates of the parameters required for a business case analysis. However, any experienced observer should recognize that this is no different from many other decisions in the real world, including actual investment decisions, which are always based on projections and estimates of an uncertain future. Investors and businesses routinely must make substantial commitments under uncertainty, given the information available. Dr. Bryant's contention that the Commission should ignore the FCC's rules because the business case approach can produce different results if different inputs and assumptions are used is to presume that the FCC failed to understand that business cases are sensitive to their input assumptions. There is ample evidence in the TRO, however, that the FCC fully recognized this fact (TRO 483-485, fn 1600), but it ordered state commissions to consider such analyses nevertheless.

Q. MR. WOOD ARGUES THAT THE COST OF A SWITCH AND THE NEED TO BACKHAUL TRAFFIC CREATE AN ENTRY BARRIER. (WOOD REBUTTAL 15-16.) PLEASE COMMENT.

A. Mr. Wood improperly presumes the outcome of this case. Moreover, Mr. Wood's argument is actually nothing more than a reprise of the invalid impairment framework sponsored by Mr. Turner, to which I responded in my rebuttal testimony. (Turner Direct 5-7.) Mr. Wood essentially seeks to define an entry barrier as being a cost disadvantage relative to the ILEC. (Wood Rebuttal 15-16.) As I explained in my rebuttal testimony, the FCC examined and rejected this interpretation of impairment. (Aron Rebuttal 32-35, TRO 84 and 112.) The economic rationale for the FCC's rejection of this argument is that, despite any cost disadvantage, an efficient CLEC may nevertheless find entry to be profitable without access to the unbundled element. The FCC correctly recognized that the entire issue of whether CLECs suffer cost disadvantages relative to the ILEC is a sideshow that does not address the central economic issue of impairment.

Q. MR. WOOD ARGUES THAT ANOTHER RISK FACING THE EFFICIENT CLEC IS THAT IT STARTS WITH NO CUSTOMERS AT ALL, WHEREAS THE ILEC ALREADY HAS CUSTOMERS. (WOOD REBUTTAL 15.) PLEASE COMMENT.

A. This is not precisely correct. Out of an abundance of conservatism, we have *elected* to model the competitive entry of a CLEC that starts without any customers. We took this approach to demonstrate that *even if* an efficient CLEC

were to start without customers, it nevertheless could profitably enter particular markets. The obvious reality is that CLECs such as AT&T, MCI, and others already have mass-market customers that they are serving using UNE-P. According to the TRO, one legitimately could have modeled the efficient CLEC as starting with some level of penetration via UNE-P and then migrating those customers while gaining new ones. The Commission should keep this additional source of conservatism in mind as we discuss the other parameter estimates later in my testimony.

Q. IS IT CONSISTENT WITH THE TRO TO DETERMINE IMPAIRMENT ON THE BASIS OF WHETHER "ALL" CUSTOMERS THAT CAN BE SERVED BY UNE-P ALSO CAN BE SERVED BY UNE-L OR SOME OTHER FORM OF COMPETITIVE SUPPLY, AS CLAIMED BY DR. BRYANT? (BRYANT REBUTTAL 17-18.)

A. The CLEC that we model in BACE offers service to *every* customer in each market (and in each wire center in that market) in which it operates. The model takes customers from *every* spend category and from every wire center. In this way, the BACE model would seem to address Mr. Bryant's concern. However, I will add that Mr. Bryant's proposal to investigate whether all of the customers currently served by UNE-P also are (or could be) served by UNE-L is interjecting an additional layer of analysis that is not required by the TRO. The TRO specifically

requires consideration of the *most efficient business model*, and not of a particular model, such as UNE-P. Moreover, the TRO does not suggest that switch-based CLECs must serve precisely the same set of customers as are served under UNE-P. Indeed, this would seem to be an impossible standard to implement because it would require a separate, granular analysis of which customers could be economically served via UNE-P. Such an additional layer of analysis is neither appropriate, nor called for in the TRO, and would further burden an already challenging proceeding.

III. RESPONSES TO ISSUES REGARDING COMPETITION THEORY

Q. MR. WOOD SAYS THAT BELLSOUTH'S ABILITY TO REDUCE PRICES TO WIN BACK CUSTOMERS WOULD DISCOURAGE A PRUDENT CLEC FROM MAKING INVESTMENTS IN THE FIRST PLACE AND WOULD THEREFORE DISCOURAGE ENTRY. (WOOD REBUTTAL 17.) PLEASE RESPOND.

A. While competition may cause some prices to decrease in the market, such price decreases should be applauded by the Commission, and not treated as a reason to discourage competition. I believe it would be perverse public policy indeed if the Commission were to decline to relieve the incumbent of a UNE obligation on the

grounds that doing so might unleash additional price competition. While I understand that Mr. Wood is attempting to paint a scenario in which CLEC entry would not occur despite a lack of impairment, I am aware of no evidence, and Mr. Wood provides none, that this is a realistic concern. Certainly, if the FCC believed this to be a realistic concern it would not have established the impairment rules it did. Under the FCC's rules established in the TRO, the incumbent's ability and desire to win back customers is not identified as a barrier to entry, except perhaps insofar as it is a component of a CLEC's churn. The BACE model reflects reasonable churn assumptions, and therefore accounts for this concern.

Q. WOULD YOU RESPOND IN THE SAME WAY TO MR. KLICK'S CONCERN THAT BELLSOUTH WILL REDUCE ITS PRICES TOWARD SHORT- AND MEDIUM-TERM COST? (KLICK REBUTTAL 32.)

A. Yes. While competition may cause some prices to decrease in the market, such price decreases should be applauded by the Commission. Of course, Mr. Klick limits his observations about the potential for price decreases to the "short" and "medium" term, perhaps realizing that over the longer term, surviving firms in the industry should be expected to earn their risk-adjusted cost of capital.

IV. RESPONSE TO ISSUES REGARDING THE BACE MODEL

Q. PLEASE DESCRIBE THE CONTENTS OF THIS SECTION.

A. In this section, I respond to comments and criticisms regarding the way the BACE model implements the business case analysis that is required under the TRO.

A. RESPONSE TO ISSUES REGARDING THE STRUCTURE OF THE BACE MODEL

Q. MR. KLICK CLAIMS THAT THE SUPPORTING WORKPAPERS UNDERLYING THE PREPROCESSED DATA AND THE DATA ITSELF WERE NOT PROVIDED. (KLICK REBUTTAL 13-14, 29) IS HE CORRECT?

A. Mr. Klick is referring here not to the BACE model itself, but to the separate pre-processing program that uses several million customer billing records to determine revenues for *a la carte* service offerings in Alabama. The supporting workpapers and the programming code itself were provided in Sprint's first request for production of documents in Florida. These documents and supporting workpapers were provided in January 2004 along with a memorandum describing the computations performed. The workpapers are applicable to Alabama. I understand that the parties have agreed that the documents provided in Florida discovery can be utilized in Alabama. As I understand it, the millions of proprietary, individual

customer billing records from the BellSouth billing systems were not provided to Mr. Klick or any of BellSouth's competitors, but samples of all other input files to the pre-processing program were provided so that CLECs could examine their structure.

Q. DR. BRYANT IMPLIES THAT CLECS ARE NECESSARILY IMPAIRED IN WIRE CENTERS WITH FEWER THAN 5,000 LINES. IS HE CORRECT? (BRYANT REBUTTAL 6-7.)

A. No. Dr. Bryant refers to a BellSouth model presented in the FCC's TRO proceeding that was rejected by the FCC because the model was not sufficiently granular. (TRO ¶ 472.) In contrast to that model, the BACE model is very granular and can compute the mass market NPV for each BellSouth wire center in Alabama. Dr. Bryant claims that there are 23 wire centers with fewer than 5,000 lines in the unimpaired markets as defined in the BACE model run in my direct testimony. In fact, there are only 9 wire centers with fewer than 5,000 lines in the unimpaired areas in Alabama based on the lines input to BACE. Moreover, I find that only 2 of these 9 wire centers have a negative mass market NPV when looked at on a stand-alone basis. Dr. Pleatsikas explains why it is inappropriate to determine impairment on the basis of the NPV of a wire center on a stand-alone basis, and why the appropriate market definition is larger than a single wire center. It is not necessary that, within an economic market, every customer, or every wire

center, demonstrate a positive mass market NPV in order for the market as a whole to have a positive mass market NPV, and for CLECs to therefore be unimpaired in that market. Nevertheless, contrary to Dr. Bryant's claim, over 75 percent of the wire centers in question do have a positive mass market NPV, contrary to Dr. Bryant's contention that customers in smaller wire centers are at high risk of being left without competitive alternatives. While economies of scale do play a role in the determination of impairment, only a complete analysis of all relevant factors (such as calculated in the BACE model) can be used to determine impairment.

Q. PLEASE COMMENT ON MR. WOOD'S CLAIM THAT THE MODEL STRUCTURE "LOCKS" THE TIME HORIZON ASSUMPTION AT 10 YEARS. (WOOD REBUTTAL 7.)

A. Mr. Wood's comments on this topic represent a total lack of comprehension of what a business case is and how the BACE model implements the business case. The BACE model is a discounted cash flow model that *explicitly* accounts for a 10-year horizon, but it also accounts for the value of the firm that is generated *beyond* 10 years. It is important to understand that the NPV of a properly constructed business case is completely unaffected by the number of years that are explicitly modeled. That is, the NPV results of a particular business case that uses a 5-year explicit forecast and a terminal value (for the years 6, 7, 8, 9, . . .) will be (or should be) identical to the results of a 10-year explicit forecast and a terminal value (for

the years 11, 12, 13, ...). This is because the terminal value represents the NPV of the remaining (unmodeled) years out to, potentially, an infinite horizon. This can be summarized as:

NPV = NPV of Explicitly Modeled Years + Terminal Value

A business case has this structure because the firm's value (i.e., NPV) is (or should be) determined on the basis of economic fundamentals of demand, revenues, and costs over the entire potential horizon of the project, not on the basis of the number of years one explicitly models. In any business case analysis, one cannot appropriately create or destroy value simply by changing the number of years that are explicitly modeled. The number of years that are explicitly displayed should be sufficient to demonstrate that the firm is beyond its start-up phase. Mr. Wood is welcome to use a shorter explicit time horizon if he wishes, but he must adjust the terminal value appropriately.

Q. MR. KLICK ALSO CLAIMS THAT THE BACE MODEL'S TERMINAL VALUE COMPUTATION IS "CONCEPTUALLY FLAWED." (KLICK REBUTTAL 46.) WOULD YOU PLEASE ADDRESS MR. KLICK'S DISCUSSION?

A. Mr. Klick argues that (1) the BACE model assumes that the CLEC sells its assets at the end of year 10; and that (2) the terminal value assumes that the CLEC remains profitable after year 10. (Klick Rebuttal 46.)

Mr. Klick's first point is not correct; we do not assume anything about the sale of the firm. In any event, whether or not a firm sells its assets at the end of year 10 or at any other time does not affect the NPV of a firm's business case. The NPV of a firm is determined by the discounted cash flows. Indeed, according to finance theory, the price of an asset sale should bear a relationship to (if not determined by) the expected future cash flows. As a result, even if the assets are sold, they still have value as a going concern business. Indeed, undivided interests in a publicly traded firm's assets (and expected profitability) are sold every day in the stock market. Even when the sales amount to changes in management (as has occurred, for example, when AT&T sold its cable business to Comcast, and as is occurring as AT&T Wireless attempts to sell its business to Cingular), the assets remain in production and continue to generate income for their owners. In sum, the value of the firm is determined from the cost and revenue fundamentals, not who happens to own the rights to the profits.

Mr. Klick's second point, that we should "test" whether the firm is profitable from year ten on rather than "assuming" it is simple nonsense. (Klick Rebuttal 46.) First, I do not assume that the CLEC is profitable after year ten, but rather that the

value of the ongoing concern is equal only to the net book value of its assets. Another way of saying this is that the CLEC earns zero profit from that point on. Second, Mr. Klick's comment that the TRO does not contemplate the CLEC selling its assets is truly misguided. In markets, the value that assets would command upon sale equals (at least) their discounted present value as an ongoing concern. Assigning them such a value certainly does not require, nor does it imply, that the assets are to be sold.

In fact, there is no reason to model every year into eternity to understand whether a business case has a positive NPV. Standard texts on business case valuation do not call for a business case model into eternity, but instead they note that an estimate of terminal value is *essential* to a business case valuation for a going concern. (See, e.g., Tom Copeland, Tim Koller, Jack Murrin, *Valuation: Measuring and Managing the Value of Companies* (2nd ed.), (1994) (New York: John Wiley & Sons), Chapter 9. Hereafter, *Copeland et al.*)

From an economic standpoint, Mr. Klick's idea of "excluding" the terminal value implies that the firm operates for 10 years and that, at the close of business on December 31 of the 10th year, everyone puts down his or her tools and walks away from the business. If the terminal value were zero, this would imply that the business is abandoned and is neither sold for scrap nor anything else. In other words, under Mr. Klick's notion, all of the accumulated goodwill and all of the

tangible assets invested (some of which are invested in year 9, for example) are abandoned and no economic value is derived at all from them. This is an unreasonable method of estimating terminal value. Accordingly, the Commission should reject Mr. Klick's flawed idea.

Q. DOES YOUR TERMINAL VALUE ASSUMPTION MEAN THAT THE CLEC NEVER INVESTS IN ANY MORE EQUIPMENT?

A. No. It simply means that any investment after year 10, of, say $50, will provide (on a discounted basis) exactly $50 in expected return. In this way, expected economic profit after year 10 will be zero (on any incremental investment).

B. RESPONSE TO ISSUES REGARDING MODEL SENSITIVITY

Q. WHAT ARE THE ISSUES REGARDING MODEL SENSITIVITY?

A. Several of the witnesses claim to have re-run the BACE model using their own input assumptions. (Bryant Exhibits MTB-9, and 11; Wood Rebuttal at (e.g.) 30-31, Klick Rebuttal 27.) Based on the runs that I have made to date, it seems that the differences in the parties' positions are primarily the result of different input assumptions. Dr. Bryant admits that changing the inputs one at a time in a direction more favorable to impairment tends not to cause the NPV to turn negative

in the defined geographic markets. (Bryant Rebuttal 28.) In fact, Mr. Klick's sensitivity analysis shows that even assuming that after ten years a facilities-based CLEC gets no more than 5 percent of the market—an unreasonably low number--most of the markets I identified as unimpaired continue to be unimpaired. (Klick Rebuttal Exhibit JCK-2.)

This general robustness of the results to changes in assumptions should provide the Commission with the confidence that the BACE results are not overly sensitive to any particular assumption. Of course, if one were to adopt sufficiently grim assumptions for a sufficient number of inputs, no matter how ill-founded, the modeled CLEC would not be profitable in any of his defined markets in Alabama. In a well-constructed model such as BACE, there will always be some set of assumptions under which entry will not be economic in any market. However, I have not seen anything that would change my recommendations on "unimpaired" markets that I described in my direct testimony and updated in this testimony. It is also important to note that the parties do not dispute the approach of the BACE model (i.e., the use of net present value as a means of determining impairment, under the FCC's rules).

Q. PLEASE DISCUSS THE INCONSISTENCY OF THE VARIOUS WITNESSES' ASSESSMENTS OF THE SENSITIVITY OF THE BACE

MODEL RESULTS TO CHANGES IN THE PARAMETER VALUES. (BRYANT REBUTTAL 28-29, WOOD REBUTTAL 20.)

A. Dr. Bryant notes that varying parameter values did "little" to change the NPV. (Bryant Rebuttal 29.) In contrast, Mr. Wood claimed that "even slight changes" to parameter assumptions cause the analysis to indicate that there is impairment. (Wood Rebuttal 20.) These are, of course, mere subjective conclusions. No one has provided a standard or index of the "appropriate" degree of sensitivity. Accordingly, these remarks provide no probative criticism of the model.

V. RESPONSE TO ISSUES REGARDING THE "EFFICIENT CLEC" REQUIREMENT

Q. PLEASE DESCRIBE THE ISSUES THAT YOU ADDRESS IN THIS SECTION.

A. The TRO requires that the potential deployment analysis investigate the business model of an efficient CLEC. (TRO 517, fn. 1579.) "No impairment" is determined on the economic success of the most efficient business model for entry, not on the basis of a particular CLEC or a particular business plan. (TRO 517.) This section addresses issues related to interpreting these directions.

Q. MR. WOOD CLAIMS THAT THE BACE MODEL'S TREATMENT OF CLEC PRODUCT OFFERINGS IS OVERLY BROAD, AND THE RELEVANT ISSUE IS WHETHER A CLEC WILL SELF-PROVISION LOCAL SWITCHING IN ORDER TO PROVIDE LOCAL EXCHANGE AND EXCHANGE ACCESS SERVICE TO MASS-MARKET CUSTOMERS, NOT WHETHER IT WILL PROVIDE NON-SWITCHED SERVICES (SUCH AS DSL). (WOOD REBUTTAL 47-48.) PLEASE COMMENT.

A. Consistent with the FCC's requirements, we did not design the business case analysis to determine whether a particular CLEC or a particular business plan is profitable, as would be the case if we focused only on a CLEC that sought to limit its portfolio of services to switched services. (TRO 517.) Instead, consistent with the TRO, we designed the business case to determine whether the CLEC with an efficient business model economically could serve mass-market customers in a market without access to the local switching UNE. (TRO 517.) The BACE model assumes that the CLEC will offer a variety of communications services, including vertical features, long distance, voice mail, and broadband internet access, in addition to basic local service (inside wire maintenance is excluded, although an efficient CLEC might offer this as well). Mr. Wood may believe that some CLECs might want to offer a narrower range of services or specialize in some way, but that is irrelevant to the directions provided by the FCC. If such a CLEC can do better by specializing than the BACE CLEC, the model is conservative. If such a CLEC

would do worse, it has not adopted the most efficient business plan and need not be considered. Moreover, Mr. Wood's assertion is contrary to the FCC's direction to consider *all* revenues reasonably available to an efficient CLEC. (TRO 519.)

Q. DOES THE FACT THAT MANY CLECS HAVE GONE OUT OF BUSINESS MEAN THAT THE REMAINING CLECS ARE EFFICIENT (WOOD REBUTTAL 50) OR, IF ANYTHING, THAT THESE CLECS HAVE REDUCED THEIR COSTS BELOW WHAT MIGHT BE OPTIMAL FROM A LONG-RUN PERSPECTIVE? (BRYANT REBUTTAL 33-34.)

A. Not at all. A CLEC that has wiped debt off its books via the bankruptcy process may indeed have a lower overall cost structure (in the sense of having less fixed financing costs to recover) than a competitor that did not do so. To the extent this is a countervailing advantage of some existing CLECs, we did not incorporate it into the BACE model. Certainly, having undergone bankruptcy (and its effect on the company's balance sheet) does not imply that the CLEC has emerged with efficient customer acquisition practices, churn rates, overhead costs, or business practices, nor that carriers who have avoided bankruptcy are efficient in any of these respects. Moreover, as I described in my direct testimony, UNE-P-based CLECs that offer service in markets that are not truly impaired have the incentive to inefficiently increase their customer acquisition costs, for the reasons I discussed earlier. This is an incentive for inefficient behavior that applies to all UNE-P-based

CLECs that operate in "unimpaired" markets, and it has not been resolved by the spate of bankruptcies of other CLECs.

Q. MR. WOOD CLAIMS THAT DR. BILLINGSLEY'S DISCUSSION ABOUT BANKRUPTCIES CONFLICTS WITH YOUR OWN. (WOOD REBUTTAL 49-50, 54-55.) PLEASE COMMENT.

A. There is no conflict. Mr. Wood points to a quotation in Dr. Billingsley's direct testimony from a study by New Paradigm, a research group. The study contends that many CLECs took on too much debt and invested in too much infrastructure relative to demand, and succumbed to their debt loads when the expected demand did not materialize. Mr. Wood then cites to a passage in my direct testimony that says that CLECs have gone bankrupt, and my conclusion that, on average, existing CLECs do not have optimally efficient operations.

My comments are in complete concert with the passage from the New Paradigm report cited by Mr. Wood. Overinvestment in anticipation of demand that does not materialize can itself be a form of inefficiency. However, excessive investment is not the only inefficiency exhibited by CLECs. Other inefficiencies that have been noted by researchers include having unstable business processes, incomplete databases, incomplete inventories of circuits, overly informal business practices, and inadequate accounting systems. (See, Larry F. Darby, Jeffrey A. Eisenach, and

Joseph S. Kraemer, "The CLEC Experiment: Anatomy of a Meltdown," Progress on Point (The Progress & Freedom Foundation), Release 9.23 September 2002, pp. 16-17.) These are the very reasons that would render it untenable to rely on such CLECs for inputs such as customer acquisition costs or overhead costs as being representative of an efficient CLEC. There also was, of course, substantial fraud by some CLECs that led to bankruptcy. I understand that Dr. Billingsley also responds to Mr. Wood's argument, from the perspective of finance considerations.

Q. MR. WOOD ARGUES THAT "THERE IS NO SUPPORT FOR DR. ARON'S ASSUMPTION THAT CURRENT [ACTUAL] CLEC COSTS NEED TO BE ADJUSTED IN ORDER TO REFLECT EFFICIENT CLEC OPERATION." (WOOD REBUTTAL 50.) PLEASE COMMENT.

A. This is a disingenuous argument. In requests to AT&T, BellSouth sought AT&T's business cases that analyze UNE-P and self-provisioned switching. (BellSouth Florida First Set of Interrogatories No. 15.) AT&T objected to providing that information, arguing that the TRO required an examination of the most efficient business model, and not, specifically, AT&T's business models. Yet, here Mr. Wood essentially claims that actual CLEC costs should be taken as representative of an efficient CLEC. Moreover, in addition to taking an opportunistic position, I am not sure that there is any real meaning to Mr. Wood's claim that I made "adjustments." For example, if I base my estimate on the midpoint of several

actual CLEC figures, that is not an "adjustment." My customer acquisition cost estimate of $95 for residential customers is higher than the estimated actual expense for Talk America, and it is substantially higher than the $50 goal that Z-Tel management seeks. This is not an "adjustment" in the sense implied by Mr. Wood—if anything, it would be an *upward* adjustment. I would characterize my estimate as a conservative selection of a point estimate within the range of observed values after reviewing the evidence. Mr. Wood's accusations to the contrary are unsupported.

VI. RESPONSE TO ALLEGATIONS MADE ABOUT SPECIFIC PARAMETER ESTIMATES

Q. PLEASE DESCRIBE THE CONTENTS OF THIS SECTION.

A. In this section, I respond to various arguments made about the parameter estimates that I supplied to the BACE model.

Q. MR. KLICK CLAIMS THAT YOUR MARKET SHARE, RATE OF PENETRATION, AND RETAIL PRICE ASSUMPTIONS ARE "UNSUPPORTED." (KLICK REBUTTAL 3.) PLEASE COMMENT.

A. I believe that the Commission will find Mr. Klick's assessment, like much of his testimony, to be unreliable, and wildly inaccurate. I will discuss my research methodology, research sources, and results in the separate subsections regarding market share, penetration rate, and prices. However, I will note here that I have provided hundreds, if not thousands, of pages of documents, workpapers, and programs related to these topics in multiple rounds of discovery; and I have been deposed in Florida on the various parameter estimates that I provided to the BACE model (the transcripts of which Mr. Klick would have access to). Mr. Klick's claims are simply not correct.

A. MARKET SHARE (OR MARKET PENETRATION)

Q. DR. BRYANT CLAIMS THAT THE MARKET PENETRATION RATE IS UNSUPPORTED BY THE EVIDENCE. PLEASE DESCRIBE THE EVIDENCE AND PROCESS THAT YOU USED TO DETERMINE THE MARKET PENETRATION RATE. (BRYANT REBUTTAL 34-35, KLICK REBUTTAL 21-26.)

A. I investigated evidence on market share and market penetration from the academic literature (that is, literature that is published in peer-reviewed professional journals), a review of customer willingness to switch service providers based on cable telephony, AT&T's successes in other venues, and long-distance successes of

Bell Companies after 271 approval, and a consideration of potential future market structure for UNE-L providers.

One of my first steps was to review the academic literature to determine whether there were any relevant general principles that I should account for in an estimate of an efficient CLEC. I concluded that research generally demonstrated that successful firms increased rapidly toward their "maximum" market share in early years, and that growth tapered off as the firm approached its maximum share. I incorporated this general finding into my analysis (as it pertains to the "p-value," which I discuss in the following subsection).

My second step was to review the success that firms have had in the BellSouth region. As I explained in my earlier testimony, I reviewed hundreds of examples of CLEC entry into BellSouth wire centers and determined that it was not unreasonable to use the general "shape" suggested by the academic literature. I also examined the total number of lines (and share of lines) of CLECs in Alabama and elsewhere in the BellSouth region to determine CLEC successes to date. This analysis provided me with an indication of customer willingness to change providers, and therefore the "take rates" (i.e., the ability to gain share) of CLECs individually and collectively.

Also, I examined the successes that CLECs have had in other parts of the country, including where competition has been attempted by cable telephony providers. I believe that the experience elsewhere in the country generally is an indicator of customers' willingness to change their service provider. Moreover, such analysis provides an indication of the potential opportunities for an efficient CLEC because it demonstrates what has happened in different market environments, not just what has occurred specifically in Alabama. It also demonstrates the potential for penetration in light of different competitive responses by other CLECs and ILECs. In other words, examining performances in other parts of the country helps ensure that there is robustness to my own estimate. For example, as I mentioned, cable telephony providers have had success in different areas around the country. This indicates to me that customers generally are willing to change their provider and that this willingness is not unique to any particular market or region. I examined the pricing packages offered on the web sites of some of these firms and confirmed that the telephony services and features were reasonably available to an efficient CLEC.

I also note that at least one investment bank expects AT&T to attain penetration rates of 15 percent local penetration in the states where it offers local service. (Laura Warner et al., "Reinstating Coverage with Neutral Rating, $31 Target," Credit Suisse – First Boston Equity Research, January 13, 2003, pp. 11-12). The Credit Suisse discussion did not mention any markets in Alabama, but I believe it is

nevertheless indicative of the willingness of customers to change their service provider, in this case, to AT&T.

As I mentioned, the success of the Bell companies entry into in-region long-distance service also provides a useful point of reference for the ultimate market penetration by an efficient CLEC. Like the efficient CLEC, the Bell companies sell bundles of long-distance and local services. According to analysts at Banc of America, which I referenced in my direct testimony (at p. 28, citing to David W. Barden, et al., "AT&T Corporation: A Case for Consumer Services," April 30, 2003, p. 6), these companies have attained market shares on the order of 30 to nearly 40 percent within a two-year period. Not only does this suggest that customers are willing to switch providers (which would apply to local service as well), it also suggests that the "p-value," or rate of success in the marketplace, which I will discuss later, is reasonable.

As illustrated by my examples, I did not limit myself to primary research. Instead, I also consulted secondary research such as investment analyst reports and other analytical and forecasting reports on the industry's prospects. In formulating my proposal, I also consulted with knowledgeable industry and former CLEC experts on the general factors and issues relevant to CLEC market share, and to the market share proposal itself. I presented my findings and responded to their insights, criticisms, and recommendations.

I believe that my approach produces a reasonable, robust, conservative estimate of market share and the "rate" of market penetration. My approach (conservatively) assumes that the market does not grow. In other words, I presume that any share that the efficient CLEC obtains is a result of success with respect to the ILEC's existing base of customers or from other CLECs, or from acquisitions or mergers with other CLECs, and not from additions to the market size itself. Nor does my market analysis incorporate wireless or other services that may be influencing, or could influence, the landline telephone market. I do not presume that the CLEC wins any converts from, e.g., wireless customers.

My analysis also is conservative in that it does not incorporate any revenue-enhancing effects that could result from changes to product characteristics, or innovations that a switch-based CLEC might implement that would attract subscribers.

My research process was complex, it was time-consuming, and it was intensive. It entailed reviewing a substantial amount of existing research and primary data in the BellSouth region and throughout the country. My approach was designed to produce a reasonable estimate of an efficient CLEC's market share I believe that the breadth of my research agenda, and its depth, in the sense of including both

primary and secondary research, and both qualitative and quantitative research, provides a sound, robust basis for my recommendation.

Q. MR. KLICK USES FCC DATA TO COMPUTE A CLEC PENETRATION IN ALABAMA. (KLICK REBUTTAL 24-26.) IS MR. KLICK'S ANALYSIS CORRECT?

A. No, it is not. Mr. Klick misuses FCC data and, as a result, he under-estimates CLEC market share in the BellSouth territory in Alabama. (Dr. Bryant makes this same error when he claims (on page 34 of his rebuttal testimony) that CLECs in aggregate have achieved a market penetration of just under 15 percent.) To begin with, his analyses (as shown in Tables JCK-3 and JCK-4) are incorrect because they implicitly and erroneously assume that there is *but a single statewide market* in Alabama for local exchange service. Instead, there are *multiple* local exchange markets, each of which may have different levels of CLEC penetration due to, e.g., the relative attractiveness of the market and the length of time that CLECs have been competing in the particular market. As Dr. Pleatsikas has noted, from an economic perspective, there is no statewide "market share" for local exchange service in Alabama: indeed, the TRO prohibits such a consideration of the market. (51.319(d)(2)(i).) By improperly using a statewide definition, Mr. Klick's aggregate penetration statistics underestimate CLEC successes in the markets

where CLECs choose to compete most intensely and have competed for the longest period of time.

An example may clarify how the FCC's CLEC market share data can be subject to the kind of misinterpretation seen in Mr. Klick's analysis. Suppose there are four markets of equal size and that competitors enter them in succession. In the first year the CLEC obtains 8 percent share in market *A*. In the following year, the CLEC obtains 12 percent in market *A* and 8 percent in market *B*. In the third year, the CLEC obtains 16 percent in market *A*, 12 percent in market *B* and 8 percent in market *C*. Penetration in market *D* remains zero throughout.

Calculating aggregate penetration by treating all four markets as one (analogous to the FCC's methodology in its *Local Competition Reports*) the CLEC's first year share would seem to be 2 percent (8/4), its second year share would seem to be 5 percent ((8+12)/4), and its third year share would seem to be 9 percent ((8+12+16)/4). Thus, these aggregated penetrations do not illuminate what is happening in specific local markets—the high rate of growth of CLEC penetration, and the high level of penetration in certain markets.

Moreover, the FCC's data are statewide and not confined to the ILEC territory within a state (or to specific markets within that territory). Statewide data do not provide any indication of CLEC market share in BellSouth's markets—or, more

specifically, an accurate indication of CLEC market share in BellSouth's Alabama service territories. If, for example, most of the competitive activity in Alabama occurs within the BellSouth territory in the state, the statewide average market share would be lower than the average within BellSouth's territory in Alabama. In addition, CLECs with fewer than 10,000 lines in a state are not required to file data with the FCC. The omission of smaller carriers biases the statewide market share estimates low, and could substantially bias the estimates in particular markets. Hence, the FCC's *Local Competition Report* does not provide an adequate basis for identifying CLECs' market share in BellSouth's territory in Alabama or in any specific markets within Alabama, and certainly provides no basis for Mr. Klick's declaration that an ultimate penetration rate for an efficient CLEC is in the range of 4 to 5 percent. Mr. Klick provides no other justification for his conclusion. (Klick Rebuttal 26.)

Q. DR. BRYANT CLAIMS THAT "THE ULTIMATE MARKET SHARE THAT AN INDIVIDUAL CLEC MAY ACHIEVE IS UNKNOWN AND UNKNOWABLE." (BRYANT REBUTTAL 35.) PLEASE COMMENT.

A. I agree that the future is unknowable with certainty. However, I disagree with the inferences that Dr. Bryant draws from this unexceptional fact. As I noted earlier, Dr. Bryant recommends that, due to this uncertainty, the Commission draw no conclusion about impairment from the potential deployment analysis. (Bryant

Rebuttal 40.) The FCC directed state commissions to assess potential deployment despite the inherent uncertainty of the future, and I believe it is the Commission's responsibility to do so. Dr. Bryant's advice amounts to an attempt to re-write the rules and it should be ignored.

Dr. Bryant also recommends that because of uncertainty with respect to parameter estimates such as churn, the Commission should perform sensitivities using different parameter values. I have no general objection to the prudent use of sensitivity analyses. However, such an analysis is no substitute for a reasonable initial point estimate. Many of Dr. Bryant's estimates, such as his 5 percent market share estimate, are simply unreasonable for the reasons that I discussed in my rebuttal testimony. It is pointless to perform a sensitivity analysis on unreasonable point estimates to determine whether there is impairment.

Q. MR. KLICK AND DR. BRYANT CLAIM THAT AN EXAMINATION OF AGGREGATE CLEC MARKET SHARE IN ALABAMA DOES NOT IMPLY THAT EACH CLEC, OR THAT ONE CLEC, COULD ATTAIN THE SAME MARKET PENETRATION. (KLICK REBUTTAL 23-26, BRYANT REBUTTAL 34-35.) PLEASE COMMENT.

A. Mr. Klick (at Table JCK-4) and Dr. Bryant are confounding two separate (though related) issues. One issue is the willingness of customers to leave the ILEC and

obtain telephone service from an alternative provider; and the second is the structure of the market (e.g., the number and relative size of competitors). Both factors contribute to the market share of any particular firm. My analysis of aggregate CLEC successes in Alabama (and elsewhere in the BellSouth region) provides information regarding the willingness of customers to change their service provider. There is tangible information in cable telephony, long-distance service in the wake of 271 approvals, AT&T's successes in New York, and in a number of wire centers in the BellSouth region about the *willingness of at least 15 percent of customers* to switch to alternative telecommunications service providers and, in the alternative, the degree of customer loyalty to or lock-in to the incumbent carrier. Whether one, two, or three switch-based CLECs will each obtain 15 percent of the market is the topic of market structure. Indeed, in a valuation model created by investment analysts at Credit Suisse, the analysts expect AT&T alone to gain 15 percent of the residential market, not just in New York, but in all of the states where it is operating. (Laura Warner et al., "Reinstating Coverage with Neutral Rating, $31 Target," Credit Suisse – First Boston Equity Research, January 13, 2003, pp. 11-12.)

Q. DR. ARON, WHAT IS YOUR VIEW OF THE LIKELY MARKET STRUCTURE THAT WOULD PREVAIL IN MARKETS IN WHICH UNBUNDLED LOCAL SWITCHING IS NOT OFFERED AND WHICH

YOU HAVE REFLECTED IN YOUR RECOMMENDED MARKET SHARE ASSUMPTIONS?

A. The current market structure, which is highly fragmented with many very small participants, is not likely to prevail in a market with only facilities-based providers. Availability of UNE-P promotes a highly fragmented market, because UNE-P-based carriers need make very little investment in (or commitment to) the market. Because a much greater share of UNE-P CLECs' costs are incremental to the customer, they have much less economies of scale than do facilities-based carriers. While a given local area might support a large number of UNE-P players, I believe a typical urban market would support a much smaller number of UNE-L players.

My framework for viewing market structure implies that the market will undergo significant consolidation in the coming years. I believe that this is inevitable if public policy advances the viability of efficient facilities-based competition. Indeed, we are now seeing consolidation in the wireless industry, also a capital-intensive, facilities-based industry, as AT&T Wireless seeks to sell itself to Cingular. One should not mechanically extrapolate from today's UNE-P market structure to project the market structure – or market shares – that would obtain in a facilities-based market, as Mr. Klick does (in Table JCK-4). Doing so would ignore the fundamental efficiencies in cost structures that drive market structure. Facilities-based firms with significant scale economies would, in equilibrium, have

non-trivial market shares. My approach begins with the understanding that I have articulated regarding market structure, and applies to it the evidence we have about consumers' willingness to switch carriers. I do not believe that a market structure with numerous firms, especially firms with small penetration rates, is likely as a long-run equilibrium in light of the scale economy issues I just discussed, nor will many geographic markets support numerous facilities-based CLECs (in addition to the ILEC), as Mr. Klick's Table JCK-4 indicates. I expect market structure to be more consolidated, as is occurring in the wireless industry, and to reflect the scale economies available to CLECs. Hence I believe my penetration estimate is most consistent with a realistic view of ultimate market structure.

Q. PLEASE RESPOND TO THE CLAIM THAT CABLE TELEPHONY IS NOT AN APPROPRIATE INDICATOR OF THE MARKET SHARE THAT CLECS MIGHT ATTAIN. (WOOD REBUTTAL 41-42.)

A. Mr. Wood argues that information about cable telephony penetration is not representative of the market share a CLEC might reasonably attain because cable providers do not rely on BellSouth's loops. (Wood Rebuttal 42.)

Mr. Wood errs in his conclusion because he confuses supply with demand. In rejecting the use of cable television because cable telephony providers do not routinely use ILEC loops, what Mr. Wood really is talking about is the hot cut

issue, which is a supply-side concern having nothing to do with an investigation into customers' willingness to change service providers (except through the supply-side issue of customer dissatisfaction with the changeover process).

As putative support to his position, Mr. Wood cites to paragraph 446 of the TRO where the FCC is discussing the fact that cable telephony offers competition from a provider that uses both its own switching and its own loop. Of course, the FCC does not say (and is wise not to say) that cable telephony is an inappropriate indicator of the *willingness of customers to switch providers*, or that cable telephony is an inappropriate indicator of the market share that a traditional UNE-L-based CLEC might attain in the future.

Mr. Wood does not dispute that cable telephony is equivalent to traditional local exchange service in overall quality. He does not dispute the fact that cable companies have gained substantial numbers of customers and substantial share where they have offered telephone service. Mr. Wood also does not dispute the fact that cable companies such as Cox have gained 20 to over 30 percent share in its more mature markets (See, e.g., Simon Flannery et al. "Trend Tracker: Bottom Line Better, But for How Long?," Morgan Stanley North American Equity Research, May 23, 2003, p. 15), and that Cox itself has gained 19 percent share overall where it offers service and 53 percent of its existing cable TV subscribers. Indeed, analysts at Deutsche Bank Securities, Inc estimate that "over the longer-

term we expect cable to capture around 15% of the US residential market." (Viktor Shvets and Andrew Kieley, "RBOCs: Initiating Coverage '. . . but he's got my switch!'," Deutsche Bank Securities Inc. US Wireline Services, November 22, 2002, p. 129.) These figures indicate that *customers are willing to change their service providers* in large numbers from the ILEC (or other CLECs) to alternative service providers, in this case a cable telephony provider. Such data indicate that it is possible for CLECs to overcome any brand name or other potential goodwill advantage that the ILEC might have and change their providers in substantial numbers. The cable example is especially apt because the traditional structure of cable TV networks is designed to serve homes (rather than large, enterprise businesses) and so cable telephony's successes are good evidence that customers' willingness to change service providers exists in the mass market.

Q. GIVEN YOUR DISCUSSION OF CABLE TELEPHONY, WOULD YOU ALSO SAY THAT THE SUCCESS OF UNE-P-BASED CLECS IN OBTAINING CUSTOMERS LIKEWISE INDICATES CUSTOMER WILLINGNESS TO SWITCH? (WOOD REBUTTAL 41-42.)

A. Yes. Again, one should not confuse demand fundamentals (which relate to the customers' willingness to switch providers) with supply fundamentals (which, among other things, relate to the hot cut issue and economies of scope), as Mr. Wood does. There is no reason, given the evidence on customer willingness to

change providers, that switch-based CLECs would not be able to make the kinds of gains that we have seen in UNE-P. For this reason, the ability of CLECs to attain market share in the BellSouth region and elsewhere is useful information, regardless of the (supply-side) provisioning method used by the CLECs.

Q. MR. WOOD ARGUES THAT CLEC SUCCESSES ACROSS THE BELLSOUTH REGION ARE NOT REPRESENTATIVE OF HOW WELL CLECS MIGHT PERFORM IN SPECIFIC MARKETS AND WITH SPECIFIC PRODUCTS. (WOOD REBUTTAL 41-42.) PLEASE EXPLAIN WHY YOU BELIEVE THE BELLSOUTH REGION-SPECIFIC DATA ARE SUFFICIENTLY GRANULAR TO INDICATE HOW WELL AN EFFICIENT CLEC MIGHT DO WITH RESPECT TO MARKET PENETRATION.

A. It is reasonable to conclude that an efficient CLEC could learn from what is observed in the marketplace, whether that market is in Alabama or elsewhere in the United States.

With regard to Mr. Wood's "specific products" argument, the range of services that we model in BACE is well representative of the range of services that an efficient CLEC would offer. This might not perfectly match the specific business models of particular CLECs, but doing that would be attempting to model specific CLECs'

business plans, contrary to the direction provided by the TRO, as I explained earlier. (TRO 519.)

Q. WHY IS THE ACADEMIC LITERATURE ON MARKET ENTRY RELEVANT TO THE ISSUE OF MARKET PENETRATION, CONTRARY TO THE CLAIMS OF MR. WOOD? (WOOD REBUTTAL 41.)

A. The purpose of scientific research is to identify and test generalized principles (which mean principles that may apply beyond the specific data set investigated). Principles that have withstood empirical challenge can provide guidance to researchers and policy makers. Sometimes, as in this instance, the guidance is of a qualitative nature in that it helps establish a general pattern of competitive entry, as I will discuss.

As I explained in my direct testimony, the academic literature provided me with guidance as to a reasonable "shape" of the market penetration path. For example, one might suppose that a firm gained market share in an "S-shaped" curve. That certainly was one of the ideas that I considered as I began my research. However, my subsequent research indicated that successful firms tended to grow more quickly upon entry than unsuccessful firms when they are young and small, and that the growth rates of these firms tend to decrease as they become older and larger. The growth of successful firms was more of like the top half of a "C," with

fast immediate growth slowing toward an asymptotic level of market share. There is nothing in the telecommunications industry or local exchange industry that suggests to me that an efficient CLEC would not also follow this pattern.

As I noted in my direct testimony (though Mr. Wood failed to note this in his discussion on pages 41 and 42 of his rebuttal testimony), I analyzed data on every wire center in the BellSouth territory and I examined several hundred examples of entry by different CLECs over time. I found that the pattern of entry into wire centers varied, but that generally, entry followed the pattern found by academic researchers in their more formal studies; that is, entry starts with a bang, and then grows at a decreasing rate as the firm matures toward its ultimate market share. This provided me with some assurance that the (qualitative) generalized principle of market entry applied to the local telecommunications industry as well.

I believe that this type of thorough research, which considers the established, researched wisdom of market entry, reviews literally hundreds of pages of actual evidence on this entry in the BellSouth region, considers the implications of entry by telecommunications services providers that is observed in other parts of the country, and derives a conclusion based on this analysis, illustrates that my proposal is reasoned and reasonable.

Q. WILL BELLSOUTH'S "WINBACK" EFFORTS REDUCE THE ESTIMATE OF THE EFFICIENT CLEC'S ULTIMATE MARKET SHARE? (BRYANT REBUTTAL 35.)

A. No, it will not reduce it from the 15 percent estimate that I recommend, because this is already accounted for in my estimate. My proposal is based on what we can observe in the marketplace today, such as AT&T in New York and cable television companies where they choose to offer telephone service. It is rational for the ILEC in those areas to offer winback programs and these CLECs still have been successful in gaining substantial share. In other words, absent ILEC winback programs in these areas, I would expect these CLECs would have higher market penetration rates than they already do. Thus, making a downward adjustment to my proposed market share because BellSouth offers winback programs would effectively twice-consider the effect of these programs.

Q. DR. ARON, IS YOUR 15 PERCENT MARKET SHARE RECOMMENDATION CONSERVATIVE IN ANY OTHER WAY? (WOOD REBUTTAL 41.)

A. Yes, it is. I assume that the overall market for the services offered by the CLEC does not grow (or shrink) over time. This has an important implication for my 15 percent market share recommendation. A market share of 15 percent 10-years out

in a market that does not grow represents approximately the same level of demand (all else the same) as a 12 percent share in a market that grows by just 2 percent per year. (Indeed, a market that grows at 4 percent per year would produce approximately the same level of CLEC-served demand at a 10 percent share as does the 15 percent share with no overall market growth.)

It is reasonable to believe that the overall demand for voice telecommunications services will increase in the future. (Viktor Shvets, RBOCs: Initiating Coverage, Deutsche Bank Securities Equity Research, November 22, 2002.) Accordingly, my assumption of zero market growth is conservative.

In sum, to be conservative, I have presented a consistent set of assumptions based on a conservative product definition (i.e., I exclude wireless services, and consider only ILEC and CLEC lines and revenues), prices, and penetration rates that assume no growth in the either the number of total customer locations, or in the definition of the market (as CLEC + ILEC lines).

Q. MR. WOOD CLAIMS THAT THE BACE MODEL ASSUMES THAT THE TOTAL MARKET FOR WIRELINE TELECOMMUNICATIONS SERVICES WILL GROW OVER THE TIME HORIZON OF ITS ANALYSIS. (WOOD REBUTTAL 40.) IS THIS TRUE?

A. No, as I just described.

B. P-VALUE

Q. DR. ARON, WOULD YOU PLEASE SUMMARIZE THE ISSUE WITH RESPECT TO THE "P-VALUE"?

A. Yes. One of the inputs in the BACE model is the trajectory that is assumed for the CLEC's market share. We assume that the CLEC begins with no customers, and adds them over time and ultimately approaches a "maximum" market share. The "p-value" relates to the speed with which the efficient CLEC is able to gain market share and move toward its "maximum." For residential customers, I recommend a p-value of 0.50, which means that the CLEC gains half of its ultimate share (or 7.5 percent, because we assume a maximum share of 15 percent) by the end of the first year, three-quarters by the end of the second year, and so on. Various parties submit that the p-value of 0.50 for residential customers is overly aggressive. I believe that it is conservative, as it is used in the BACE model.

Q. WHY IS A P-VALUE OF 0.50 FOR RESIDENTIAL CUSTOMERS CONSERVATIVE? (WOOD REBUTTAL 43, KLICK REBUTTAL 22-23.)

A. First, the BACE approach models a *de novo* CLEC—that is, a CLEC that enters the market without any customers. However, the FCC's requirement that the Commission consider all the CLECs' various advantages would permit us to model a CLEC (such as AT&T or MCI) that already has a substantial number of revenue-generating UNE-P lines, which, over time, will be migrated to UNE-L lines in those areas where an efficient CLEC is not impaired without access to the local switching UNE. Indeed, Mr. Klick admits that CLECs already serve at least 10 percent of switched access lines in Alabama, and, as I indicated, this is biased low as an indicator of market penetration in particular markets. We opted not to model an efficient CLEC with a base of existing customers, but certainly this illustrates the conservatism of the p-value assumption.

Second, as implemented in BACE, a p-value of 0.50 means that the CLEC obtains half of its ultimate market share at the *end* of the first year. The *average* penetration during the year is 3.75 percent. (Mr. Wood and Mr. Klick completely misunderstand how the BACE model uses the p-value, and as a result, their arguments are wrong.) The revenue assumption for the first year reflects a 3.75 percent penetration rate, not 7.5 percent. We provided a description of the method and data that we used to develop the market entry curves, and other information, to AT&T and Sprint in response to discovery. (AT&T's (Georgia) 2nd Set of Requests for Production of Documents No. 44, Florida Sprint's 1st Request for Production of Documents No. 2.)

Third, as I noted earlier, analysts at Banc of America estimate that the Bell companies have attained market shares on the order of 30 to nearly 40 percent within two years of offering in-region long distance service. Moreover, they have attained approximately 25 percent in the first year, which means that the p-value is on the order of 0.625 (i.e., 25 percent / 40 percent) to 0.833 (i.e. 25 percent / 30 percent). I believe that this is relevant information because firms such as AT&T and MCI are large national long-distance providers that can provide local service and local/long-distance bundles, which provides them with the same products that the Bell companies are selling (local and long distance or local/long-distance bundles). The Bell long-distance data therefore are relevant indicators of customer willingness to change service providers.

Finally, it is worth noting that Dr. Bryant's approach uses a p-value of 1.00. In other words, he models a CLEC that obtains its full measure of market share (five percent, in Dr. Bryant's case) on the first day of operations. His average penetration for the first year is 5 percent, which exceeds our assumed average penetration of 3.75 percent.

Q. MR. KLICK CLAIMS "RAPID GAINS" BY CLECS ARE LARGELY ATTRIBUTABLE TO THE EXISTENCE OF UNE-P, AND THAT CLECS

MAY NOT ACQUIRE MARKET SHARE AS RAPIDLY USING UNE-L. (KLICK REBUTTAL 27-28.) PLEASE RESPOND.

A. Certainly the first response is that CLECs in Alabama already have acquired customers, and that, as a result, they will not have to "reacquire" these same customers as they shift the provisioning method from UNE-P to UNE-L. As a result, Mr. Klick's concerns about the rate of additions under UNE-L are overblown for that reason alone.

Moreover, Mr. Klick's argument has nothing to do with whether a customer is willing to change service providers, which is the subject of my testimony. Rather, his argument has to do with whether an efficient CLEC can manage its network processes (e.g., establish collocation where necessary, arranging for transport, and hot-cutting customers) to produce the same number of additions (or more) as has occurred under UNE-P. The BACE model accounts for the establishment of collocation and backhaul, and hot cuts. Other BellSouth witnesses describe the ability of an efficient CLEC to establish their network requirements so as to permit the CLEC to add customers as they win them in the marketplace.

Q. MR. KLICK CLAIMS THAT YOUR APPROACH TO MARKET PENETRATION "FRONT-LOAD[S]" THE PENETRATION RATES AND THEREBY OVERSTATES THE PRESENT VALUE OF THE REVENUES

THAT A CLEC CAN EXPECT TO RECEIVE OVER THE 10-YEAR STUDY PERIOD. (KLICK REBUTTTAL 28-29.) PLEASE COMMENT.

A. My recommended penetration curve shape is derived from my research of the academic literature and the generalized findings of researchers who have investigated the market entry paths of successful firms. Mr. Klick does not dispute the findings that I described from my review of the academic literature: indeed, he does not even acknowledge them. Rather, Mr. Klick's complaint seems to be that such a pattern contributes to the chances of success for the efficient CLEC that is modeled in the BACE model. This may be so, but simply because the peer-reviewed academic research is instructive or beneficial to the impairment business case does not mean that we should ignore it. The FCC instructed us to consider an efficient firm. I take that to mean that we should model the penetration patterns of successful, rather than unsuccessful firms. It would be foolish to use an entry pattern of *unsuccessful* firms to model the entry patterns of an *efficient* CLEC.

Q. IN HIS REBUTTAL TESTIMONY, MR. KLICK USES A STRAIGHT LINE TO RAMP UP THE MARKET PENETRATION. (KLICK REBUTTAL 28.) IS THIS PARTICULAR PATTERN OF GROWTH SUPPORTED BY THE RESEARCH?

No, it is not. As I discuss in this section of my testimony, the peer-reviewed academic literature does not support a straight-line penetration path and Mr. Klick provides no reasoned analysis for this particular "sensitivity" analysis. On this point, Mr. Klick clearly is engaging in mere speculation, without legitimate support. In contrast, I provided substantial background support for the path that I recommend for use in the BACE model. All of these papers were made available to Mr. Klick, but Mr. Klick said not a word about any of the academic literature that contradicts his recommendation.

Moreover, it is clear that Mr. Klick does not understand the relationship between gross CLEC customer additions, net additional, churn, and the penetration rate. Mathematically, Mr. Klick's linear penetration rate (i.e., a penetration rate that increases linearly until reaching the maximum penetration, and then abruptly flattens out) requires *either* a churn rate of zero (in which case gross adds translates into penetration), or, if churn is positive, it requires exponential growth in the number of monthly gross adds (to offset the monthly churn losses). Neither of these assumptions is realistic, in my view. In contrast, the "concave" penetration curve, such as the one I recommend, is the result of the interplay between churn and gross additions. The concave penetration curve is consistent with a positive, non-zero churn rate and a constant (linear), number of *gross* additions each month.

C. PRICE LEVELS

Q. DR. ARON, PLEASE SUMMARIZE THE ISSUES THAT YOU ADDRESS IN THIS SECTION.

A. In this and the following section, I address criticisms leveled by various CLEC witnesses regarding the prices that I recommended for use in the BACE model. This section discusses criticisms of the prices themselves. The following section discuses issues related to trends in the prices over time. (Consistent with the TRO, my estimates for prices, and costs, are not trended.) The BACE model incorporates prices for service bundles (e.g., aggregations of services consisting of local voice service, vertical features, and long-distance and/or DSL services) and for what I call "*a la carte*" services.

In both cases, the main complaint seems to be that I relied on the use of existing CLEC service prices for bundles and on actual BellSouth billing data for the *a la carte* services. Various theories are advanced for the use of other data and for adjusting these data over time. My main response is that the FCC clearly foresaw that prices would be a contentious issue. It reasonably determined that rather than bogging down the impairment analysis process in controversy, it would require that the potential deployment analysis use existing prices. Many of these criticisms

simply seek to rewrite or ignore the TRO's direction and use prices that are not reflective of prices that are effective in the market today.

Q. MR. WOOD CLAIMS THAT YOU DID NOT SUFFICIENTLY DISAGGREGATE BELLSOUTH'S CURRENT *A LA CARTE* PRICES AND, AS A RESULT, CLEC REVENUES CANNOT BE ESTIMATED WITH ANY DEGREE OF ACCURACY. (WOOD REBUTTAL 27.) PLEASE COMMENT.

A. By any objective standard, the BACE model is a highly granular model. It is, in fact, the most granular business case analysis I have ever seen. I believe that Mr. Wood resorts to the (unfounded) criticism that the BACE data lack granularity whenever his imagination flags. In any event, Mr. Wood has absolutely no basis for this claim. In determining the revenues reasonably available to the CLEC for its *a la carte* services sold to mass-market customers, we processed millions of individual BellSouth customer billing records. For residential customers, we consolidated those billing records into five "spend" groups at the wire center level (for businesses, we grouped the records into four business segments that varied by the number of lines served and three spending groups for each business segment). In so doing, we provided abundant granularity on the numbers of lines, the services, and the spending levels that reasonably would be available to an efficient CLEC. Our methodology produces different, granular average revenue estimates

for each product, customer segment, and spend group by state. These estimates are based on the specific mix of customers in each wire center. Each wire center has a different profile of customers delineated by spend categories. Therefore each wire center has a different effective average revenue per residence and each of the four business customers segments. This process addresses the point that Mr. Wood makes without the additional (and pointless) complexity that Mr. Wood seeks.

Q. MR. WOOD CLAIMS THAT YOUR PROCESS OF AGGREGATING CUSTOMERS FAILS TO SEPARATE HIGHER SPENDING THAT RESULTS FROM BEING IN A HIGHER-PRICED RATE GROUP FROM HIGHER SPENDING THAT RESULTS FROM BUYING MORE SERVICES. (WOOD REBUTTAL 32-34.) PLEASE COMMENT.

A. Mr. Wood expresses a concern that because Alabama has several retail price groups, the BACE model's treatment of customer segmentation is "incorrect" and "biased" the results toward a showing on no impairment. (Wood Rebuttal 33.) Mr. Wood's testimony is unclear and somewhat confused on this point, but his conclusion appears to be without merit.

Mr. Wood's concern seems to pertain to his observation that some customers spend a lot on telecommunications because they buy a lot of services at relatively low prices, while others spend a lot despite buying fewer services because they pay

higher prices. While in principle this is a true statement, it does not lead to any realistic concern with the results of the BACE model. First, as a practical matter, regardless of whether there were any merit to his concern in theory, the fact is that the only BellSouth prices that vary by rate group in Alabama are the basic local access line rates. Based on the design of the rate groups, only a relatively few residential customers will pay prices that differ by as much as $1.70 from the highest to the lowest rate group. Instead, over 75 percent of BellSouth's residential customers will face local access line rates that are within $0.35 of one another, and over half will have the same local access line rates. In the context of total spend levels, this difference would have minimal effect on the model and so Mr. Wood's convoluted discussion is actually much ado about nothing.

In fact, there are many reasons that customers vary in their spend levels. One customer might spend more than another because she is in a higher rate group for the local access line; or it might be that she is in the same or lower rate group, but purchases more vertical features, purchases DSL, purchases voice mail, has more long distance usage, or spends more on other services. A customer's spend level reflects all of these factors. The BACE model captures all of these factors because customers who, for whichever set of reasons, spend more, are placed in a higher quintile to reflect that spend level. All else equal, wire centers in higher rate groups will have larger numbers of customers in high spend quintiles. This is not a bias in the model but rather is a strength of the model because it enables the modeled

CLEC to target geographic markets with high-spend customers. To the extent that costs differ from wire center to wire center, this is also captured in the cost architecture of the model. Hence, there is no bias.

While Mr. Wood asserts that his observation about the different reasons that customers might be in a high spend category would lead to some bias or systematic inaccuracy in the model, he does not explain what the mechanism leading to such inaccuracy would be, and he certainly does not demonstrate any bias. *Any* model will aggregate and summarize different individual observations into averages or groups in some way, and this will always obscure some individual differences and characteristics. Short of modeling competition for each individual customer, an unreasonable and unrealistic standard, some individual-specific factors will not be accounted for. This in no way creates a bias or constitutes a weakness.

The fact is that in the BACE model, the costs of serving a given customer profile in a wire center are specific to the characteristics of that wire center, and the numbers of customers in each spend quintile are specific to each wire center. I believe that the level of granularity of the model is extremely high, and any attempt to discredit it or level unsupported claims of purported bias for failure to model still greater granularity should be rejected.

Q. MR. WOOD CLAIMS THAT THE PRICES FOR SERVICE BUNDLES WERE NOT DESCRIBED IN YOUR TESTIMONY. (WOOD REBUTTAL 28.) PLEASE COMMENT.

A. These prices were provided in response to Florida Sprint's First Request for Production of Documents No. 1, and Florida Staff's 5th Request for Production of documents No. 31 and Interrogatory 82. I understand that all of these responses have been made available to all parties in each of the BellSouth states.

Q. DOES DR. BRYANT CRITICIZE YOUR REVENUE ESTIMATE FOR RESIDENTIAL CUSTOMERS? (BRYANT REBUTTAL 38-39.)

A. No, not directly. Instead he runs his own sensitivity using a monthly revenue estimate of $53.70. He does not comment directly on my revenue estimates.

Q. PLEASE COMMENT ON DR. BRYANT'S USE OF THE $53.70 IN HIS SENSITIVITY ANALYSIS.

A. In my rebuttal testimony, I have already addressed Dr. Bryant's use of TNS telecom data for developing a revenue estimate. As Dr. Bryant has failed to address any of my criticisms, I stand on my previous testimony that the use of this figure is inappropriate.

Q. MR. KLICK CLAIMS THAT THE PRICE DATA USED IN THESE PROGRAMS IS SOMEWHAT DATED AND THAT PRICES HAVE DECLINED SINCE THE DATA WERE EXTRACTED FROM THE BELLSOUTH BILLING SYSTEMS. (KLICK REBUTTAL 13-14, 29.) PLEASE COMMENT.

A. A close reading of Mr. Klick's testimony at page 14 indicates that he is providing his opinion on BellSouth's retail prices in Florida, not in Alabama. However, later on page 29, Mr. Klick errs by inferring that prices have changed in Alabama. I understand from Mr. Ruscilli that BellSouth has not reduced its local service prices in Alabama. Accordingly, the data are reasonable to use.

Q. MR. KLICK CLAIMS THAT THE BACE MODEL PRICES ARE BASED ON THE ENTIRE BELLSOUTH REGION, NOT ALABAMA-SPECIFIC DATA. (KLICK REBUTTAL 29.) PLEASE RESPOND.

A. This is not true. The April 2003 data were pulled from all 9 of the BellSouth states, but only the state-specific data were used to determine local revenues in a particular state. In particular, only Alabama billing records were used to determine the model's *a la carte* pricing in Alabama, and only actual CLEC bundled offerings in Alabama were used to establish the model's bundled pricing in Alabama.

Q. MR. KLICK CLAIMS THAT THE BACE MODEL ASSUMES THAT RESIDENTIAL CUSTOMERS WILL SPEND ABOUT $46 PER MONTH PER LINE FOR LOCAL SERVICE (EXCLUDING LONG DISTANCE AND VOICE MAIL), WHICH IS CONSIDERABLY HIGHER THAN THE PRICES THAT HE CLAIMS ARE IN AN FCC REPORT. (KLICK REBUTTAL 30.) PLEASE COMMENT.

A. After criticizing our use of April 2003 actual BellSouth billing data as being "outdated" (Klick Rebuttal 13), Mr. Klick presents 2002 data. Mr. Klick cites to two reports, one an NRRI report and the other an FCC report. However, the NRRI report is based on the very same FCC report to which he also cites. The NRRI data has merely been updated with more recent subscriber line charge and federal universal service fund data. In addition (and in contrast to the data used to provide estimates for the BACE model), the FCC report does not provide Alabama-wide revenues, but instead reports only the residential revenue of one sample city in Alabama, Huntsville. (See Reference Book on Rates, Price Indicies and Expenditures for Telephone Service, FCC Wireline Competition Bureau, IAD (July 2003), Table 1.3.)

Moreover, Mr. Klick's comparison between the FCC numbers and the BACE numbers is not valid. The $23.38 to which Mr. Klick cites excludes vertical

features (e.g. call waiting), connection charges, intraLATA toll, and line maintenance. (See Reference Book on Rates, Table 1.1.) Yet, all of these are *included* in the $46 to which Mr. Klick makes his comparison. Indeed, when the two revenue estimates are put onto a comparable basis, the BACE estimate is in line with the FCC numbers and the revenues one would expect to see given AT&T's prevailing prices, as cited by Mr. Klick.

In order to compare Mr. Klick's cited AT&T prices to the BACE average residential revenue per line, they must first be put on a comparable basis. Because the AT&T price does not include either USF support or access charges, these same charges must be removed from the BACE revenue of $46. Removing these charges reduces the BACE average monthly revenue from $46 to $40. Mr. Klick notes that AT&T offers a package of local service (no long distance) that sells for $29.95. (Klick Rebuttal 30) However, the $29.95 price does not include the EUCL charge of $6.50 that AT&T charges its customers, so the cost to the consumer is $36.45, and this is before any additional vertical features the customer might wish to add for an additional charge. This is reasonably close to the $40 figure that we use in the BACE model (before access charges and USF). In addition, AT&T offers higher-priced packages of local service that would increase AT&T's average revenue for its residential subscribers above $36.45. For example, AT&T offers a $32.95 package (or $39.45 when the EUCL is included) that virtually matches our $40 average revenue. Birch Telecom provides a similar offering, with a basic

package price of $34, and adding in vertical features can increase the price of this offering to as much as $47 (these prices assume a $6 EUCL charge). This is again in line with the BACE average of $40.

In sum, our revenue estimates are within the range of prices cited by Mr. Klick. Indeed, our own estimates may be conservative given the CLEC propensity to attract higher-revenue customers.

Q. IS MR. KLICK SIMILARLY WRONG WITH REGARD TO THE IMPLICATIONS OF HIS ANALYSIS OF SOHO SPENDING? (KLICK REBUTTAL 30.)

A. Yes, he is. Mr. Klick cites once again to the NRRI report, which as I stated, is based on 2002 data (although it has been updated for certain minor charges). In addition, he again makes invalid comparisons. The $49.51 NRRI revenue estimate to which he compares the BACE estimate represents an *average flat rate* for one-line business customers, with no vertical features. In contrast, the BACE average revenue includes the vertical features that some customers actually buy on average, and also includes access charges and USF support. In addition, the revenue per line estimate that Mr. Klick computes from the BACE model reflects the effect of customer targeting ("cherry picking") by the efficient CLEC. I have documented evidence of substantial customer targeting of SOHO customers by CLECs, through

their avoidance of the lowest spending SOHO customers. Avoiding these low-spending customers results in an increase in *average* per-line spending. Finally, I would emphasize that my prices and revenue estimates are based on *actual* Alabama billing data, and *actual* CLEC bundled offer prices in Alabama, and these prices are taken from *all* Alabama customers, instead of just Huntsville. Therefore, the revenue reported in BACE is much more appropriate, reflects prevailing prices, and is representative of the revenue available to an efficient CLEC.

Q. MR. KLICK CITES TO A JP MORGAN REPORT ("ART OF WAR") AND CONCLUDES THAT YOUR LONG-DISTANCE REVENUE ESTIMATE IS OVERSTATED. (KLICK REBUTTAL 31.) PLEASE RESPOND.

A. First, Mr. Klick has miscalculated the average long-distance revenues that the BACE model uses to derive NPV. He states that the residential average long-distance revenue in the first year is $15.48. The actual average long-distance residential revenue per line in the first year is $13.83, and the average across the entire period is $13.28. In addition, I do not believe that data derived from that particular JP Morgan report is reliable. My analysis of the report shows that it is inconsistent with FCC published reports. For example, JP Morgan estimates that the voice long distance market was $89.5 billion in 2000. However, the FCC's *Trends* report estimates that total industry toll revenues were $109.6 billion in 2000. (*Trends in Telephone Service*, FCC Industry Analysis and Technology

Division-Wireline Competition Bureau, May 2002.) Thus, the FCC's estimate is some 22 percent higher than JP Morgan's. Indeed, merely increasing the $12.16 per-line residential long distance average that Mr. Klick claims JP Morgan estimates for consumers by this 22 percent overall industry understatement produces $14.89, which is comparable to the BACE average of $13.28.

I also find that the year 2000 data presented in that JP Morgan report produces an AT&T consumer market share of about 69 percent, whereas the FCC estimates AT&T's consumer market share at about 48 percent. These figures can be reconciled by recognizing that JP Morgan's estimate of the overall voice long distance market is too low.

As a consequence of these anomalies, I do not think that that particular JP Morgan report is a reliable way of estimating voice long-distance revenues in Alabama.

Q. HOW WERE THE LONG-DISTANCE REVENUES FOR THE BACE MODEL DEVELOPED?

The long-distance revenues in the BACE model were developed from industry revenue estimates developed by independent telecommunications analysts and applied to the various customer segments. The national market size (measured by revenue) was determined from IDC and Yankee Group reports. The 2003 market

size from these reports was averaged separately for business and residential customers. The share attributable to the BellSouth footprint was computed on the basis of access minutes. The residential long-distance revenues were allocated to individual customers based on a BellSouth estimate of the long-distance revenue from each customer and adjusting for the CLEC customers within the BellSouth footprint. The business long-distance revenue was reduced to reflect the HiCap customers excluded from BACE. This reduced revenue was allocated to the BellSouth states on the basis of access minutes. Finally, the business long-distance revenue per line was computed by dividing the business long-distance revenue by the number of BellSouth and CLEC business lines within the BellSouth footprint within that state. This structured approach, which was supported in detail in response to Sprint's first production of documents in Florida, assures that the long-distance revenue estimates are reasonable.

D. PRICE TRENDS

Q. DO YOU HAVE ANY GENERAL COMMENTS ABOUT THE WITNESSES' ARGUMENTS REGARDING PRICE TRENDS?

A. Yes. It is critically important to design a financial model so that the various assumptions correspond to one another in logical fashion. Witnesses Wood and Klick advance arguments about future price trends (they forecast declining prices)

that are disassociated from any coherent worldview. For example, these parties describe how competition and technological change may affect prices, but they fail to even mention, let alone forecast, how competition and technological change may affect, e.g., cost reductions and product innovation. By conducting a one-sided analysis, they create an unrealistic worldview where prices decrease, but costs stay the same, and no one innovates. I find this an implausible set of circumstances.

A more comprehensive analysis would consider how the technological changes that may permit, in some circumstances, price decreases do so because they drive cost decreases, and which (all else the same) will keep NPV the same. A more comprehensive analysis would also consider how the same competition that may spur some price decreases may also spur product innovation, with the net effect being *higher* per-customer spending, rather than lower spending, and a higher NPV rather than a lower NPV. While Mr. Wood and Mr. Klick eagerly speculate about the effects of competition and technology on the prices of the existing portfolio of services, they totally neglect to consider the countervailing effects that competition, technology, and product innovation can have on the total business case and they thereby present a biased view of the future.

I do not recommend trying to forecast any of the effects of these various forces. I believe—and I believe that the FCC supports me (TRO ¶ fn. 1588)—that the result would be unending controversy about the effects that competition and technology

would have on prices, costs, innovation, and total spending. Instead, because of the complexities in forecasting technology, competition, and innovation, I conclude that it is more appropriate to (1) assume a given portfolio of existing services (rather than speculate on the availability and diffusion of new services); (2) assume that the prices for this portfolio neither increase nor decrease over time; and (3) assume a constant level of technology so that costs neither increase nor increase over time. This is the coherent worldview that is consistent with the TRO. This coherent worldview contrasts with the biased view offered by Mr. Wood and Mr. Klick in which competition and technology lead to reduced prices but not to reduced costs nor to the kind of product innovation that would contribute to increased spending per customer.

Q. MR. KLICK CLAIMS THAT PARAGRAPHS 157 AND 518 OF THE TRO PROVIDE SUPPORT FOR MODELING PRICE DECREASES AS A RESULT OF COMPETITION. (KLICK REBUTTAL 32, 39-40.) DOESN'T THIS DEMONSTRATE THAT SUCH PRICE DECREASES SHOULD BE MODELED?

A. No, it does not. Mr. Klick cites as his authority two paragraphs in the TRO (157 and 518). In doing so, Mr. Klick relies on a discussion that is entirely off-topic (having to do with universal service rather than price forecasts) and, in any event, it is a discussion that was roundly criticized by the D.C. Circuit Court in its *Vacatur*

and Remand. Moreover, in clutching at these off-point, criticized discussions, Mr. Klick ignores a direct, on-point discussion that FCC has regarding prices and revenues, in footnote 1588.

As I noted, paragraphs 157 and 518 of the TRO do not discuss the merits of forecasted prices. Instead, these paragraphs discuss the sometimes "complex" effects that implicit price supports—such as may exist in local service rates as a result of universal service considerations—may have on competitive entry. The FCC's ruminations on implicit price supports are hardly clarion calls to engage in price forecasting, as Mr. Klick seems to conclude. Indeed, they have nothing to do with forecasting at all. The FCC merely observes that entry may be accelerated in areas that provide subsidies, and retarded in areas that receive implicit subsidies, and that such implicit subsidies ultimately cannot withstand competitive forces. Indeed, the FCC's vacillations and inconclusive arguments on implicit subsidies were met with especially scathing comments from the D.C. Circuit Court. The Court concluded that the FCC's discussion was essentially vacuous because the FCC made no attempt to connect the discussion to any relevant economic entry barrier that had anything to do with "impairment." According to the Court:

> The interesting case is the one where TELRIC rates are so low that unbundling *does* elicit CLEC entry [despite below-cost retail rates], enabling CLECs to cut further into ILEC revenues in areas

> where the ILECs' service is mandated by state law—and mandated to be offered at artificially low rates funded by ILECs' supracompetitive profits in other areas. If the scheme of the Act is successful, of course, the very premise of these below-cost rate ceilings will be undermined, as those supracompetitive profits will be eroded by Act-induced competition. In competitive markets, an ILEC can't be used as a piñata. The Commission has said nothing to address these obvious implications, or otherwise to locate its treatment of the issue in any purposeful reading of the Act.(Vacatur and Remand, p. 26. Emphasis in Original.)

In other words, according to the Court, the FCC appears to recognize that competition can erode implicit subsidies, but the FCC said nothing to address the "obvious implications," nor did the FCC explain how implicit subsidies affect an "impairment" analysis. From my reading of those paragraphs, I conclude that the FCC made no conclusions about the efficacy of price forecasts.

Indeed, as I noted earlier, the single, unambiguous place that the FCC actually addressed the issue of price forecasts is footnote 1588, where the FCC said, in straightforward language:

> [W]e expect states to consider prices and revenues prevailing at the time of their analyses. We believe that these are reasonable proxies for likely prices and revenues after competitive entry and will result in a more administrative standard." (TRO, fn. 1588.)

The FCC instructs state commissions to use existing prices and revenues because they are "reasonable proxies" for the prices and revenues after competitive entry and will be simpler to administer (which would require considering the effect that innovation and technological change might have on prices, costs, and revenues). Mr. Klick inappropriately clutches at the "rates are likely to change" language in paragraph 518 of the TRO that has to do with the erosion of implicit subsidies in the context of universal service, rather than any directions by the FCC to try to forecast prices (and, one would infer, directions that would likewise require forecasts of costs and innovation as well, in order to shape a coherent worldview).

Because a fair, full analysis requires consideration of all of the factors that can affect prices, costs, innovation, and revenue, and because such an analysis would be fraught with controversy, it is most appropriate from a modeling perspective to stay with the existing portfolio of services, existing prices, and existing costs rather than attempting to forecast changes in all three of these, as would otherwise be required.

Q. DO MR. KLICK'S VARIOUS EXAMPLES OF PRICE DECREASES AROUND THE COUNTRY PROVIDE ANY EVIDENCE THAT ONE SHOULD FORECAST CONTINUED PRICE DECREASES? (KLICK REBUTTAL 35-37.)

A. No. First, the prices that I recommend for use in the BACE model are based on market prices. To the extent that competition already has resulted in price decreases in Alabama, these are incorporated in the model. Second, as I noted, one should not model a firm whose prices continually decrease as a result of competition and technological change without also considering the effect that these forces will have on costs, product innovation, and total customer spending, which Mr. Klick fails to do. Considering one outcome (decreased prices) while failing to consider others (increased revenues due to an expanded product portfolio and decreased costs) biases the business case, perhaps substantially. Because of the speculative nature of making forecasts of prices, technology, and competitive responses it is more appropriate to follow the FCC's directive to consider prices and revenues prevailing at the time of the analysis, as I recommend.

I also will note that Mr. Klick's citations to advocacy papers (that he characterizes as "academic literature," but which, to my knowledge have not been published in academic or peer reviewed journals) that claim to demonstrate that competition has reduced prices provide no academic consensus that would direct the use of price

forecasts in the potential deployment model. (Klick Rebuttal 38.) For example, the paper by Dr. Braunstein simply recites some price decreases. The topic of his paper has to do with UNE costs, not with price forecasting or the *future* of telecommunications prices, costs, technology, and innovation. The paper by Hassett, Inova, and Kotlikoff creates a simulation model that the authors say describes the effects that competition has on the prices and investments by an *unregulated* monopolist. They find that additional competition will cause an unregulated monopolist to increase output and reduce prices. But, this basic economic model hardly characterizes the circumstances in the telecommunications industry generally or in Alabama in particular, where regulation of retail prices is the norm. In my view, the model is not suited for assessing real world price performance or investment in the future in the current context. As I noted, since I base my price recommendations on existing BellSouth and CLEC prices, my price recommendations account for the price reductions that have occurred in Alabama to date. *Revenues* are more important in a business case model than are *prices.* Indeed, prices may be declining while revenues per customers are increasing.

Finally, despite what Mr. Klick calls a "litany" of anecdotes (Klick Rebuttal 39), there are no data supporting the view that landline local telephone rates have declined as a result of competition. According to the Bureau of Labor Statistics, landline local telephone rates have not declined since the 1996 Telecommunications Act. Indeed, on a national basis, local charges associated

with landline telephone services for consumers were 27 percent higher in February 2004 than they were in February 1996 when the Act was signed into law, an average annual increase of about 3 percent. The February 2004 prices are also 2.5 percent higher than in February 2003, 7 percent higher than in 2002, 12 percent higher than in 2001, and 18 percent higher than in 2000. Thus, there is no evidence that landline local telephone rates for consumers have decreased since 2000 when UNE-P was implemented in a substantial way.

Q. IS IT REASONABLE TO APPLY A 10 PERCENT DISCOUNT ON ALL REVENUES AS MR. KLICK RECOMMENDS? (KLICK REBUTTAL 49-50.)

A. No. The method that I propose (applying the discount to *a la carte* local services only) applies the discount only to those services where BellSouth has traditionally been the service provider and where, arguably, it may require some reason for customers to make a change. For other services, we rely on effective CLEC prices in Alabama to begin with. These prices already reflect competition with BellSouth. It is therefore not reasonable to assume that a firm such as AT&T would have to discount its long-distance services by 10 percent to entice customers to leave BellSouth's long-distance subsidiary. If anything, one might expect that AT&T (or MCI or Sprint or other long-distance carriers) to have long-distance service offered at a premium to BellSouth's offering. Similarly, it does not seem reasonable that a

CLEC would have to discount its Internet (DSL) services when BellSouth is simply another broadband competitor.

Q. IS MR. KLICK'S 15 PERCENT DECREASE OF PRICES IN YEAR 1, WITH NO PRICE DECREASES THEREAFTER, A REASONABLE SENSITIVITY? (KLICK REBUTTAL31.)

A. No, it is not. As I stated above, our prices reflect the prevailing prices in Alabama today, and there would be no justification for prices to fall by 15 percent in year one.

Q. ISN'T IT TRUE THAT THE COMPETITIVE PROCESS WILL DRIVE REVENUES DOWN? (KLICK REBUTTAL 38-40.)

A. No. Mr. Klick inadequately describes the nature of the competitive process. Even if competition results in lower prices in some instances (such as where prices exceed costs due to implicit subsidies of other prices), other prices may increase. Moreover, competition does not necessarily imply that the *revenues per customer* will decrease over time. While one outcome of competition can be lower prices when prices are substantially above cost, price decreases cannot be expected if prices already are below the competitive level. In fact, competition will undermine any existing cross-subsidies and cause below-cost prices to rise to an economically

rational level. Moreover, there is a countervailing factor that these arguments completely overlook, and that is the effect, in a competitive market, of product innovation that entices customers to spend more on existing and new products than had been the case before. This will contribute toward *increased revenue per customer* over time, which will, in turn, will contribute to an increased net present value of the business case, and possibly more "unimpaired" areas.

Out of conservatism, the BACE model does not assume that the efficient CLEC will create innovative new products or that it will derive increased revenues per customer from newly developed products (except through the upward penetration of DSL in the initial years). Instead, we draw from a *fixed portfolio of existing products* that are available today to customers. Mr. Klick's proposal to trend prices downward over time takes a one-sided view of competition because it ignores circumstances where some prices may increase and ignores product innovation that would result in higher total spending per customer. Because there is no way, in my mind, to resolve the issue of whether customers of the efficient CLEC will in the future spend more or less on telecommunications services as a result of product innovation and price competition, I conclude that there is no reason to diverge from the FCC's requirement that we base prices on existing prices and not adjust them (or adjust spending per customer) upward or downward in an attempt to reflect the various factors that influence customer spending. It is more principled to determine

spending based on existing prices rather than try to project which factors will dominate among the countervailing influences on spending per customer.

Q. MR. KLICK ALSO ARGUES THAT PRICES WILL DECREASE BECAUSE TELECOMMUNICATIONS IS A "DECLINING COST INDUSTRY". (KLICK REBUTTAL 33.) PLEASE COMMENT.

A. Mr. Klick uses the term "declining cost industry" in the lay sense of productivity improvements over time that reduces a firm's costs. The proper economic definition of "declining cost industry" refers to an evaluation of average costs at different levels of output (when time is invariant). I will respond to Mr. Klick's depiction.

Mr. Klick argues that the efficient CLEC's costs will decrease over time. He concludes, "As costs fall in a competitive market, all other things being equal, prices fall as well." (Klick Rebuttal 33.) While this is true, I see nowhere in Mr. Klick's testimony where he recommends that the same productivity that he claims will reduce *prices* also will reduce *costs* in the model. Mr. Klick's recommendation therefore is biased: he would have us reduce prices to reflect productivity; but he would not have us reduce costs to reflect that same productivity.

Rather than engage in fruitless debates about future productivity rates for the efficient CLEC, our approach is to follow the TRO and use prices that are based on currently prevailing prices. Our cost analysis likewise is based on existing, standard technologies and is not trended downward to reflect gains in productivity.

Q. MR. WOOD CLAIMS THAT PRICES WILL CHANGE IN THE FUTURE BECAUSE AREAS WHERE PRICES ARE HIGH AND COSTS ARE LOW ARE LIKELY TO ATTRACT COMPETITIVE ENTRY. (WOOD REBUTTAL 26.) PLEASE COMMENT.

A. This is nonsense. First, as I indicated, there really is no "short term" modeling approach for a going-concern business. Mr. Wood fails to understand what a business case entails. A going concern generates a residual, or terminal value, which represents the discounted net value of the firm for the years beyond the explicitly modeled period. The firm's total value is the sum of the explicitly-modeled part and this terminal value. A shorter explicitly-modeled time horizon does not increase the certainty of the estimates; it simply pushes the uncertainty into the terminal value estimate. Any reduction in the number of years that are explicitly modeled requires an offsetting adjustment on the terminal value for the simple reason that value is neither created nor destroyed simply by the number of years that one chooses to explicitly model.

Second, there is no economic reason (and Mr. Wood has provided no such reason) that a constant price assumption implies that a shorter-term explicit model should be used. As I indicated, the total value of the firm should not change simply because the number of explicitly-modeled years is reduced.

The fact that Mr. Wood failed to express his views on the interaction of explicitly-modeled years and the terminal value leads me to conclude that, possibly, he is uninformed of the role that the terminal value plays in a business case analysis. There is no credible economic theory or process that would change the NPV of a project or going concern simply by lopping off some of the years where value is created.

Q. MR. WOOD ARGUES THAT INTERSTATE TOLL PRICES HAVE DECREASED BY 5.1 PERCENT PER YEAR DURING THE 10-YEAR PERIOD FOLLOWING DIVESTITURE. (WOOD REBUTTAL 29.) IS THIS USEFUL INFORMATION FOR THE POSSIBLE PATH OF LOCAL SERVICE PRICES?

A. Absolutely not. Many will recall that over the past decades, access charge reform changed the way common line costs were recovered, and that this reduced toll costs and prices. Access reform entailed the movement from a per-minute-of-use charge levied on long-distance carriers to a monthly recurring end user common line

charge ("EUCL") directly paid by local service end users (as well as a flat-rate charge charged to the carriers). Access charge reform was a regulatory exercise that removed cost recovery from long-distance service variable costs. According to the FCC, from 1984 to 1994, interstate switched access charges decreased by nearly 9 percent per year. Access charges account for a substantial portion of long-distance costs (by one estimate about 40 percent of AT&T's consumer long-distance division's costs), so the access charge decreases made a substantial contribution to overall cost and price decreases. Mr. Wood does not appear to consider access reform, and so their claims about long-distance pricing are inapplicable indicators of what might occur for local exchange services.

In sum, there is no probative value to the quantitative historical trend of long-distance prices, as presented by Mr. Wood, relative to the future price path of local exchange services at issue in this proceeding. The fact that Mr. Wood finds that NPVs are "significantly reduced" if a 5.1 percent annual price decrease is applied over the 10-year horizon of the BACE model should come as no surprise. (Wood Rebuttal 31.) However, Mr. Wood's number is based on an inapplicable comparison and has not been shown to apply to local exchange service. Moreover, while Mr. Wood seeks to reduce prices, he does not make any corresponding adjustment for costs that reasonably might decrease over the 10-year time horizon.

Q. DOES MR. KLICK MAKE A SIMILAR ARGUMENT ABOUT FUTURE PRICES BY POINTING OUT THAT LONG-DISTANCE PRICES HAVE DECREASED AND MAY CONTINUE TO DECREASE? (KLICK REBUTTAL 48-49.)

A. Yes. Mr. Klick argues that long-distance prices may continue to decrease, and he further claims that long distance *volumes* may decrease as well. As I pointed out in my response to Mr. Wood, however, the historic decrease in long-distance prices can be traced primarily to the effect that access reform has had on the costs faced by interexchange carriers.

It is, of course, unlikely in the extreme that long-distance volumes in the telecommunications industry are decreasing. People are not talking less to one another than they have in the past. Rather, there appears to be a reduced economic rationale for long-distance service on a *stand-alone basis*, and a shift from wireline to wireless long distance. It appears that economies of scope in both wireless and wireline industries between local and long-distance services, as well as the interests of customers in obtaining service bundles, are encouraging carriers to offer combinations of local and long-distance services. (I describe economies of scope in greater detail later in my surrebuttal testimony, and I provide an example in Exhibit DJA-09, which I also describe later, that illustrates how two services that

appear unprofitable on a stand-alone basis can be profitable when offered by an integrated carrier.)

Second, and related, is that the shift in long-distance calling volumes from wireline to wireless services has been exacerbated by the relative pricing between these industries. Wireline long-distance prices generally are on a per-minute basis, while wireless long-distance prices often are offered on a "bucket of minutes" basis. To the extent that wireline local service companies continue to meld long-distance and local services, and continue to adopt pricing structures along the wireless model (as has occurred with several of MCI and AT&T's bundled plans), wireless substitution that is occurring as a result of the wireline industry's per-minute pricing method will be reduced or potentially reversed.

The BACE model accounts for observed changes in the long-distance market by incorporating bundled pricing. The bundles and bundle prices represent actual CLEC offerings. The BACE model also accounts for the fact that when a CLEC leases the UNE loop, the CLEC is able to generate revenues from all of the different services that use the loop, and all of which can provide some contribution to the recovery of this shared cost. Such services that use the loop include long-distance service (and DSL, central office features, and other services such as voice mail). Mr. Klick has presented is no evidence that the combined, total revenues that may be available to CLECs using the loop will decrease over time, even

assuming that particular volumes and prices associated with one or another of the existing suite of possible services may change.

Moreover, other services that are unknown or which provide little revenue today may become important new additions to the CLEC's suite of services. For example, within the past several years, we have seen first, the rise of features as a source of revenue, and, more recently, the evolution of DSL from a consumer curiosity to an important revenue stream. There is no reason to believe that engineering and marketing innovations are exhausted in the telecommunications business. However, as I noted, it is more conservative to refrain from speculating about new additions to the product portfolio. Similarly, it is appropriate to refrain from speculating about, e.g., declines in existing products in that portfolio. I had earlier noted that since 2000, local telephone service prices have increased by about 18 percent (about 4.2 percent per year). Just as I do not recommend increasing local telephone service prices by 4 percent per year, I also do not recommend trying to forecast changes in the price of long-distance service.

Q. MR. WOOD CLAIMS THAT IT IS "NONSENSICAL" TO COMBINE CONSTANT PRICES WITH A 10-YEAR MODEL. HE CLAIMS THAT CONSTANT PRICES IMPLY A SHORT-TERM TIME HORIZON FOR THE ANALYSIS. (WOOD REBUTTAL 29.) PLEASE COMMENT.

A. Mr. Wood is incorrect. As I mentioned, the FCC directs us to use prices that are based on those currently in the market. This is wise counsel because otherwise there would be no end to the disputes about future price trends. Our approach, which keeps prices, the product portfolio, *and costs* constant over the forecast period, is more reasonable, and more consistent with the TRO, than is engaging in insoluble debates about technological and product innovations, current and future price-cost relationships, the effects of retail regulations, and competitive dynamics.

E. SERVICES OFFERED

Q. MR. WOOD ARGUES THAT THE RANGE OF SERVICES CONSIDERED IN THE BACE MODEL SHOULD BE WHAT THE CLEC SEEKS TO OFFER, NOT WHAT BELLSOUTH THINKS CLECS SHOULD OFFER. (WOOD REBUTTAL 12-13.) PLEASE COMMENT.

A. At pages 48 and 49 of his rebuttal testimony, Mr. Wood claims that it is inappropriate to consider "non-switched services" (or donuts) that might be used "in order to help pay for the switch." I take it that Mr. Wood is referring to DSL service, which is a non-switched service that can be provided over the same loop that provides switched voice services. The TRO itself provides clear guidance as to what services, including data, should be considered potential revenues in a potential deployment analysis. "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, emphasis added.)

In any event, a simple example will show the error of Mr. Wood's argument. Exhibit DJA-09 illustrates that a CLEC may find it uneconomic to offer either voice service or DSL service alone, but may find that it is economic (i.e., the CLEC can earn zero economic profits) if it offers both. The reason is that there may be *economies of scope* in offering switched and unswitched services. As shown in my example, these economies are the result of the common use of the local loop.

The example shows that the profitability of both services benefits from the existence of, and the CLEC's recognition of, scope economies. An efficient CLEC will recognize instances where economies of scope exist, and it will take advantage of them. There is no reason to artificially crimp the potential deployment analysis by failing to recognize the scale and scope economies and any other advantage available to an efficient CLEC. Mr. Wood pejoratively scoffs at the notion that the CLEC should engage in a fundraiser by selling donuts on a street corner to help pay its switching costs. Of course, this absurd example illustrates an instance where there are no economies of scope (one presumes) between providing telecommunications services and providing donuts.

Mr. Wood plays lightly with the Commission's time by creating a misleading example and by failing to address the genuine issue of economies of scope that should be considered when evaluating the profit opportunities open to an efficient CLEC. My simple example demonstrates the power that such economies can have. Economies of scope can provide a way of changing the results of a business case from one that appears to have no promise in *either* voice or DSL service, to one that appears to offer an economic return if *both* are offered. This is the issue that this Authority should consider, and not examples that treat this proceeding as a farce.

F. CHURN

Q. PLEASE COMMENT ON DR. BRYANT'S CLAIM THAT ANY INPUT TO THE BACE MODEL (REGARDING CHURN) THAT RELIES EXCLUSIVELY ON THE ACTUAL EXPERIENCE OF UNE-P FIRMS WILL BE UNDERSTATED. (BRYANT REBUTTAL 36.)

A. Dr. Bryant claims that churn based on the experience of UNE-P-based carriers will be understated for the same reasons that he provided in his discussion of market share. These reasons were (1) BellSouth winback programs; (2) CLEC service prices; (3) CLEC service quality; (4) the availability of hot cuts; (5) the ability of the CLEC to bring new services to market; (6) the costs of those new services; and

(7) the ability or inability of the CLEC to offer broadband using the ILEC's new infrastructure capabilities. (Bryant Rebuttal 35-36.) However, Dr. Bryant actually engages in mere hand waving because he does not discuss these factors at all as they relate to churn, and he certainly does not explain why *all* of these factors would lead to an understatement of churn that is based on the experience of UNE-P providers. A closer examination shows that this claim has no basis.

For example, there is no reason to believe that ILECs' winback offers affect a switch-based CLEC any differently than it affects a UNE-P-based CLEC (and Dr. Bryant fails to explain why it would). Indeed, this would conflict with Dr. Bryant's argument in his direct testimony that a switch-based CLEC would have the incentive to reduce its price below that of a UNE-P-based CLEC in order to retain customers. (Bryant Direct 80-81.) The theory is flatly inconsistent with his discussion on churn.

It also appears that a number of the other factors cited by Dr. Bryant may be associated with *lower*, not *higher*, churn for a switched-based CLEC than might be observed with UNE-P providers. For example, a switch-based CLEC has more control of its own service quality than does UNE-P CLEC simply because it has a reduced reliance on the ILEC network. The switch-based CLEC also has the incentive and ability to manage its switching resources so as to reduce costs, perhaps by investing in a newer generation of technology. (Although the BACE

model considers a CLEC that uses traditional circuit switching technology, a real-world CLEC may elect to use more advanced packet switches, if these are less costly.) Finally, a switch-based CLEC can implement new products without working through a third party (i.e., the ILEC) to do so. In sum, a switch-based CLEC has more control of quality, better ability to manage costs, and an enhanced ability to offer new services than does the UNE-P-based CLEC, which reasonably would suggest lower, not higher churn.

Q. MR. WOOD ARGUES THAT YOUR USE OF AN "INDUSTRY-WIDE CHURN RATE" REFLECTS THE EXPERIENCE OF ILECS (AS WELL AS CLECS) AND IS THEREFORE BIASED LOW BECAUSE THE ILEC BASE OF CUSTOMERS IS UNLIKELY TO CHANGE PROVIDERS. (WOOD REBUTTAL 46.) PLEASE COMMENT.

A. Mr. Wood's argument is incorrect. First, I do not base my churn assumptions on any one report, but on the reported churn rates for a variety of CLECs, as I explained in my direct (and rebuttal) testimonies. Moreover, with respect to the one report to which Mr. Wood refers, his discussion is misleading because he fails to tell the whole story. Mr. Wood cites to page 33 of my direct testimony as using an "industry-wide churn rate." A casual reading of that paragraph shows that I am discussing the results of a Morgan Stanley survey of *business customers*. Thus, Mr. Wood's (unsupported) conclusion that my proposed churn rates are understated

because of "the presence of a base of [ILEC-served] customers who are unlikely to change providers in response to competitive alternatives," (Wood Rebuttal 46.) fails to note that these are *business customers* that he is talking about.

This is an important omission because business customers are unlikely to have an irrational bias against changing providers. Businesses can be expected to make a rational evaluation of a CLEC's service offering, and it is safe to assume that they generally are among the more savvy telecommunications services end-users. Businesses have the incentive, especially in this economy, to aggressively manage their costs and resource use. Any churn rate related to business customers is not biased either way by including the ILEC experience with its business customers. Moreover, the *efficient* CLEC should be able to reduce its churn rate to that of the ILEC for business customers through, e.g., term contracts, superior service, and the like. Indeed, recent statistics I have seen suggest that in the business market, ILEC churn may exceed CLEC churn.

Q. DO YOU HAVE ANY COMMENTS REGARDING MR. WOOD'S DISCUSSION OF YOUR ESTIMATE FOR "CHURN"?

A. Yes. My recommended churn rate for residential customers is 4 percent, which is the same rate that Z-Tel experienced, according to investment analysts, and it is also the same rate that Z-Tel told the FCC that it experienced. (TRO 471.)

Moreover, according to the FCC, Z-Tel claims that "carriers in a competitive market cannot expect to keep any particular customer for more than 18-24 months," (TRO 471) which implies a monthly churn rate of 2.9 to 3.9 percent. In my direct testimony, I also noted an investment analyst report by Banc of America. This report estimates that AT&T's own local experience is on the order of 4.6 percent. It is entirely disingenuous to suggest that an efficient CLEC cannot attain a 4 percent churn rate for its residential customers.

Q. MR. WOOD CLAIMS THAT RELIANCE ON WIRELESS CHURN RATES IS "MISPLACED" BECAUSE THE WIRELESS INDUSTRY HAS (TO THIS POINT) HAD NO NUMBER PORTABILITY AND BECAUSE IT USES TERM CONTRACTS. (WOOD REBUTTAL 46.) PLEASE COMMENT.

A. I specifically examined the issue of number portability in my direct testimony (although Mr. Wood does not acknowledge this in his rebuttal testimony). On pages 32-33 of my direct testimony, I explained that analysts at Banc of America Securities held the view (with which I agree) that wireless churn was indicative of local churn; though local churn may be higher due to number portability. Wireless churn is on the order of 2.6 percent. I recommend a residential churn rate of 4 percent, or some 54 percent higher than the wireless churn rate. This is in line with the 4.6 churn rate that Banc of America estimates for AT&T's own local services (which may not be an efficient CLEC). It is also in line with the estimate of a

Morgan Stanley investment analyst report that I noted (page 33) in my direct testimony. Finally, I noted in my testimony that at least one analyst estimates that wireless number portability will increase wireless churn rates by about 50 percent, which will put them at about 4 percent, or, in other words, about the same as my estimate for an efficient CLEC serving its residential customers.

The efficient CLEC can reduce churn by introducing attractive, useful new services, pricing plans, billing options, and the like that the ILEC does not offer. Thus, churn is at least in part a management issue—it is a cost that a carrier actively must try to manage. I find it very disingenuous, and smacking of a defeatist self-pitying attitude to argue, as Mr. Wood does, that the ILECs "effectively dictate CLEC churn rates" going forward. (Wood Rebuttal 46.)

G. SALES COSTS

Q. MR. WOOD CLAIMS THAT THERE IS A MISMATCH BETWEEN CUSTOMER ACQUISITION COSTS, WHICH APPLY TO A NARROW RANGE OF SERVICES, AND THE BROAD RANGE OF CUSTOMER SERVICES THAT THE MODELED CLEC IS SAID TO OFFER. (WOOD REBUTTAL 51.) PLEASE COMMENT.

A. I disagree. This argument does not apply to business customers, because my recommendation for customer acquisition costs is derived from a multiple of first-month's revenues. Thus, the broader or more expensive the services, the higher is the implied customer acquisition cost. For residential customers, however, I propose a flat $95 per customer location. My recommendation of residential acquisition costs of $95 is sufficient to accommodate the entire portfolio of services. My parameter value is based on the experience of existing UNE-P-based firms such as Z-Tel (which has a target of $50) and Talk America (whose actual costs are estimated to be $80). My parameter value of $95 is substantially higher than either. Moreover, as I explained in my direct testimony, Hazlett and Havenner describe why existing UNE-P-based firms that operate in areas that legitimately are unimpaired have the incentive to inefficiently increase their customer acquisition costs. Therefore it may be the case that Talk America's customer acquisition costs are inefficiently high.

I can demonstrate that my proposal is sufficient to accommodate customers who order DSL as well as voice services. Consider the example that I show in Exhibit DJA-10. This exhibit shows that customer acquisition costs, based on the Z-Tel and Talk America figures, are on the order of $50 to $80. I compute an incremental customer acquisition cost associated with DSL from data provided by Dr. Bryant. For those customers who obtain *both* voice and DSL service from the efficient CLEC, customer acquisition costs should be on the order of $150 to $180. In the

BACE model, this represents approximately 15 percent of a CLEC's customers. The other 85 percent obtain voice services only. Thus, the weighted average customer acquisition cost for the portfolio of services should be on the order of $64 to $95 for the average customer, yet the BACE model applies $95 to *every* customer.

Q. PLEASE RESPOND TO DR. BRYANT'S ADDITIONAL CRITICISMS OF YOUR CUSTOMER ACQUISITION COSTS. (BRYANT REBUTTAL 36-37.)

A. Dr. Bryant makes several claims. He says that my customer acquisition costs are, at the low end, based on the Z-Tel experience. (Bryant Rebuttal 36.) This is only partly true. I considered customer acquisition costs for Z-Tel, Talk America, and AT&T as shown in Revised Exhibit DJA-06 in my Rebuttal testimony, all of which are wireline, local exchange providers. (Moreover, this applies only to residential acquisition costs.)

Dr. Bryant then claims that his sources range from $80 to $400. He says that these are from the "same types of sources" that I used. (Bryant Rebuttal 37.) That is not true. According to Dr. Bryant, the $400 estimate is for a *wireless provider*. I did not consult wireless providers to create my estimate because the differences between the wireline and wireless industries on this particular dimension invalidate

any simplistic comparison of customer acquisition costs. As should be well known, wireless providers often underwrite the cost of the handset. Neither Dr. Bryant nor Dr. Gabel appears to make any adjustment for that. This invalidates any simple, direct use of wireless providers as indicators of customer acquisition costs for an efficient wireline CLEC. Moreover, as I indicated, wireless churn is on the order of 2.6 percent per month, which is substantially less than the 4 percent for residential customers that the BACE model uses. Accordingly, wireless providers reasonably can afford to spend more on customer acquisition, since their average customer stays with them half-again as long as does the efficient CLEC's customer (i.e., 27 months versus 17 months).

The one item of Dr. Bryant's that corresponds to some of my data is the claim that Z-Tel's customer acquisition costs are on the order of $80. This is reasonably consistent with the estimate that I obtained for Z-Tel of $60-70, with a management goal of $50. (See Revised Exhibit DJA-06 in my Rebuttal Testimony) I will note that this is about the same as the Talk America experience, and it is about 15 percent less than my recommendation. But, Dr. Bryant is recommending $130. *None* of the CLEC data that Dr. Bryant considers (Dr. Gabel's or my own) provides him with any legitimate support for his $130 customer acquisition cost. It is only by misapplying the wireless experience that he is able to "justify" his recommendation.

Q. DR. BRYANT CLAIMS THAT CUSTOMER ACQUISITION COSTS ARE "UNKNOWABLE" IN A POST UNE-P MARKET. (BRYANT REBUTTAL 37.) PLEASE RESPOND.

A. As I noted earlier in this testimony, complete and absolute certainty is not required to make a reasoned and reasonable estimate of customer acquisition cost, or any other variable required for the potential deployment analysis. Dr. Bryant returns to this argument to advocate running "scenarios" where the customer acquisition costs in a post-UNE-P market substantially exceed those for UNE-P-based firms. (Bryant Rebuttal 37, MTB-9 and MTB-11.) In making this argument Dr. Bryant does not try to rebut, nor does he even mention, the Hazlett and Havenner discussion. Because he does not address this, he cannot legitimately claim that customer acquisition costs for a switch-based CLEC will "substantially exceed" those of UNE-P-based firms.

Moreover, the CLECs themselves do not appear to support Dr. Bryant's claim. MCI submitted to the FCC an *ex parte* study that purported to compare the incremental cost of the change from serving residences via UNE-P to UNE-L. The study excluded marketing and customer service costs, which indicates that the modelers did not see fit to change them (i.e., increase them for a UNE-L provider).

H. G&A

Q. DR. ARON, YOU RECOMMEND THAT G&A EXPENSES BE MODELED AS A PERCENTAGE OF REVENUE, AS DETERMINED FROM AN ANALYSIS OF ILEC DATA. PLEASE DESCRIBE WHY SUCH AN ANALYSIS SHOULD APPLY TO THE G&A COSTS OF AN EFFICIENT CLEC. (WOOD REBUTTAL 51.)

A. There are two important countervailing advantages that suggest that the G&A expenses associated with an efficient CLEC can reasonably be equal to or even less than those of ILECs. First, as I have noted, the CLEC that we have elected to model is a new entrant into the market. This provides us with a very conservative starting point because, in reality, CLECs are not new entrants, they have an existing base of operations and some, such as AT&T and MCI, are substantial firms in their own right. These firms have the ability to serve multiple markets and to adjust their G&A resources accordingly. It is reasonable that they should be able to at least meet the traditional cost structure of the ILEC. An evaluation of an estimate of G&A expenses should keep in mind the reality that the efficient CLEC reasonably could be modeled as part of a much larger firm, such as AT&T or MCI, and that these larger firms should be able to efficiently adjust the resources that they devote to G&A in the various markets that they serve. I would also note that my analyses included many large and small ILECs, not only the four major ILECs.

Moreover, from an entirely different perspective, there are countervailing advantages that are open to a smaller CLEC. A smaller, efficient CLEC that does not bear the regulatory burdens of an ILEC may be able to implement a more streamlined organization than the ILECs traditionally have had. Thus, providing the efficient CLEC with G&A expenses that have the same percent of revenue as the ILEC's is reasonable.

In addition to these countervailing advantages, I will also add that the method of analysis that I used to determine the appropriate ratio for the efficient CLEC was based on the accounts from the ILEC data that CLECs normally include in their own G&A expenses. In this way, I ensured that there was comparability between the type of G&A expenses that were being measured and their applicability for the efficient CLEC.

I. CREAM SKIMMING

Q. PLEASE RESPOND TO MR. WOOD'S DISCUSSION ON CREAM SKIMMING. (WOOD REBUTTAL 34-39.)

A. Mr. Wood devotes considerable attention to the issue of cream skimming. Remarkably, he claims that CLECs do not engage in cream skimming. He tries to

draw a meaningless distinction between what he would call cream skimming (which he says refers to the results of, e.g., marketing programs to draw the most profitable customers) and customer self-selection, which, as I will describe, is simply another way of implementing cream skimming. In any event, in a separate docket in Texas, one of AT&T's witnesses, Phillip L. Gaddy, admitted the obvious, that cream skimming (or what Mr. Gaddy referred to as "cherry picking") is "simple business common sense." (Gaddy Rebuttal Testimony before the Public Utility Commission of Texas, Docket No. 28600, January 5, 2004, p. 20.) Indeed, AT&T's Chief Executive Officer, David Dorman has admitted to customer targeting. At a recent investors conference AT&T Chairman and CEO David W. Dorman stated:

> We continue to take a targeted approach to attract and retain high-value customers to our bundled services offerings, allowing us to drive profitability in this area of our business. (AT&T Press Release, "AT&T Chairman Outlines Aggressive Competitive Strategy at SCFB Conference," (December 11, 2003). Downloaded from http://biz.yahoo.com/prnews/031211/nyth130_1.html (quoting AT&T Chairman and CEO David W. Dorman) on December 15, 2003.)

On page 36 of his rebuttal testimony, Mr. Wood presents a discussion of marketing activity that he claims is not cream skimming. He argues that a disproportionate number of the more profitable long-distance customers "self-selected" themselves and left AT&T, because they could obtain greater savings elsewhere. (Wood Rebuttal 36.) This admission succinctly describes the use of pricing plans to skim the cream. Pricing plans are a very common, powerful, and efficient way to cream skim. Indeed, if Mr. Wood had more carefully read my direct testimony he would have seen that in discussing the issue of "countervailing advantages" that are available to CLECs, I described precisely the situation that Mr. Wood observed in the long-distance businesses:

> The ability to target attractive customers selectively is one such advantage that CLECs have exploited in reality and is highlighted in the TRO (. . .). 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. (Aron Direct 22.)

These price plans skim the cream because they are meant to discourage customers that spend substantially less than $60 on local service, features, and long-distance

services from subscribing with the CLEC. In other words, the CLEC in my example did not seek to "identify" customers in the normally-understood sense of that term (e.g., actively calling them or looking for them), nor did it create a "marketing plan" in the sense of hailing high-spending customers. The CLEC simply designed its prices to attract high-profit customers (those that spend at least $60) and discourage low-profit customers (those that spend far less than $60) and let the customers skim themselves. This is cream skimming, and Mr. Wood admits to this strategy. Mr. Wood apparently seeks to draw some type of distinction between marketing to higher-spending customers and customers "self-selecting," based on the design of the offer's price, as if there were some type of meaningful difference between the two. For purposes of the BACE model, there is no meaningful difference.

Q. HOW CAN MR. WOOD ARGUE THAT CLECS THAT SELF-PROVISION SWITCHES DO NOT HAVE AN INCENTIVE TO CREAM SKIM? (WOOD REBUTTAL 37-38.)

A. The argument is obviously incorrect. Mr. Wood argues that a CLEC has the incentive to "obtain all customers served by [a] wire center." (Wood Rebuttal 37.) Mr. Wood also claims that a CLEC will seek to serve as many customers as it can as quickly as possible. Both of these reasons are nonsense.

Quite plainly, a CLEC has absolutely no incentive to serve customers that do not provide the CLEC with a positive contribution over their expected lifetime of service. Moreover, the prices of packages that I observed marketed on web sites indicates that the CLECs offered bundles on the order of $50 rather than bare-bones local service. The higher-priced bundled packages may be offered to everyone, but the packages are *specifically designed to dissuade* those who only wish to purchase bare-bones local service, and instead they are specifically designed to appeal to those who spend substantially more. (They may also attract those who, on average, currently may spend somewhat less than the offered price, but want the assurance and safety of a flat rate, or value the additional services more than their incremental price.)

Q. BUT, IS IT NOT TRUE, AS MR. WOOD ARGUES, THAT A LOW-SPENDING CUSTOMER IS BETTER THAN NO CUSTOMER AT ALL? (WOOD REBUTTAL 39.)

A. Not necessarily. If it costs $50 to acquire a new customer, but that customer contributes only $40 in margin (i.e., revenues less variable costs) over his or her tenure with the CLEC, then it is more costly to the CLEC to obtain that customer than to have no customer at all. Such a customer does not help the CLEC contribute to the recovery of large fixed costs; instead, that customer becomes a cash drain on the firm and contributes negative value (or NPV).

J. DSL CROSS-PENETRATION

Q. MR. BRADBURY CLAIMS THAT YOUR PENETRATION RATES FOR DSL FOR RESIDENCES AND FOR SMALL ("SOHO") BUSINESSES ARE TOO HIGH. (BRADBURY REBUTTAL 21-22.) PLEASE COMMENT.

A. First, let me clarify that I do not assume 15 percent penetration in year one. I assume 5 percent penetration in year 1 and that increases to 15 percent in the third year for residential customers. Similarly, I assume that DSL penetration for SOHO customers increases from 10 percent in year 1 to 25 percent in year 3. Also, my DSL penetration rate is *contingent on* the CLEC winning the voice line. Accordingly, a 15 percent DSL penetration in year 3 translates into about 2 percent of the total residential customer locations in the market that are obtaining DSL service from the CLEC, and about 3.3 percent of total SOHO customer locations obtaining DSL service from the CLEC. I would think that these estimates are well within the mainstream expectations for broadband penetration. Moreover, the 15 percent residential penetration (and the 25 percent SOHO penetration) are merely "inputs" to the BACE process. The model computes the 15 percent (or 25 percent) penetration *only on DSL compliant loops*. Thus, actual, effective year 3 DSL penetration for the CLEC is less than 15 (or 25) percent. In other words, if only 75 percent of the residential loops in a wire center can support DSL, the actual (or

"output") penetration rate for residential DSL would be about 11 percent (i.e., 75 percent x 15 percent).

The only evidence that Mr. Bradbury presents to support his claim that my estimates are too high is his claim that BellSouth's "current penetration rate" for its retail FastAccess Service is approximately 6 percent. Mr. Bradbury does not indicate the vintage of his data, but DSL penetration has been growing robustly. For example, a study by Cahners In-Stat suggests that DSL revenues will increase by 54 percent per year through 2005. (Cahners In-Stat, "U.S. Residential DSL Market Continues to Grow," October 2001, p. 2.)

The robust growth potential applies to small businesses as well. As long ago as 1999, firms with 1-4 telephone lines, 47.8 percent had access to the Internet through dial up or high-speed means. (U.S. Small Business DSL Services Market Assessment and Forecast, 1998-2003, International Data Corporation, October 1, 1999, p. 12) This represents an opportunity for CLECs to market broadband services. BellSouth proprietary data regarding DSL penetration for its smaller business customers, which I reviewed, showed that as of August 2003, there was penetration ***[redacted]***.

Finally, Mr. Bradbury ignores the fact that the efficient CLEC, executing the most efficient business model, can target those customers who are more likely to want broadband along with their voice service. This permits the efficient CLEC to increase the proportion of *its* customers who have DSL even beyond the overall market penetration rate. A penetration rate of 15 percent for CLEC-served customers can be consistent with an *overall* DSL penetration of *less than 15 percent* for all residential customers.

Such targeting appears to be occurring with real-world CLECs. According to computations that I made based on DSL penetration data from Cahners In-Stat and on overall line penetration data from the FCC (for approximately the same period of 2001), CLECs (including IXCs) served about 15 percent of DSL lines, while according to the FCC, CLECs accounted for about 9 percent of total lines. This indicates *an above-average propensity for CLEC voice customers to subscribe to DSL*. The penetration rates that I recommend for residences and SOHO (which do not increase above 15 percent for residences, or above 25 percent for SOHO customers) are conservative and consistent with these observations.

Q. MR. KLICK ARGUES THAT MANY OF TODAY'S CLEC CUSTOMERS DO NOT OBTAIN DSL FROM THEIR UNE-P-BASED SERVICE PROVIDERS. (KLICK REBUTTAL 45.) PLEASE COMMENT.

A. Whether this is true is not relevant for considering the capabilities of the UNE-L-based CLEC in providing DSL services to its customers, since the UNE-L-based CLEC has the authority to provide such services on the loop that it leases. Moreover, in creating the business case for the efficient CLEC, the TRO directs us to consider *all* potential revenues. (TRO 519.) Indeed, the TRO specifically states that:

> 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, footnote omitted.)

Q. MR. KLICK LISTS A SERIES OF REASONS THAT HE CLAIMS PREVENTS HIM FROM MAKING A DETAILED ANALYSIS OF THE BACE MODEL'S DSL CROSS-PENETRATION ASSUMPTIONS. (KLICK REBUTTAL 45-46.) PLEASE COMMENT ON THESE.

A. Yes. Although Mr. Klick writes in the third person, he essentially admits not being able to understand (1) how the residence and business categories were derived in each wire center; (2) DSL cross-penetration for each of the spend quintiles or terciles; and (3) DSL costs used in the BACE model. Mr. Klick also claims not to understand precisely the extent to which DSL service is provided by different types

of carriers (ILECs, CLECs, and DLECs). I have explained the derivation of all of these in my direct, rebuttal, and this testimony; I have been deposed in Florida on the estimates that I provided to the BACE model (the transcript to which Mr. Klick would have access); I have provided programs and workpapers in multiple rounds of discovery. If Mr. Klick does not understand how these inputs were developed, I refer him to this record.

K. PURCHASING POWER

Q. DOES MR. KLICK ARGUE THAT CLECS WOULD HAVE LESS PURCHASING POWER THAN BELLSOUTH? (KLICK REBUTTAL 44.)

A. Mr. Klick makes only the oblique argument that if the CLEC is substantially smaller than BellSouth, as might be the case if it is serving only 3 markets, it may not receive the same vendor discounts. However, Mr. Klick provides no real evidence on this point, or any reason why the efficient CLEC, executing the most efficient business plan, would fail to serve other markets in the state. I will point out that Mr. Klick's client, AT&T, is an enormous telecommunications carrier and likely can avail itself to any vendor discounts as well. AT&T has ongoing relationships with switch vendors. Indeed, AT&T used to own one of the major switch manufacturers (Lucent). MCI and Sprint are other national

telecommunications providers with substantial purchases of equipment. It is not credible that these CLECs cannot also obtain vendor discounts.

Q. DOES THIS COMPLETE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

Example of Economies of Scope				
		Voice Only	DSL Only	Both Provided Together
	Loop Cost	$20	$20	$20
+	Switching Cost	$10	$0	$10
+	Other Costs	$0	$10	$10
=	Total Costs	$30	$30	$40
	Revenue	$20	$20	$40
=	Profit	($10)	($10)	$0

Residential Customer Acquisition Costs				
	Notes	Voice & DSL	Voice Only	Total
Voice service	(1)	$50-80	$50-80	
Incremental cost for DSL	(2)	$95	$0	
Total Cust. Acq. Cost		$145-175	$50-80	
Pct. Of CLEC's Customers	(3)	15%	85%	
Weighted Cust. Acq Cost		$22-$26	$42-68	$64-94

(1) Source is Exhibit DJA-06, based on Z-Tel and Talk America.
(2) Source is Bryant (Voice + DSL = $225, voice only is $130, so incremental cost of DSL is $95).
(3) Source is Exhibit DJA-05.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Montgomery
STATE OF VA

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Randall S Billingsley who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 9 pages and 0 exhibits.

Randall S. Billingsley

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 17th DAY OF MARCH, 2004

Notary Public

My Commission Expires 8/31/05

BELLSOUTH TELECOMMUNICATIONS INC.

BEFORE THE

ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, PHASE II

SURREBUTTAL TESTIMONY OF

DR. RANDALL S. BILLINGSLEY, CFA

MARCH 24, 2004

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Randall S. Billingsley. I am a finance professor at Virginia Polytechnic Institute and State University. I also act as a financial consultant in the areas of cost of capital analysis, financial security analysis, and valuation. My business address is: Department of Finance, Pamplin College of Business, Virginia Polytechnic Institute and State University, Blacksburg, Virginia 24061-0221.

This surrebuttal testimony presents my independent professional opinions and is not presented by me as a representative of Virginia Polytechnic Institute and State University.

Q. Have you previously submitted testimony in this proceeding on behalf of BellSouth Telecommunications Corporation (BST)?

A. Yes.

II. PURPOSE OF SURREBUTTAL TESTIMONY AND SUMMARY OF CONCLUSIONS

A. PURPOSE OF SURREBUTTAL TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. My purpose is to critically evaluate the cost of capital-related portions of Mr. Don J. Wood's rebuttal testimony filed on behalf of AT&T Communications of the Southern States, L.L.C. (AT&T), which is dated March 5, 2004. I show that his rebuttal testimony provides no insight into the current capital costs faced by competing local exchange companies (CLECs) in general or any specific insight into the appropriate discount rate to be used in the BellSouth Analysis of CLEC Entry (BACE) model. Below I summarize my analysis of Mr. Wood's rebuttal testimony.

B. SUMMARY OF SURREBUTTAL OF MR. DON J. WOOD'S REBUTTAL TESTIMONY ON BEHALF OF AT&T COMMUNICATIONS OF THE SOUTHERN STATES, L.L.C.

Q. What issues does your surrebuttal focus on in Mr. Wood's rebuttal testimony concerning the CLEC industry's capital costs?

A. My surrebuttal shows that most of Mr. Wood's testimony provides nothing more than unsupported speculations concerning CLEC capital costs and the rest presents inconsistent and incorrect arguments that leave us with no evidence on current CLEC capital costs. Importantly, Mr. Wood provides *absolutely no estimates* of CLEC capital costs. I identify numerous examples of his unsupported personal opinions in my surrebuttal. Further, I focus on Mr. Wood's inconsistent and incorrect argument that currently operating CLECs possess inefficient, sub-optimal capital structures and yet at the same time somehow are economically efficient. This contradictory argument dramatizes his misunderstanding of the information provided by currently operating, market-traded CLECs concerning their capital costs. I also evaluate Mr. Wood's misguided projection that past CLEC infrastructure investments and associated bankruptcies will necessarily be repeated in the future. In summary, Mr. Wood's unsupported and incorrect observations tell us nothing meaningful about the appropriate discount rate that should be used in the BACE model.

III. ANALYSIS OF MR. DON J. WOOD'S REBUTTAL TESTIMONY ON BEHALF OF AT&T

A. QUALIFICATIONS AS A COST OF CAPITAL EXPERT

Q. Are you familiar with Mr. Wood's testimony as a cost of capital expert in other regulatory proceedings?

A. No. While I have read and rebutted Mr. Wood's testimony in other regulatory proceedings, in my experience he has always simply summarized the cost of capital recommendations made by the cost of capital expert(s) working in the given case. I am not familiar with any

independent work done by Mr. Wood as a cost of capital expert. I am consequently surprised that he appears to consider himself a cost of capital expert in the current proceeding and I know of no basis for doing so.

B. EVIDENCE CONTRADICTING MR. WOOD'S ASSUMPTION OF CLEC INEFFICIENCY

Q. Do you agree with Mr. Wood's position that CLECs are currently operating efficiently?

A. No, I believe that the evidence contradicts Mr. Wood's position. He incorrectly argues that:

> … the fact that a significant number of CLECs have gone bankrupt suggests that competitive market constraints have winnowed the field and those CLECs that currently are operating do have efficient operations. In order to make reasonable assumptions about efficient CLEC costs, it is logical to look at currently operating CLECs (Rebuttal Testimony, p. 50, lines 5 - 10).

Mr. Wood's argument reduces to unsupported speculation that CLECs that did not go bankrupt are, by definition, necessarily operating efficiently. As shown in my direct testimony in this proceeding, the average bond rating for a sample of market-traded CLECs is CCC+/CCC (see Billingsley Exhibit No. RSB-6). This is a speculative-grade bond rating that is associated with firms in financial distress. Consider the following definition of the CCC-level rating:

> An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation (***Standard & Poor's Bond Guide***, October 2003, p. 4).

It is absolutely amazing that Mr. Wood argues that such firms should be used "… to make reasonable assumptions about efficient CLEC costs." The evidence obviously contradicts this. Further, Mr. Wood's reliance on unadjusted data drawn from inefficient CLECs is inconsistent with the Federal Communication Commission's (FCC's) assertion that the cost of capital should reflect a forward-looking, efficient network (see Triennial Review Order, In Re Review of the Section 251, Unbundling Obligations of Incumbent Local Exchange Carriers, First Report and Order on Remand and Further Notice of Proposed Rulemaking, FCC 03-36, released August, 21, 2003, pp. 419-420, §682).

C. INCONSISTENT ARGUMENT THAT CLEC CAPITAL STRUCTURES ARE NOT EFFICIENT

Q. After arguing that CLECs are currently operating efficiently, does Mr. Wood also argue that current CLEC capital structures are not efficient, target capital structures?

A. Yes. Mr. Wood states:

> This structure is clearly not the target capital structure of these companies, but

> has arisen in large part because of the precipitous drop in the companies' stock prices (Rebuttal Testimony, p. 57, lines 18 - 20).

Mr. Wood is inconsistent. On one hand he argues that CLECs are efficient and a reasonable source of representative capital costs. Yet on the other hand he argues that their current capital structure is not equal to their target, optimal capital structure. His only explanation for this contradictory speculation concerning current CLEC capital structures is that they are the result of the "precipitous drop in the companies' stock prices." Mr. Wood's contradictory, inconsistent argument does not make sense. The truth that must be faced is that CLECs are not currently efficient in a comprehensive sense. It is consequently reasonable to use the averaging process that I do to produce a representative bounded estimate of representative CLEC capital costs. It is eminently appropriate to bound current CLEC costs on the downside with the S&P 500 and on the upside with capital costs produced by a CLEC sample, which is obviously in an inefficient condition.

D. MR. WOOD'S SPECULATIONS CONCERNING CLEC FUTURE INFRASTRUCTURE INVESTMENTS

Q. What speculation does Mr. Wood make concerning future CLEC infrastructure investments based on history?

A. The gist of Mr. Wood's speculation is that CLECs have no capacity to understand or to avoid their past mistakes. He states that:

> … CLECs invested in network infrastructure (large fixed costs) based on an anticipation of future revenues that would make their market entry economic.

> Their assumptions regarding whether entry in this manner would be economic, now clearly flawed, are very similar to the assumptions that BellSouth is now inviting CLECs to make through the results of its business case analysis (and is asking the Commission to conclude that the CLEC's should accept the invitation). … CLECs face a decision of whether or not to invest in network infrastructure (in this case a local circuit switch, whose cost characteristics cause it to represent a large fixed cost). BellSouth argues that they could rationally do so … (Rebuttal Testimony, p. 54, line 27 - p. 55, line 10).

Thus, Mr. Wood attributes the CLECs past woes to network infrastructure investments with "large fixed costs" and predicts that CLECs will necessarily experience the same troubles again in the future. However, I do not share Mr. Wood's uncomplimentary view of the CLECs' ability to learn from past challenges. The future is not necessarily a simple extension of the past and learning is possible.

E. RELATIVE RISK OF CLECS AND ILECS

Q. Does Mr. Wood provide any evidence to support his position that CLECs face higher risks than incumbent local exchange companies (ILEC's)?

A. No. Mr. Wood offers no evidence on the relative riskiness of CLECs and ILECs. He only expresses his unsupported opinion as follows:

> There is a fundamental difference in the risk incurred by a former monopoly provider, with existing network facilities and an existing base of customers, and the risk incurred by a new entrant to enter the market by making a large fixed

investment without the customer base needed to recover the cost of that investment (Rebuttal Testimony, p. 53, lines 1 - 5).

He then speculates that "… a CLEC continues to face, for the reasons described above, much higher risk than an ILEC" (Rebuttal Testimony, p. 54, lines 9 - 11).

While CLECs may well be riskier than ILECs, any possible difference should be *demonstrated* using empirical evidence rather than *assumed*. Mr. Wood *speculates* about the relative risks of ILECs and CLECs when evidence is needed, not his opinion.

IV. SUMMARY OF COST OF CAPITAL ANALYSIS FOR BACE MODEL

Q. Please summarize your recommendation concerning the appropriate pre-tax overall cost of capital that should be used to calculate the NPV in the BACE model.

A. As presented in my previously filed direct testimony in this proceeding, my cost of capital estimation approach adapts to the data problems resulting from the current troubled environment facing the CLEC industry. I essentially provide "ceiling" and "floor" estimates of the industry's capital costs. Thus, I use two surrogates to measure the representative CLEC's capital costs. I use the S&P 500 as a lower-bound or minimum estimate of the representative CLEC's cost of capital and I also use a sample of publicly-traded CLECs that provides an upper-bound or maximum estimate of the representative CLEC's cost of capital. I then provide a reasonable estimate of the industry's overall capital costs by averaging the results of my two approaches.

My analysis indicates that a forward-looking cost of equity estimate for the representative CLEC is an average of 17.55%. I also find evidence that the cost of debt of the representative CLEC is an average of 9.92%. The average market value-based capital structure of firms is 58.50% debt and 41.50% equity. Combining this average capital structure with the above average costs of debt and equity produces an average pre-tax overall cost of capital for the representative CLEC of 13.09%. This bounded averaging approach provides the most reasonable estimate of efficient CLEC capital costs in the current environment.

In summary, I recommend that the Alabama Public Service Commission use a *before-tax* overall cost of capital of 13.09% as an input in the BACE business case model. This cost of capital should be adjusted to reflect the effect of taxes before using it to discount the after-tax cash flows generated by the BACE model.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF BOONE
STATE OF MISSOURI

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Eric Fogle, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 4 pages and 0 exhibits.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 20th DAY OF MARCH, 2004

Alicia Altomari Notary Public

ALICIA ALTOMARI
Notary Public - Notary Seal
State of Missouri
Boone County
My Commission Expires September 3, 2006

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF ERIC FOGLE

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, PHASE II

MARCH 24, 2004

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

A. My name is Eric Fogle. I am employed by BellSouth Resources, Inc. as a Director in BellSouth's Interconnection Operations Organization. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. ARE YOU THE SAME ERIC FOGLE WHO FILED REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. My surrebuttal testimony responds to portions of the rebuttal testimony of Mark David Van de Water of AT&T Communications of the Southern States, LLC ("AT&T"), and Sherry Lichtenberg of MCI WorldCom Communications, Inc. and

MCIMetro Access Transmission Services, Inc. ("MCI").

Q. ON PAGE 10-11 OF HER REBUTTAL TESTIMONY, MS. LICHTENBERG CRITICIZES THE IMPACT OF THE BATCH ORDERING PROCESS ON LINE SPLITTING AND OPINES THAT BELLSOUTH MUST CHANGE THE PROCESS SO THAT THE CUSTOMER'S LINE SPLITTING ARRANGEMENT IS NOT TAKEN DOWN. PLEASE COMMENT.

A. First, Ms. Lichtenberg's 'understanding' of when a "customer is served by a UNE-P voice CLEC and a data CLEC over a line splitting configuration" is flawed. As I explained in my rebuttal testimony, line splitting service is not compatible with a UNE-P arrangement, as a splitter has been inserted between the UNE Port and UNE Loop that were previously combined and provided to the CLEC as a UNE-P. Since CLECs that use line splitting do not, by definition, use UNE-P, there is no process that converts UNE-P customers to UNE-Ls that will affect the DSL service of the end-user customer.

Second, Ms. Lichtenberg continues by saying that "a process that does not allow the customer to retain his or her data provider when he moves to UNE-L is not acceptable…" As outlined in my rebuttal testimony, if a CLEC is concerned about the impact a change in the switch provider for the voice service would have on DSL service, then the CLEC can easily address this concern by installing and maintaining its own splitters, and performing the change of the voice service switch provider without any assistance from BellSouth and without any interruption of the data service. By the CLEC installing its own splitter, the UNE-

Loop carrying the combined voice and data services is terminated on the CLECs splitter, and all necessary wiring (including subsequent changes) for both the voice service and the data service is within the complete control of the CLEC. The simplest approach to resolving Ms. Lichtenberg's concerns remains one in which the CLECs maintain and manage their own splitters.

Since the Triennial Review Order does not require BellSouth to provide a splitter, BellSouth has met its obligations. Moreover, there is a process that the CLECs can follow, even in the circumstances when BellSouth voluntarily provides a splitter, that allows the end-user to retain his or her data provider after a momentary disconnect (necessary when the CLEC moves the end-user's service from a BellSouth splitter to a CLEC splitter), because the UNE Loop portion of the service can be reused with the new service arrangement.

Q. ON PAGE 3 OF HIS REBUTTAL TESTIMONY, MR. VAN DE WATER STATES THAT "BELLSOUTH IGNORES THE BASIC REALITY THAT ITS 'BATCH' ORDERING PROCESS EXCLUDES CUSTOMERS WHO OBTAIN DIGITAL SUBSCRIBER LINE ("DSL") SERVICES VIA A LINE-SPLITTING ARRANGEMENT..." PLEASE COMMENT.

A. BellSouth does not ignore the fact that the batch ordering process excludes customers that obtain their DSL service via a line splitting arrangement. BellSouth's batch process is efficiently designed to move large numbers of CLEC customers provisioned via UNE-P to UNE-L. The introduction of the splitter between the UNE Port and the UNE-Loop breaks up the UNE-P, and therefore

excludes line splitting lines from the batch ordering process. Additionally, and perhaps more importantly, at the end of 2003 there was a total of 1,506 line splitting lines provisioned at the request of CLECs region-wide. With fewer line splitting lines in service than there are BellSouth central offices (that is, on average there is less than one line splitting arrangement per BellSouth central office), no batch migration process is necessary.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared A. Wayne Gray, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 22 pages and 0 exhibits.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF A. WAYNE GRAY

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, PHASE II

MARCH 24, 2004

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

A. My name is A. Wayne Gray. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. My title is Director – Regional Planning and Engineering Center in BellSouth's Network Planning and Support organization.

Q. ARE YOU THE SAME A. WAYNE GRAY WHO PREVIOUSLY FILED REBUTTAL TESTIMONY IN THIS DOCKET ON MARCH 5, 2004?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony rebuts portions of the rebuttal testimony filed by MCI witness James D. Webber and AT&T witness Mark David Van De Water. In so doing, I respond to the competitive carriers' suggestions that they are "impaired" due to

collocation issues in BellSouth's central offices. These issues range from the availability of sufficient collocation space to BellSouth's ability to handle the additional demand for collocation services that will result from a "no impairment" finding. I point out the errors in these witnesses testimony and explain how BellSouth is prepared to handle any collocation issues that may arise as a result of these proceedings. I also discuss cross connection issues that these witnesses raise and demonstrate that BellSouth is addressing these issues appropriately.

As stated in my rebuttal testimony, the only collocation issue related to the FCC's impairment analysis is "whether a lack of sufficient collocation space gives rise to impairment in [a] market." TRO ¶ 472. The availability of sufficient collocation space in BellSouth's Alabama central offices is not a problem and certainly does not give rise to impairment. Notably, none of the competitive local exchange carrier ("CLEC") witnesses refer to a single instance of an alleged space availability issue. Nor do they present any evidence to refute the excellent results achieved by BellSouth with respect to the collocation performance measurements established by the Alabama Public Service Commission ("Commission"). In short, collocation does not constitute an impairment to CLECs in Alabama, now or the foreseeable future.

<u>Rebuttal Testimony of MCI Witness James D. Webber</u>

Q. ON PAGE 5, MR. WEBBER TAKES ISSUE WITH THE FACT THAT MCI WOULD HAVE TO BUILD OUT ADDITIONAL COLLOCATION AND TRANSPORT FACILITIES OR GAIN ACCESS TO ENHANCED EXTENDED

LINKS ("EELS") IF THE COMMISSION WERE TO FIND THAT THERE IS NO IMPAIRMENT WITHOUT ACCESS TO UNBUNDLED LOCAL SWITCHING ("ULS"). PLEASE COMMENT.

A. While Mr. Webber is correct that MCI would need to use other means, besides UNE-P (a UNE loop and port combination), to serve its customer base if the Commission determines that CLECs are not impaired without access to ULS, Mr. Webber appears to ignore the fact that there is no impediment in regard to new or additional collocation in any of BellSouth's wire centers in Alabama.

Moreover, the fact that MCI has chosen not to collocate in all of the BellSouth wire centers that serve its UNE-P customers or ordered any EELs to serve these customers is a problem of MCI's own making, and in the context of this proceeding, is irrelevant. MCI has had, and will continue to have, very little incentive to collocate its equipment in these other wire centers or request EELs from BellSouth as long as ULS and UNE-P are available.

<u>Rebuttal Testimony of AT&T Witness Mark David Van De Water</u>

Q. ON PAGE 12, MR. VAN DE WATER APPEARS TO SUGGEST THAT BELLSOUTH DOES NOT PROVIDE CROSS-CONNECTS BETWEEN CLECS. PLEASE COMMENT.

A. Mr. Van De Water is wrong. He is evidently talking about what BellSouth refers to as "Co-Carrier Cross Connects" ("CCXCs"), which are cross-connects placed between two different CLECs' collocated arrangements within the same

BellSouth central office. BellSouth permits a CLEC to engage a BellSouth Certified Supplier ("supplier"), which may be the CLEC's own technicians if the CLEC has been certified by BellSouth as such, to provision the necessary cabling directly between its collocation space and that of another CLEC within the same central office. If the two collocation spaces are not contiguous, then the supplier must run the appropriate optical or electrical (lit or dark) cabling between the two CLEC spaces utilizing BellSouth's cable support structure. If the two collocation spaces are contiguous, then the CLEC's supplier may place a cable directly between the two arrangements, without having to place the cabling in the BellSouth cable support structure. Therefore, if AT&T wished to place a CCXC between its collocation space and that of another CLEC, it would need to engage a supplier (or use its own technicians if AT&T has been certified as a supplier) to provision a cable directly between its collocation space and the other CLEC's space. The amount of time that would be required to place the cabling would be negotiated between AT&T and its supplier, since it will be the supplier that will be provisioning the cabling. Thus, the timeliness of provisioning the CCXC would not be controlled by BellSouth, but would be determined by AT&T and its supplier.

Q. ON PAGES 12 AND 13, MR. VAN DE WATER CITES PARAGRAPHS 478 AND 514 OF THE FCC'S TRO, AS WELL AS SECTION 51.319 OF THE TRO RULES, AS REQUIRING BELLSOUTH TO *"PROVIDE"* CROSS-CONNECTIONS BETWEEN CLECS (emphasis in original). WHAT ARE THE FCC'S RULES REGARDING BELLSOUTH'S OBLIGATION TO "PROVIDE CO-CARRIER CROSS-CONNECTIONS"?

A. 47 C.F.R. § 51.323(b)(h) states:

> (h) As described in paragraphs (1) and (2) of this section, an incumbent LEC shall permit a collocating telecommunications carrier to interconnect its network with that of another collocating telecommunications carrier at the incumbent LEC's premises and to connect its collocated equipment to the collocated equipment of another telecommunications carrier within the same premises, provided that the collocated equipment is also used for interconnection with the incumbent LEC or for access to the incumbent LEC's unbundled network elements.
>
> > (1) An incumbent LEC shall provide, at the request of a collocating telecommunications carrier, a connection between the equipment in the collocated spaces of two or more telecommunications carriers, ***except to the extent the incumbent LEC permits the collocating parties to provide the requested connection for themselves or a connection is not required under paragraph (h)(2) of this section.*** Where technically feasible, the incumbent LEC shall provide the connection using copper, dark fiber, lit fiber, or other transmission medium, as requested by the collocating telecommunications carrier. (emphasis added)
> >
> > (2) ***An incumbent LEC is not required to provide a connection between the equipment in the collocated spaces of two or more telecommunications carriers if the connection is requested pursuant to section 201 of the Act, unless the requesting carrier submits to the incumbent LEC a certification that more than 10 percent of the amount of traffic to be transmitted through the connection will be interstate.*** The incumbent LEC cannot refuse to accept the certification, but instead must provision the service promptly. Any incumbent LEC may file a section 208 complaint with the Commission challenging the certification if it believes that the certification is deficient. No such certification is required for a request for such connection under section 251 of the Act. (emphasis added)

Q. DOES BELLSOUTH COMPLY WITH THE FCC'S RULES?

A. Yes. BellSouth permits collocated CLECs to provision the necessary CCXCs themselves, in compliance with 47 C.F.R. § 51.323(b)(h)(1).

Q. WHAT ABOUT THE FCC'S REQUIREMENT UNDER 47 C.F.R. § 51.323 (b)(h)(2)? HAS BELLSOUTH FILED A SECTION 201 CCXC OFFERING IN ITS TARIFF FCC NO. 1?

A. Yes. BellSouth recently filed its Section 201 CCXC tariff offering in the BellSouth Tariff FCC No. 1 as required by 47 C.F.R. § 51.323(b)(h)(2). In order to differentiate the tariff offering, CCXCs offered pursuant to the tariff are called "Intra-Office Collocation Cross Connects" in the tariff. This tariff is in effect, so AT&T and the other CLECs may place orders pursuant to this Section 201 tariff offering. However, as the FCC has stated in its rules, any CLEC that orders this product must certify that 10% or more of the traffic transmitted over this intra-office cross connection will be interstate.

Q. ON PAGE 13, MR. VAN DE WATER IMPLIES THAT IF BELLSOUTH DOES NOT PROVIDE CO-CARRIER CROSS CONNECTIONS, CLECS WILL NOT BE ABLE TO PARTNER WITH OTHER CLECS TO OFFER VOICE AND DATA SERVICES. IS THIS TRUE?

A. No. First, BellSouth complies with the FCC rule requiring it to allow CLECs to install CCXCs. Second, as I have described above, there are several options

available to AT&T (and other CLECs) that allow CLECs to partner with each other to offer voice, data and any other type of telecommunications services to their customers.

Q. IS MR. VAN DE WATER'S STATEMENT THAT BELLSOUTH'S NEW FCC TARIFFED "SPECIAL ACCESS PRODUCT" REQUIRES CLECS TO CERTIFY THAT THE TRAFFIC CARRIED ON THAT CFA TO CFA CONNECTION MEETS THE FCC'S DE MINIMUS (10%) INTERSTATE RULE CORRECT?

A. Yes. As I stated above, the Intra-Office Collocation Cross Connect Service reflected in Section 13 of BellSouth's Tariff FCC No. 1 was filed pursuant to the FCC's Rules in 47 C.F.R. § 51.323(b)(h)(2), which require that a carrier ordering this product certify to BellSouth that 10% or more of the traffic transmitted over this intra-office cross connection will be interstate. This requirement is often referred to by the FCC as the "de minimus" rule. (The FCC has applied this same rule to traffic that is being transported over special access facilities.) BellSouth included this requirement in order to comply with the FCC's Rules in 47 C.F.R. § 51.323(b)(h)(2), not because BellSouth wished to preclude carriers from requesting this service offering.

Q. ON PAGE 14, MR. VAN DE WATER ASSERTS THAT BELLSOUTH'S NEW TARIFFED PRODUCT CANNOT BE ORDERED EFFICIENTLY. IS THIS TRUE?

A. No. If a collocated carrier wishes to place an order for BellSouth's tariffed Intra-Office Collocation Cross Connect Service, then it can do so by submitting an Access Service Request ("ASR") to BellSouth for this service, along with (1) a written certification that 10% or more of the amount of traffic to be transmitted through the Intra-Office Collocation Cross Connect will be interstate traffic and (2) an LOA from the receiving collocated carrier that includes the appropriate Connecting Facility Assignment ("CFA") and Access Carrier Terminal Location ("ACTL") that BellSouth is authorized to use for interconnecting the networks and/or equipment of the two collocated carriers. It is not a complicated process.

Q. MR. VAN DE WATER ALLEGES THAT ALTHOUGH A UNE LOOP IS ORDERED ON AN LSR, BELLSOUTH WILL REQUIRE THAT THE CROSS CONNECTION BETWEEN TWO CLECS THAT WISH TO "SPLIT" THE LOOP BE ORDERED AND PROVISIONED OUT OF THE FCC ACCESS TARIFF USING AN ASR. PLEASE COMMENT.

A. As I explained above, the Intra-Office Collocation Cross Connect Service is a tariffed interstate service offering that BellSouth is making available to satisfy the FCC's Section 201 requirements, pursuant to the FCC Rules in 47 C.F.R. § 51.323(b)(h)(2). There is no mandate set forth by the FCC that requires BellSouth to offer an Intra-Office Collocation Cross Connect Service (or CCXC Service) as a UNE, unless BellSouth refuses to permit collocated carriers to self-provision CCXCs between their collocation spaces in the central office. BellSouth has allowed (for several years), and will continue to allow, the collocators to self-provision CCXCs between their individual collocation

arrangements. As I have already stated in my testimony, pursuant to 47 C.F.R. § 51.323(b)(h)(1), if BellSouth permits the collocators to self-provision CCXCs between their collocation arrangements in BellSouth's central offices, then BellSouth is not required to provision CCXCs for the collocators.

Q. MR. VAN DE WATER CONTENDS THAT THERE WILL BE NO MEANS OF ELECTRONICALLY ORDERING SUCH AN ARRANGEMENT TO ESTABLISH WORKING SERVICES FOR THE CUSTOMER. IS HE CORRECT?

A. No. BellSouth's tariffed Intra-Office Collocation Cross Connect Service may be ordered electronically using an ASR.

Q. MR. VAN DE WATER STATES THAT IN ORDER FOR THE TWO CLECS TO "SPLIT" THE LOOP BETWEEN THEM, BOTH CLECS MUST ISSUE AN LSR AND THEN ONE OF THE CLECS MUST ISSUE AN ASR. IS THIS TRUE?

A. It depends upon how the two CLECs determine they will "split" the loop. It would appear to BellSouth that the most efficient means of accomplishing a "split" of the loop (which would presumably be ordered as a UNE-Loop) would be for the "loop splitting" CLEC (the CLEC that has the loop splitting equipment located in its collocation space) to order the loop, perform the "loop splitting" function and send the agreed-upon split portion of the loop (either voice or data traffic) to the receiving CLEC via a CCXC between the two collocated CLECs, if both CLECs are collocated in the same central office. If the receiving CLEC is not collocated in the same office or has a Point of Presence ("POP") located outside the

BellSouth central office, then the “loop splitting” CLEC could send the agreed-upon split portion of the loop to the receiving CLEC via a UNE transport service (which may be an EEL) that either terminates to the receiving CLEC’s POP or the receiving CLEC’s collocation space in another BellSouth central office.

If the CLECs opted to order an Intra-Office Collocation Cross Connect, then it would seem likely to BellSouth that the ordering CLEC would need to be the “loop splitting” CLEC, as well as the CLEC that places the order for the loop that will be split between the two CLECs. In this case, the ordering CLEC would perform the loop splitting function and then send the agreed-upon split portion of the loop to the receiving CLEC via the Intra-Office Collocation Cross Connect. It would then be up to the receiving CLEC to place this traffic on whatever transport facilities it has to route it to its switch or other equipment.

Q. MR. VAN DE WATER SPECULATES THAT BELLSOUTH’S TARIFFED PRODUCT WILL CREATE “OPERATIONAL AND ECONOMIC BARRIERS TO PROVIDING DSL SERVICES TO MASS MARKET CUSTOMERS.” DO YOU AGREE?

A. No. There are several alternatives available to CLECs that wish to provide DSL services to mass market customers. I noted two such alternatives in the discussion above regarding the means by which two CLECs could “split” a loop between them by utilizing a CCXC placed by the CLECs or by placing an order for a BellSouth Intra-Office Collocation Cross Connect from BellSouth’s Tariff FCC No. 1. CLECs can also request cageless or virtual collocation space in

increments as small as that required to place a single bay or rack of equipment in those central offices in which they desire to serve mass market customers. Finally, the two CLECs could effectively share collocation space through the establishment of a Guest/Host arrangement in a caged collocation space. In this scenario, one of the CLECs would lease the caged collocation space from BellSouth and then sublease a smaller amount of this space to the other CLEC for the placement of this CLEC's equipment.

Q. FINALLY ON PAGE 14, MR. VAN DE WATER ALLEGES THAT "BELLSOUTH'S PROPOSED POLICIES AND PRACTICES FOR THIS SERVICE ARE DESIGNED TO COMPLICATE AND HINDER THE PROVISION OF LINE SPLITTING SERVICE TO CLEC CUSTOMERS AND SHOULD BE REJECTED BY THIS COMMISSION." DO YOU AGREE?

A. Absolutely not. As I have already explained above, BellSouth's Intra-Office Collocation Cross Connect Service offering was filed by BellSouth to comply with 47 C.F.R. § 51.323(b)(h)(2), which required BellSouth to file a Section 201 CCXC (which is called an Intra-Office Collocation Cross Connect in the tariff) offering in its Tariff FCC No. 1. It was not designed, nor contemplated, by BellSouth to complicate or hinder the provisioning of loop splitting service to a CLEC's customers.

Q. ON PAGE 21, MR. VAN DE WATER ALLEGES THAT BELLSOUTH HAS FAILED TO CONSIDER IN ITS HOT CUT FORECAST THAT CLECS MAY NOT HAVE THE COLLOCATED FACILITIES AND NETWORK EQUIPMENT IN

PLACE TO SUPPORT THE MIGRATION OF THE EMBEDDED BASE OF UNE-P CUSTOMERS OVER TO THE CLECS' FACILITIES. DO YOU AGREE?

A. No, I do not. As discussed in the testimony of BellSouth's witnesses Ken Ainsworth and Al Heartley, BellSouth has estimated the number of hot cuts that would be needed to transfer the embedded UNE-P (a UNE-Loop and Port Combination) base to UNE-L (a UNE-Loop) over the three seven month periods outlined in the TRO. In some cases, as Mr. Van De Water has stated, the CLECs may not currently have the necessary collocated facilities and network equipment in place to support the migration of the embedded base of UNE-P customers. However, if the CLEC requires new or additional collocation space for the placement of its network equipment to achieve the migration of its UNE-P customers over to UNE-L, BellSouth would be required by this Commission to complete any requests for collocation space within the Commission-ordered provisioning intervals (which are dependent upon the type of collocation space requested – i.e., virtual, caged or cageless) or pay substantial penalties for missing these intervals. As soon as BellSouth receives orders for collocation space from a CLEC, BellSouth begins preparing the space to meet the specifications requested by the CLEC. In addition, a CLEC can request permission to occupy the requested space prior to BellSouth's completion of the space provisioning. In any event, a CLEC would be able to procure collocation and the necessary equipment well in advance of the date when conversion of the embedded base of UNE-P circuits would commence. Based on the FCC's Triennial Review Order, the first third of the embedded base would begin conversion 13 months after the state commission issues its finding of no

impairment. Thus, CLECs would have over a year to make plans for the conversion of the embedded base of UNE-P circuits.

Q. IS THERE ANY OTHER TYPE OF ARRANGEMENT, BESIDES COLLOCATION, THAT CAN BE USED BY A CLEC TO MIGRATE ITS EMBEDDED UNE-P BASE TO UNE-L SERVICE?

A. Yes. It is my understanding that a CLEC may also order EELs from its end user at the DS0 level (which may or may not terminate into the CLEC's collocation space) to its switch or Point of Presence ("POP"), as a means of converting its embedded UNE-P base to UNE-L service. As noted above, the DS0 transport piece of the EEL may terminate to the CLEC's collocation space or it may terminate directly at the CLEC's POP.

Q. ON PAGE 22, MR. VAN DE WATER CONTENDS THAT BEFORE CLECS CAN ISSUE CONVERSION ORDERS, THEY MUST ESTABLISH NEW COLLOCATION FACILITIES AND/OR AUGMENT EXISTING ARRANGEMENTS. IS THIS TRUE?

A. It depends. If a CLEC already has sufficient collocation space in the central offices that serve its mass market customers, then there would be no need for the CLEC to augment its existing space. However, if the CLEC does not have collocation space in a particular office or does not have sufficient space in a particular office to serve its mass market customers, then the CLEC would need to request a new collocation arrangement, augment an existing collocation

arrangement or use EELs to reach these customers. As I have already explained above, the length of time to provision collocation space is determined by the intervals established by this Commission.

Q. ON PAGE 22 OF HIS TESTIMONY, MR. VAN DE WATER OPINES THAT THE CLECS' ABILITY TO ESTABLISH NEW COLLOCATION FACILITIES AND/OR AUGMENT EXISTING ARRANGEMENTS " TO MEET THE BALANCED SCHEDULE THAT BELLSOUTH ASSUMED WILL BE GATED BY A NUMBER OF FACTORS OUTSIDE OF THE CLECS' CONTROL." PLEASE COMMENT.

A. The factors Mr. Van De Water lists – a CLEC's ability to raise the capital it will need for these facilities, BellSouth's ability to manage and keep up with collocation demand, the ability of BellSouth's approved vendors to establish collocation arrangements, the ability of BellSouth's approved vendors to establish the required collocation arrangements, and the ability of the CLEC's equipment manufacturer's to deliver and install equipment in the CLEC's new/expanded collocation space – are not factors the Commission needs to consider. Mr. Van De Water ignores that in this proceeding the Commission's only task concerning collocation is to determine whether or not sufficient space is available in BellSouth's central offices to ensure that collocation does not pose a barrier to competitive entry. Other factors are simply not relevant to this proceeding. There is no dispute that BellSouth has collocation space available in all of its central offices in Alabama.

Furthermore, Mr. Van De Water's "factors" attempt to hold BellSouth responsible for matters over which BellSouth has no control. For example, in regard to the first factor, BellSouth would not exercise any control over a CLEC's ability to raise the necessary capital needed for the CLEC to establish new collocation facilities and/or augment existing collocation arrangements. This function would be the responsibility of the CLEC's corporate officers. The means by which a CLEC would secure the capital funding needed to expand its operations would not be of any concern to BellSouth.

Likewise, in reference to the last factor, BellSouth would have no control over a CLEC's equipment manufacturer's ability to deliver and install equipment in the CLEC's collocation space. This transaction would be negotiated directly between the CLEC and its chosen equipment manufacturer.

Neither of these factors would affect BellSouth's ability to complete the required provisioning of the collocation space requested for occupancy by the CLEC.

Q. MR. VAN DE WATER SUGGESTS THAT THE AMOUNT OF TIME TO ESTABLISH THE NECESSARY COLLOCATION ARRANGEMENTS AND INSTALL THE NECESSARY FACILITIES MAY RESULT IN THE NEED FOR UNE-L CONVERSIONS IN THESE OFFICES TO BE "BACK-LOADED" AT THE END OF THE SCHEDULE. DO YOU AGREE?

A. No. If a CLEC requires new or additional collocation space for the placement of its network equipment to achieve the migration of its UNE-P customers over to

UNE-L, BellSouth must complete any requests for collocation space within the Commission-ordered provisioning intervals or pay SEEMS penalties for its inability to meet these intervals. Therefore, BellSouth has every incentive to timely provision collocation applications as such applications are received.

Q. WOULD HAVING MORE CONVERSIONS "BACK-LOADED" AT THE END OF THE TWENTY-SEVEN (27) MONTH PERIOD SPECIFIED BY THE FCC RESULT IN AN UNDERSTATEMENT OF BELLSOUTH'S ACTUAL STAFFING NEEDS, AS MR. VAN DE WATER SPECULATES?

A. It might, if one believed the assumption upon which Mr. Van De Water relies. I do not agree, however, with Mr. Van De Water's contention that UNE-P to UNE-L conversions associated with all of the BellSouth central offices in which the CLEC has requested new collocation space or the augmentation of existing collocation arrangements would take an inordinate amount of time and result in a delay of the migration. There is no reason for a CLEC to experience a delay in the provisioning of the collocation space, pursuant to the Commission-ordered intervals, unless it is the CLEC that has caused the delay by not submitting its orders for the space in the time necessary for BellSouth to complete its space preparation activities. [Note: The CLEC can only backload one-third (1/3) of its embedded base for conversion at the end of the 27 month interval. The other two-thirds (2/3) of the embedded base would have dates earlier than 27 months. Also, the 27 month deadline is for the CLEC to submit its orders for the last one-third (1/3) of its embedded base. The actual conversion dates would be

negotiated with the CLEC over some period of time beyond the 27 month deadline.]

Q. ON PAGE 29, MR. VAN DE WATER STATES THAT BELLSOUTH HAS FAILED TO DISCUSS HOW IT WILL HANDLE "THE SURGE OF APPLICATIONS FOR NEW COLLOCATION ARRANGEMENTS AND AUGMENTATIONS OF EXISTING COLLOCATIONS. . ." PLEASE COMMENT.

A. BellSouth has not discussed the means by which additional applications for new collocation arrangements will be handled in this proceeding, because BellSouth's processing of future collocation applications is not anticipated to change from BellSouth's current procedure for handling collocation applications. Whether or not there is a surge of requests for new collocation applications and/or augmentation applications in the future, BellSouth is prepared to handle these applications utilizing its existing processes. If, as a result of a significant increase in the number of applications received by BellSouth, there becomes a need for BellSouth to increase its current staffing levels, BellSouth is prepared to do so. Also, BellSouth is continually analyzing and updating its electronic ordering system, called the e.App system, for the processing of collocation applications to ensure that BellSouth uses the most efficient means of processing all requested applications.

Q. WILL BELLSOUTH STILL BE EXPECTED TO MEET THE COLLOCATION INTERVALS SET BY THIS COMMISSION IF THERE IS AN INCREASE IN THE NUMBER OF FUTURE APPLICATIONS?

A. Yes. BellSouth is expected to comply with the collocation ordering and provisioning intervals established by this Commission, as set forth in the BellSouth Service Quality Measurements ("SQM") plan, regardless of the volume of collocation applications. Furthermore, if BellSouth fails to meet the Commission-ordered provisioning intervals, then BellSouth would incur substantial SEEMS penalties for its inability to meet these intervals.

Q. MR. VAN DE WATER ALSO STATES THAT BELLSOUTH HAS NOT MENTIONED "THE NEED TO PLAN AND CONSTRUCT NECESSARY ADDITIONS TO ITS CENTRAL OFFICE BACK-UP POWER PLANTS." PLEASE COMMENT.

A. BellSouth's central office managers consistently monitor the current power usage of BellSouth's individual power plant needs, as well as expected future power plant needs. Power plant forecasts are developed after BellSouth's network and facility planners have determined what equipment and facilities are anticipated to be installed by BellSouth and the CLECs in the near and distant future. To the extent BellSouth has received any forecast information from CLECs, such forecast information is also included in the forecast developed by BellSouth. In other words, BellSouth forecasts the demand for DC (direct current) power for each central office to determine if, and when, the existing power plant will need to be upgraded or a new power plant will need to be installed. If it appears that an upgrade or the installation of a new power plant is required immediately or sometime in the current year at a specific central office or a group of central

offices, these requirements are communicated to BellSouth's network managers and included in the appropriate budget that is submitted to BellSouth's Network and Finance organizations for approval. As soon as the approval has been granted, the central office managers move forward with the necessary upgrade to the existing power plant or the installation of a new power plant.

Q. MR. VAN DE WATER CLAIMS THIS COMMISSION CANNOT DETERMINE HOW MANY NEW CLECS BELLSOUTH'S CENTRAL OFFICES CAN ACCOMMODATE IN THE FUTURE. PLEASE COMMENT.

A. This claim is simply a distraction. BellSouth does not keep a running total of how much collocation space is available in each central office because the amount of space available for collocation in each individual central office could conceivably change from day to day or even many times throughout the day, depending upon the number of applications BellSouth receives from CLECs and other telecommunication carriers for new collocation space, augmentation or termination of existing collocation space, and the reservation of future collocation space (up to 24 months). The amount of space available in an individual central office would also change based on space that is utilized or reserved (up to 24 months) by BellSouth for its own operations during the course of the day. Therefore, even if BellSouth were to prepare a report listing the amount of space available for collocation in BellSouth's central offices in Alabama, such a report would quickly become obsolete as a result of ongoing activity in these offices. The reality is that BellSouth is committed to taking all reasonable measures to

ensure that CLECs have adequate space to collocate in BellSouth's central offices in Alabama.

BellSouth does provide space availability information to CLECs and other telecommunication carriers via a "Space Availability Report" pursuant to CFR §51.323. Upon request from a CLEC or telecommunications carrier, BellSouth will provide a written report describing in detail the space that is available for collocation at a particular central office. This report includes not only the amount of collocation space available at the central office requested, but also the number of collocators present at the central office, any modifications in the use of the space since the last report on the central office requested (if a previous report had been performed), and the measures BellSouth is taking to make additional space available for collocation arrangements.

Q. ON PAGE 28, MR. VAN DE WATER SUGGESTS THAT BELLSOUTH'S CURRENT PERFORMANCE RESULTS HAVE LITTLE RELEVANCE IN AN ENVIRONMENT THAT IS MUCH MORE DEPENDENT UPON TIMELY COLLOCATION INSTALLATIONS. DO YOU AGREE?

A. No. BellSouth's current performance demonstrates that BellSouth is extremely committed to providing carriers with collocation space in its central offices as quickly as possible and in accordance with the provisioning intervals ordered by this Commission. Mr. Van De Water implies that this will change if BellSouth experiences an increase in the number of collocation applications it receives, which Mr. Van De Water is assuming will be significantly greater than the number

of current applications being processed by BellSouth today. What Mr. Van De Water fails to mention, however, is that BellSouth's past performance is an indication of BellSouth's ability to handle collocation ordering and provisioning at significant volumes. Furthermore, BellSouth has every incentive to continue its outstanding collocation performance regardless of any future increase in such volumes because of the payment of SEEMS penalties if BellSouth does not meet the performance standards ordered by this Commission

Q. MR. VAN DE WATER STATES THAT "BELLSOUTH HAS PROVIDED NO DETAILS ON HOW IT PLANS TO MANAGE INCREASED DEMAND FOR COLLOCATION OR WHAT IT ESTIMATES THAT DEMAND TO BE." PLEASE COMMENT.

A. Since I have already responded to this issue, I will only reiterate here that if BellSouth does not have the appropriate level of work forces it needs to support an increase in collocation applications, then BellSouth will take whatever action is necessary to ensure that these collocation applications will be processed within the ordering and provisioning intervals established by this Commission.

Q. FINALLY, ON PAGES 28 and 29 OF HIS TESTIMONY, MR. VAN DE WATER OPINES THAT IF BELLSOUTH CANNOT PROVIDE COLLOCATION IN A TIMELY MANNER, THEN BELLSOUTH'S ABILITY TO PERFORM HOT CUTS BECOMES A MOOT POINT. PLEASE COMMENT.

A. Obviously, I do not agree with Mr. Van De Water's conclusion that BellSouth may be unable to provide collocation in a timely manner. There is no reason to believe, nor has Mr. Van De Water offered any evidence to suggest, that BellSouth cannot fulfill its obligations to make collocation space available to CLECs in BellSouth's central offices in Alabama. Therefore, collocation should not even be a factor in this Commission's determination of whether BellSouth can perform the necessary hot cuts that will be required to convert the embedded UNE-P customer base to UNE-L.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF GEORGIA

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared ALFRED HEARTLEY, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 4 pages and 1 exhibits.

Alfred Heartley

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 22nd DAY OF MARCH, 2004

Micheale F. Bixler Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF ALFRED A. HEARTLEY

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054 PHASE II

MARCH 24, 2004

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

A. My name is Alfred A. Heartley. My business address is 754 Peachtree Street, Atlanta, Georgia 30308. My title is General Manager – Wholesale Performance and Regional Centers for BellSouth.

Q. ARE YOU THE SAME ALFRED HEARTLEY WHO EARLIER FILED DIRECT AND REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes.

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

A. I will respond to portions of the rebuttal testimony of Mr. Mark David Van de Water on behalf of AT&T regarding the batch hot cut process.

Q. MR. VAN DE WATER, ON PAGE 23 OF HIS REBUTTAL TESTIMONY, STATES THAT IT IS UNCLEAR IF AND HOW BELLSOUTH ACCOUNTED FOR CERTAIN ITEMS IN ITS FORECAST. CAN YOU ADDRESS THOSE ITEMS?

A. Yes. First, Mr. Van de Water claimed that BellSouth did not include travel time to unmanned central offices. BellSouth does not have employees report to work daily at each and every central office simply for the reason that there are some central offices in which there would be no work to be performed. Instead, for those offices with a low volume of work, technicians are dispatched as needed to work the pending load, daily if required. These tend to be small offices and therefore would not have large numbers of UNE-P lines to convert. Technicians would report to work in those offices when the cutovers are required and in most cases the technician would travel on his own time directly to the office as a first assignment. The force model accounts for the work to be performed in the office.

Second, Mr. Van de Water claimed BellSouth did not consider the number of shifts worked per day per central office. While BellSouth did not explicitly address this point, it was not necessary to do so because BellSouth has the capability to handle a worst-case scenario load projection. To highlight this point we have run a different version of our force model to include the number of technicians that can work safely and efficiently on the frame in each of the central offices. These numbers are based on BellSouth's response to Interrogatory –45. BellSouth increased the cutover load in the model to address the 1580 hot cut conversions per day that Mr. Van de Water recommended in his direct testimony and referred to again on page 21 of his rebuttal testimony. The results showed

that BellSouth would have to work 2 shifts in 20 to 30 of the 148 central offices in Alabama to handle the increased load. BellSouth would have to work 3 shifts in only 6 to 7 central offices in Alabama. The load exceeded 3 shifts in only one central office in Alabama.

We considered the load if a central office technician cut 10 lines per day or 12 lines per day. This accounted for Mr. Van de Water's estimate of 12 cuts per day in his direct testimony and our estimate of 10 cuts per day in my rebuttal testimony. I have included a revised force model, Exhibit AH-2, which shows the available technicians and number of shifts required for all central offices in Alabama. We increased the churn in the model to 40% per month or 480% per year to reach the 1580 hot cuts required per day that Mr. Van de Water recommended. The revised force model demonstrates that BellSouth can handle this increased load by working more than one shift in some of its central offices. It also indicated that BellSouth would have to increase its incremental force from 170 to 229 in Alabama.

Third, Mr. Van de Water questioned whether BellSouth considered all lines after the first one in the batch as additional lines for purposes of staffing. We considered all hot cuts as if they were the first line to keep the model simple and to demonstrate the worse case scenario. The actual hot cuts will go faster than the model predicts.

Fourth, Mr. Van de Water questioned whether the ratio of supervision to employees was applied evenly across BellSouth territory or accounted for the

geographic dispersion of the central offices. The ratio of supervision to employees was applied to the total technicians required. The supervision will be dispersed along with the technicians. In large metro areas, we anticipate that technicians will be grouped for this particular project and will gain expertise from the daily hot cut repetition. However, in some dispersed areas, technicians may be added to existing groups. We will staff the areas where the hot cuts are required with the appropriate technicians and supervisors.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

Wire Centers List w/Technician Coverage Information

Worst Case Force Projection

Percentage of UNEPs that will convert to UNEL	**100%**
Business days per month	**22.3**
Regional growth UNEPs per month	**116,295**
Regional IM UNELs per month	**19,029**
Churn percentage per month	**40%**
Maintenance and Repair Report Rate increase per mo.	**5%**

CO Cutover Times (Hours)	First Line (Worst Case)	Additional Line
CO Time SL1 Non Coordinated	0.43333	0.30000
CO Time SL1 Coordinated	0.60000	0.33333
CO Time SL2 (Coordinated)	1.05000	0.63333
Outside Tech Cutover Hours per Dispatch	1.0000	

No new UNEP.
Only new UNE-L.

12 Max Cutover per Day
10 Expected Cutover per day

STATE	W/C	CLLI	Available Techs	I&M Work Center	% of Total UNE-Ps	% IDLC	UNE-P Growth per Month	UNE-L Growth per Month	Total UNE-P Dec. 2004	Monthly UNE-P to UNE-L Conversions plus Normal UNE-P and UNE-L Growth	Daily UNE-P to UNE-L Conversions	Cutover Capacity Maximum	Cutover Capacity Expected	Does Daily Required exceed Max	Does Daily Required exceed Expected	Does Daily Required exceed Max in 2 Shifts?	Does Daily Required exceed Expected in 2 Shifts?	Does Daily Required exceed Max in 3 Shifts?	Does Daily Required exceed Expected in 3 Shifts?	Daily Conversions to SL2 (Coordinated)	CO Transfer Man-Hours	Outside Transfer Man-Hours
AL	albsalma	ALBSALMA	4	117 Little Valley Ct, Hoover	0.14354%	50%	167	27	5,509	456	30	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	8	18.93	15.18
AL	alcyalmt	ALCYALMT	4	1912 Airport Blvd, Alex City	0.05770%	16%	67	11	2,214	183	12	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	7.61	1.94
AL	alvlalma	ALVLALMA	4	1121 Kilpatrick Rd, Albertville	0.05792%	33%	67	11	2,223	184	12	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	7.64	4.06
AL	antnalle	ANTNALLE	2	4109 Myrtle AV	0.02747%	23%	32	5	1,054	87	6	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	3.62	1.32
AL	antnalmt	ANTNALMT	2	4109 Myrtle AV	0.12847%	18%	149	24	4,931	408	27	24	20	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	7	16.94	4.81
AL	antnalox	ANTNALOX	1	4109 Myrtle AV	0.08928%	38%	104	17	3,427	284	19	12	10	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	5	11.77	7.17
AL	athnaler	ATHNALER	2	1501 Hine St N, Athens	0.00344%	29%	4	1	132	11	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.45	0.21
AL	athnalma	ATHNALMA	6	1501 Hine St N, Athens	0.09376%	36%	109	18	3,599	298	20	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	5	12.36	7.06
AL	attlalnm	ATTLALNM	2	3725 Anita Ln, Gadsden	0.02398%	58%	28	5	920	76	5	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	3.16	2.90
AL	aubnalma	AUBNALMA	8	1801 Airport Rd, Opelika	0.12286%	39%	143	23	4,715	391	26	95	79	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	6	16.20	9.93
AL	blfnalma	BLFNALMA	2	3949 Demetropolis Rd, Mobile	0.00674%	31%	8	1	259	21	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.89	0.44
AL	boazalma	BOAZALMA	4	1121 Kilpatrick Rd, Albertville	0.03484%	32%	41	7	1,337	111	7	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.59	2.30
AL	brhmalch	BRHMALCH	4	117 Little Valley Ct, Hoover	0.05982%	32%	70	11	2,296	190	13	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	7.89	4.01
AL	brhmalcp	BRHMALCP	2	1661 28th Av S, Homewood	0.11010%	0%	128	21	4,226	350	23	24	20	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	6	14.52	0.00
AL	brhmalel	BRHMALEL	1	1661 28th Av S, Homewood	0.07199%	0%	84	14	2,763	229	15	12	10	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	4	9.49	0.00
AL	brhmalen	BRHMALEN	2	975 Pike Rd, B'ham	0.10326%	0%	120	20	3,963	328	22	24	20	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	5	13.62	0.00
AL	brhmalew	BRHMALEW	1	1661 28th Av S, Homewood	0.04711%	0%	55	9	1,808	150	10	12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	6.21	0.00
AL	brhmalfo	BRHMALFO	4	205 3rd St NE, Graysville	0.04204%	3%	49	8	1,613	134	9	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	5.54	0.26
AL	brhmalfs	BRHMALFS	2	2709 S Park Dr SW, B'ham	0.03249%	0%	38	6	1,247	103	7	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.28	0.00
AL	brhmalhw	BRHMALHW	2	1661 28th Av S, Homewood	0.09331%	2%	109	18	3,581	297	20	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	5	12.30	0.35
AL	brhmalmt	BRHMALMT	10	975 Pike Rd, B'ham	0.19598%	5%	228	37	7,522	623	41	119	99	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	10	25.84	1.94
AL	brhmalom	BRHMALOM	2	117 Little Valley Ct, Hoover	0.09702%	41%	113	18	3,724	308	20	24	20	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	5	12.79	8.29
AL	brhmalox	BRHMALOX	1	2709 S Park Dr SW, B'ham	0.07213%	2%	84	14	2,768	229	15	12	10	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	4	9.51	0.31
AL	brhmalrc	BRHMALRC	2	117 Little Valley Ct, Hoover	0.10978%	26%	128	21	4,213	349	23	24	20	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	6	14.47	6.09
AL	brhmalta	BRHMALTA	1	975 Pike Rd, B'ham	0.05344%	0%	62	10	2,051	170	11	12	10	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	3	7.05	0.00
AL	brhmalva	BRHMALVA	2	1661 28th Av S, Homewood	0.11860%	0%	138	23	4,552	377	25	24	20	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	6	15.64	0.02
AL	brhmalwe	BRHMALWE	1	975 Pike Rd, B'ham	0.07883%	1%	92	15	3,025	251	17	12	10	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	4	10.39	0.12
AL	brhmalwl	BRHMALWL	1	1661 28th Av S, Homewood	0.07009%	2%	82	13	2,690	223	15	12	10	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	4	9.24	0.26
AL	brptalma	BRPTALMA	2	207 Steamplant Rd, Stevenso	0.00502%	10%	6	1	193	16	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.66	0.10
AL	brtoalma	BRTOALMA	4	110 E Rankin St, Brewton	0.04254%	15%	49	8	1,633	135	9	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	5.61	1.34
AL	bsmralbp	BSMRALBP	2	975 Pike Rd, B'ham	0.00091%	40%	1	0	35	3	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.12	0.08
AL	bsmralbu	BSMRALBU	2	975 Pike Rd, B'ham	0.00670%	35%	8	1	257	21	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.88	0.49
AL	bsmralht	BSMRALHT	1	3170 Allison Bonnet, Hueytow	0.05679%	12%	66	11	2,180	181	12	12	10	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	3	7.49	1.47
AL	bsmralma	BSMRALMA	1	611 9th St N, Bessemer	0.14639%	0%	170	28	5,618	465	31	12	10	'YES'	'YES'	'YES'	'YES'	'NO'	'NO'	8	19.30	0.02
AL	bymnalma	BYMNALMA	4	114 N Dobson Av, Bay Minette	0.03000%	26%	35	6	1,151	95	6	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	3.96	1.66
AL	calralma	CALRALMA	4	2405 Hwy 31, Calera	0.01711%	5%	20	3	656	54	4	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.26	0.17
AL	chbgalma	CHBGALMA	4	200 Eastern Av, Sylacauga	0.01855%	0%	22	4	712	59	4	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.45	0.00
AL	chlsalma	CHLSALMA	2	252 Hwy 39, Chelsea	0.00787%	9%	9	1	302	25	2	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	1.04	0.14
AL	clanalma	CLANALMA	4	115 8th S S, Clanton	0.01941%	38%	23	4	745	62	4	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.56	1.54
AL	clmbalma	CLMBALMA	2	252 Hwy 39, Chelsea	0.01656%	26%	19	3	636	53	3	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.18	0.91
AL	clmnalfa	CLMNALFA	4	1311 Mitchell Rd NW, Cullman	0.01258%	53%	15	2	483	40	3	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.66	1.39
AL	clmnaljc	CLMNALJC	4	1311 Mitchell Rd NW, Cullman	0.00729%	50%	8	1	280	23	2	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.96	0.77
AL	clmnalma	CLMNALMA	6	1311 Mitchell Rd NW, Cullman	0.13639%	33%	159	26	5,235	434	29	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	7	17.98	9.53
AL	cnvialma	CNVIALMA	2	272 Walnut St, Centreville	0.00710%	26%	8	1	273	23	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.94	0.39
AL	crdvalma	CRDVALMA	2	1905 Hwy 78 E, Jasper	0.00901%	0%	10	2	346	29	2	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	1.19	0.00
AL	crhlalnm	CRHLALNM	0	1905 Hwy 78 E, Jasper	0.00140%	0%	2	0	54	4	0	0	0	'YES'	'YES'	'YES'	'YES'	'YES'	'YES'	0	0.18	0.00
AL	crldalma	CRLDALMA	4	106 State St, Citronelle	0.00412%	0%	5	1	158	13	1	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.54	0.00
AL	ctrnalnm	CTRNALNM	2	106 State St, Citronelle	0.00706%	22%	8	1	271	22	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.93	0.33
AL	cytnalma	CYTNALMA	2	10494 Hwy 80 E, Montgomery	0.00380%	24%	4	1	146	12	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.50	0.19
AL	dctralmt	DCTRALMT	2	76 Old Trinity Ln SW, Decatur	0.23526%	25%	274	45	9,029	748	49	24	20	'YES'	'YES'	'YES'	'YES'	'NO'	'NO'	12	31.02	12.46
AL	ddvlalma	DDVLALMA	4	409 Milly Francis St, Wetumpk	0.01444%	0%	17	3	554	46	3	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.90	0.00
AL	dmplalma	DMPLALMA	4	303 E Pettus St S, Demopolis	0.02950%	13%	34	6	1,132	94	6	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	3.89	0.83
AL	doraalma	DORAALMA	4	205 3rd St NE, Graysville	0.02249%	42%	26	4	863	71	5	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.97	2.00
AL	euflalma	EUFLALMA	4	29 Al Hwy 139, Maplesville	0.04738%	28%	55	9	1,818	151	10	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	6.25	2.83
AL	eutwalbo	EUTWALBO	2	10494 Hwy 80 E, Montgomery	0.00072%	0%	1	0	28	2	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.10	0.00
AL	eutwalma	EUTWALMA	4	310 Eutaw Av N, Eutaw	0.00733%	10%	9	1	281	23	2	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.97	0.15
AL	evrgalma	EVRGALMA	2	110 E Rankin St, Brewton	0.00837%	23%	10	2	321	27	2	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	1.10	0.40
AL	flrnalma	FLRNALMA	2	304 Cox Blvd, Sheffield	0.16241%	33%	189	31	6,233	516	34	24	20	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	9	21.41	11.21
AL	fmtnalmt	FMTNALMT	4	110 E Rankin St, Brewton	0.00815%	15%	9	2	313	26	2	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	1.07	0.26
AL	frhpalma	FRHPALMA	4	2001 Main St, Daphne	0.08752%	41%	102	17	3,359	278	18	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	5	11.54	7.55
AL	ftdpalma	FTDPALMA	2	10494 Hwy 80 E, Montgomery	0.00181%	30%	2	0	69	6	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.24	0.11
AL	ftpyalma	FTPYALMA	4	212 5th St NW, Fort Payne	0.04294%	26%	50	8	1,648	137	9	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	5.66	2.29

Wire Centers List w/Technician Coverage Information

Worst Case Force Projection

Percentage of UNEPs that will convert to UNEL	**100%**
Business days per month	**22.3**
Regional growth UNEPs per month	**116,295**
Regional IM UNELs per month	**19,029**
Churn percentage per month	**40%**
Maintenance and Repair Report Rate increase per mo.	**5%**

CO Cutover Times (Hours)	First Line (Worst Case)	Additional Line
CO Time SL1 Non Coordinated	0.43333	0.30000
CO Time SL1 Coordinated	0.60000	0.33333
CO Time SL2 (Coordinated)	1.05000	0.63333
Outside Tech Cutover Hours per Dispatch	1.0000	

No new UNEP.
Only new UNE-L.

12 Max Cutover per Day
10 Expected Cutover per day

STATE	W/C	CLLI	Available Techs	I&M Work Center	% of Total UNE-Ps	% IDLC	UNE-P Growth per Month	UNE-L Growth per Month	Total UNE-P Dec. 2004	Monthly UNE-P to UNE-L Conversions plus Normal UNE-P and UNE-L Growth	Daily UNE-P to UNE-L Conversions	Cutover Capacity Maximum	Cutover Capacity Expected	Does Daily Required exceed Max	Does Daily Required exceed Expected	Does Daily Required exceed Max in 2 Shifts?	Does Daily Required exceed Expected in 2 Shifts?	Does Daily Required exceed Max in 3 Shifts?	Does Daily Required exceed Expected in 3 Shifts?	Daily Conversions to SL2 (Coordinated)	CO Transfer Man-Hours	Outside Transfer Man-Hours
AL	gdsdalhs	GDSDALHS	1	3725 Anita Ln, Gadsden	0.03303%	33%	38	6	1,268	105	7	12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.36	2.30
AL	gdsdalmt	GDSDALMT	2	3725 Anita Ln, Gadsden	0.10951%	18%	127	21	4,203	348	23	24	20	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	6	14.44	4.10
AL	gdsdalrd	GDSDALRD	4	3725 Anita Ln, Gadsden	0.02751%	59%	32	5	1,056	87	6	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	3.63	3.39
AL	gdwralma	GDWRALMA	2	10494 Hwy 80 E, Montgomery	0.00290%	0%	3	1	111	9	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.38	0.00
AL	gnboalma	GNBOALMA	2	1006 Whelan St, Greensboro	0.01095%	0%	13	2	420	35	2	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.44	0.00
AL	grdlalnm	GRDLALNM	4	420 Brookwood Ct, Gardendal	0.03602%	23%	42	7	1,382	115	8	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.75	1.73
AL	grlyalma	GRLYALMA	2	128 Joplin St, Gurley	0.00425%	46%	5	1	163	14	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.56	0.41
AL	gtvlalnm	GTVLALNM	4	1121 Kilpatrick Rd, Albertville	0.03629%	15%	42	7	1,393	115	8	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.78	1.18
AL	gyvlalnm	GYVLALNM	4	205 3rd St NE, Graysville	0.01597%	33%	19	3	613	51	3	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.11	1.10
AL	hlvialma	HLVIALMA	2	602 Botts Av, Troy	0.00213%	21%	2	0	82	7	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.28	0.09
AL	hnvialLW	HNVIALLW	6	3445 Stanwood Blvd N, Hunts	0.13177%	39%	153	25	5,057	419	28	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	7	17.37	10.89
AL	hnvialmt	HNVIALMT	2	3445 Stanwood Blvd N, Hunts	0.14670%	16%	171	28	5,631	466	31	24	20	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	8	19.34	5.05
AL	hnvialpw	HNVIALPW	6	7600 S Memorial, Huntsville	0.12435%	32%	145	24	4,773	395	26	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	7	16.40	8.32
		HNVIALRA	4									48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'			
AL	hnvialrw	HNVIALRW	1	4905 Gilmer Dr NW, Huntsville	0.00787%	7%	9	1	302	25	2	12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	1.04	0.11
		HNVIALSD	1									12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'			
AL	hnvialun	HNVIALUN	6	4905 Gilmer Dr NW, Huntsville	0.12639%	42%	147	24	4,851	402	26	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	7	16.66	11.00
AL	hnvlalbr	HNVLALBR	2	1311 Mitchell Rd NW, Cullman	0.00290%	27%	3	1	111	9	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.38	0.16
AL	hnvlalnm	HNVLALNM	2	12 Bradley Rd, Fort Mitchell	0.00548%	35%	6	1	210	17	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.72	0.40
AL	hrboalom	HRBOALOM	4	203 Fonville St, Tuskegee	0.00281%	24%	3	1	108	9	1	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.37	0.14
AL	hrtsalnm	HRTSALNM	4	251 Cherry St NW, Hartselle	0.04077%	19%	47	8	1,565	130	9	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	5.38	1.65
AL	hrtsalpe	HRTSALPE	2	124 Union Rd, Sommerville	0.00407%	58%	5	1	156	13	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.54	0.49
AL	hzgralma	HZGRALMA	2	4905 Gilmer Dr NW, Huntsville	0.03068%	38%	36	6	1,178	98	6	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.05	2.43
AL	jcsnalnm	JCSNALNM	1	135 W Church St S, Jackson	0.02959%	24%	34	6	1,136	94	6	12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	3.90	1.47
AL	jcvlalma	JCVLALMA	4	1905 Hwy 78 E, Jasper	0.02955%	29%	34	6	1,134	94	6	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	3.90	1.80
AL	jspralmt	JSPRALMT	2	1905 Hwy 78 E, Jasper	0.05824%	25%	68	11	2,235	185	12	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	7.68	3.06
AL	kllnalma	KLLNALMA	4	1744 County Rd 107, Killen	0.01312%	44%	15	2	504	42	3	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.73	1.22
AL	lfytalrs	LFYTALRS	2	Alabama Av	0.00566%	13%	7	1	217	18	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.75	0.15
AL	lgtnalma	LGTNALMA	4	303 E Pettus St S, Demopolis	0.00498%	3%	6	1	191	16	1	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.66	0.03
AL	lndnalma	LNDNALMA	2	303 E Pettus St S, Demopolis	0.00439%	0%	5	1	168	14	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.58	0.00
AL	lvtnalla	LVTNALMA	2	1744 County Rd 107, Killen	0.01036%	10%	12	2	398	33	2	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.37	0.23
AL	lxtnalma	LXTNALMA	2	1744 County Rd 107, Killen	0.00244%	20%	3	0	94	8	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.32	0.10
AL	marnalnm	MARNALNM	2	123 Industrial Dr, Marion	0.00471%	0%	5	1	181	15	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.62	0.00
AL	mcinalma	MCINALMA	2	4905 Gilmer Dr NW, Huntsville	0.00176%	0%	2	0	68	6	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.23	0.00
		MDSNALNM	1									12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'			
AL	mdsnalom	MDSNALOM	4	4905 Gilmer Dr NW, Huntsville	0.05457%	42%	63	10	2,095	173	11	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	7.20	4.75
AL	mnfdalma	MNFDALMA	2	700 19th St, Talladega	0.00466%	0%	5	1	179	15	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.61	0.00
AL	mntvalnm	MNTVALNM	2	2405 Hwy 31, Calera	0.01407%	17%	16	3	540	45	3	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.86	0.50
AL	moblalap	MOBLALAP	4	301 Schillinger Rd N, Mobile	0.11109%	38%	129	21	4,264	353	23	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	6	14.65	8.77
AL	moblalaz	MOBLALAZ	2	612 S Greer Av, Mobile	0.10702%	0%	124	20	4,107	340	22	24	20	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	6	14.11	0.00
AL	moblalbf	MOBLALBF	1	3949 Demetropolis Rd, Mobile	0.01235%	31%	14	2	474	39	3	12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.63	0.81
AL	moblalos	MOBLALOS	2	3949 Demetropolis Rd, Mobile	0.23979%	0%	279	46	9,203	762	50	24	20	'YES'	'YES'	'YES'	'YES'	'NO'	'NO'	13	31.62	0.00
AL	moblalpr	MOBLALPR	1	612 S Greer Av, Mobile	0.12336%	5%	143	23	4,734	392	26	12	10	'YES'	'YES'	'YES'	'YES'	'NO'	'NO'	6	16.26	1.24
AL	moblalsa	MOBLALSA	4	612 S Greer Av, Mobile	0.05561%	29%	65	11	2,134	177	12	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	7.33	3.34
AL	moblalse	MOBLALSE	4	301 Schillinger Rd N, Mobile	0.04412%	39%	51	8	1,693	140	9	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	5.82	3.59
AL	moblalsf	MOBLALSF	2	2001 Main St, Daphne	0.10168%	45%	118	19	3,902	323	21	24	20	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	5	13.41	9.51
AL	moblalsh	MOBLALSH	2	301 Schillinger Rd N, Mobile	0.18888%	6%	220	36	7,249	600	40	24	20	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	10	24.90	2.24
AL	moblalsk	MOBLALSK	6	3949 Demetropolis Rd, Mobile	0.15480%	22%	180	29	5,941	492	32	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	8	20.41	7.05
AL	moblalth	MOBLALTH	4	3949 Demetropolis Rd, Mobile	0.05113%	41%	59	10	1,963	163	11	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	6.74	4.35
AL	moltalnm	MOLTALNM	2	13160 Market St, Moulton	0.01855%	28%	22	4	712	59	4	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.45	1.08
AL	mpvlalma	MPVLALMA	2	409 Milly Francis St, Wetumpk	0.00163%	17%	2	0	63	5	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.21	0.06
AL	mtgmalda	MTGMALDA	3	7 E Strickland St, Clayton	0.23277%	37%	271	44	8,934	740	49	36	30	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	12	30.69	18.20
AL	mtgmalmb	MTGMALMB	2	1912 Airport Blvd, Alex City	0.02760%	30%	32	5	1,059	88	6	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	3.64	1.74
AL	mtgmalmt	MTGMALMT	3	134 N Randlph Av, Eufaula	0.16309%	12%	190	31	6,259	518	34	36	30	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	9	21.50	4.18
AL	mtgmalno	MTGMALNO	2	1912 Airport Blvd, Alex City	0.14195%	0%	165	27	5,448	451	30	24	20	'YES'	'YES'	'NO'	'NO'	'NO'	'NO'	7	18.72	0.00
AL	mtvralma	MTVRALMA	2	19125 St Stephens Rd, Mount	0.00448%	0%	5	1	172	14	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.59	0.00
AL	ohtcalma	OHTCALMA	2	3725 Anita Ln, Gadsden	0.00566%	0%	7	1	217	18	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.75	0.00
AL	oplkalmt	OPLKALMT	2	251 Cherry St NW, Hartselle	0.08924%	46%	104	17	3,425	284	19	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	5	11.77	8.61
AL	pdmtalma	PDMTALMA	1	102 E Front St, Piedmont	0.01063%	0%	12	2	408	34	2	12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.40	0.00
AL	phcyalfm	PHCYALFM	4	1801 Airport Rd, Opelika	0.00471%	63%	5	1	181	15	1	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.62	0.63
AL	phcyalma	PHCYALMA	6	3107 S Railroad St, Phenix Cit	0.14001%	39%	163	27	5,374	445	29	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	7	18.46	11.38
AL	pnsnalma	PNSNALMA	4	1661 28th Av S, Homewood	0.02973%	39%	35	6	1,141	95	6	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	3.92	2.42

Wire Centers List w/Technician Coverage Information

Worst Case Force Projection

Percentage of UNEPs that will convert to UNEL	**100%**
Business days per month	**22.3**
Regional growth UNEPs per month	**116,295**
Regional IM UNELs per month	**19,029**
Churn percentage per month	**40%**
Maintenance and Repair Report Rate increase per mo.	**5%**

CO Cutover Times (Hours)	First Line (Worst Case)	Additional Line
CO Time SL1 Non Coordinated	0.43333	0.30000
CO Time SL1 Coordinated	0.60000	0.33333
CO Time SL2 (Coordinated)	1.05000	0.63333
Outside Tech Cutover Hours per Dispatch	1.0000	

No new UNEP.
Only new UNE-L.

12 Max Cutover per Day
10 Expected Cutover per day

STATE	W/C	CLLI	Available Techs	I&M Work Center	% of Total UNE-Ps	% IDLC	UNE-P Growth per Month	UNE-L Growth per Month	Total UNE-P Dec. 2004	Monthly UNE-P to UNE-L Conversions plus Normal UNE-P and UNE-L Growth	Daily UNE-P to UNE-L Conversions	Cutover Capacity Maximum	Cutover Capacity Expected	Does Daily Required exceed Max	Does Daily Required exceed Expected	Does Daily Required exceed Max in 2 Shifts?	Does Daily Required exceed Expected in 2 Shifts?	Does Daily Required exceed Max in 3 Shifts?	Does Daily Required exceed Expected in 3 Shifts?	Daily Conversions to SL2 (Coordinated)	CO Transfer Man-Hours	Outside Transfer Man-Hours
AL	prshalnm	PRSHALNM	2	1905 Hwy 78 E, Jasper	0.00163%	0%	2	0	63	5	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.21	0.00
AL	prvlalma	PRVLALMA	6	3107 S Railroad St, Phenix Cit	0.05385%	27%	63	10	2,067	171	11	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	7.10	3.10
AL	rdbaalma	RDBAALMA	4	12 Bradley Rd, Fort Mitchell	0.00647%	0%	8	1	248	21	1	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.85	0.00
AL	rlvlalma	RLVLALMA	4	205 Green Av NW, Russellville	0.02041%	13%	24	4	783	65	4	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.69	0.55
AL	rrvlalma	RRVLALMA	2	1744 County Rd 107, Killen	0.00982%	43%	11	2	377	31	2	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	1.29	0.89
AL	selmalmt	SELMALMT	2	212 Washington St, Selma	0.08756%	23%	102	17	3,361	278	18	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	5	11.54	4.16
AL	shfdalmt	SHFDALMT	1	304 Cox Blvd, Sheffield	0.11159%	16%	130	21	4,283	355	23	12	10	'YES'	'YES'	'NO'	'YES'	'NO'	'NO'	6	14.71	3.77
AL	stsnalma	STSNALMA	2	207 Steamplant Rd, Stevenso	0.00448%	23%	5	1	172	14	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.59	0.22
AL	sylcalmt	SYLCALMT	1	200 Eastern Av, Sylacauga	0.05643%	27%	66	11	2,166	179	12	12	10	'NO'	'YES'	'NO'	'NO'	'NO'	'NO'	3	7.44	3.19
AL	thvlalma	THVLALMA	4	303 E Pettus St S, Demopolis	0.01855%	17%	22	4	712	59	4	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.45	0.66
AL	tldgalma	TLDGALMA	4	700 19th St, Talladega	0.05217%	21%	61	10	2,002	166	11	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	3	6.88	2.32
AL	tldgalrf	TLDGALRF	2	700 19th St, Talladega	0.00308%	0%	4	1	118	10	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.41	0.00
AL	troyalma	TROYALMA	4	4921 Main St, Millbrook	0.03670%	18%	43	7	1,409	117	8	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.84	1.38
AL	tsclaldh	TSCLALDH	6	706 Chambliss St, Prattville	0.12141%	32%	141	23	4,660	386	25	71	60	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	6	16.01	8.24
AL	tsclalmt	TSCLALMT	2	322 Safford Av W, Thomasville	0.23979%	19%	279	46	9,203	762	50	24	20	'YES'	'YES'	'YES'	'YES'	'NO'	'NO'	13	31.62	9.63
AL	tsclalno	TSCLALNO	4	3121 Buttermilk Rd, Cottondal	0.03100%	21%	36	6	1,190	99	6	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	4.09	1.34
AL	tskgalma	TSKGALMA	4	3410 Rice Mine Rd NE, Tusca	0.01973%	21%	23	4	757	63	4	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	2.60	0.86
AL	twckalma	TWCKALMA	2	13160 Market St, Moulton	0.00529%	26%	6	1	203	17	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.70	0.28
AL	untwalnm	UNTWALNM	2	3410 Rice Mine Rd NE, Tusca	0.00231%	0%	3	0	89	7	0	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.30	0.00
AL	vncnalma	VNCNALMA	4	252 Hwy 39, Chelsea	0.00462%	0%	5	1	177	15	1	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.61	0.00
AL	wbtnalnm	WBTNALNM	2	272 Walnut St, Centreville	0.00656%	66%	8	1	252	21	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.87	0.91
AL	wrrralnm	WRRRALNM	1	420 Brookwood Ct, Gardendal	0.02475%	52%	29	5	950	79	5	12	10	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	1	3.26	2.71
AL	wtmpalma	WTMPALMA	4	123 Industrial Dr, Marion	0.04407%	38%	51	8	1,692	140	9	48	40	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	2	5.81	3.54
AL	yorkalma	YORKALMA	2	210 Stephens St S, York	0.00611%	12%	7	1	234	19	1	24	20	'NO'	'NO'	'NO'	'NO'	'NO'	'NO'	0	0.81	0.15
Alabama Total					**7.53965%**	**22%**	**8,768**	**1,435**	**289,372**	**23,969**	**1,580**									**395**	**994**	**345**
													Total YES	20	30	6	7	1	1			
														Number of office that will require at least	Number of office that will require at least	Number of office that require 3 shifts	Number of office that will require 3 shifts					

Headcount	133	46
Add Undistribute	159	55
Supervisors 15/:	11	4
Total Force	229	

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared MILTON McELROY, JR., who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 5 pages and 0 exhibits.

Milton McElroy Jr.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Micheale F. Bixler Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF MILTON MCELROY JR.

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, PHASE II

MARCH 24, 2004

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

A. My name is Milton McElroy Jr. My title is Director – Interconnection Services. My business address is 575 Morosgo Drive, Atlanta, Georgia 30324.

Q. ARE YOU THE SAME MILTON MCELROY JR. WHO PREVIOUSLY FILED REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to certain issues raised in the testimony of Mark David Van de Water of AT&T Communications of the Southern States, LLC ("AT&T") and Sherry Lichtenberg of MCI WorldCom Communications, Inc. and MCIMetro Access Transmission Services, Inc. ("MCI"). The issues to which I will respond are related to batch migrations. Throughout this testimony, I will use the terms "batch" and "bulk" interchangeably

when referring to the process of migrating Unbundled Network Element Platform ("UNE-P") service to Unbundled Loop ("UNE-L") service in batches.

Q. ON PAGE 15 OF HER REBUTTAL TESTIMONY, MS. LICHTENBERG INDICATES THAT OUT OF 724 BATCH HOT CUT ORDERS OBSERVED BY PWC, THAT 81 "PROBLEMS" WERE NOTED. PLEASE ADDRESS.

A. Although a detailed explanation of the individual deviations noted by PwC is included in my direct testimony, it is important to note the severity that PwC assigned to each noted "problem". During the test, PwC listed a total of 49 deviations where BellSouth failed to adhere to a process in excess of 95% of the time (Category 1) and eight (8) deviations where BellSouth failed to meet the 15 minute timeliness measure (Category 2). Of the 49 Category 1 process deviations, 47 could be traced to a single server malfunction that was repaired prior to the second day of testing, and did not occur again throughout the test. Similarly, although BellSouth was not timely on eight (8) batch hot cuts, the final result is that 99% of the hot cuts were made within the 15 minute interval. This result greatly exceeds the 95% benchmark established by this Commission.

Q. ON PAGE 18 OF HIS REBUTTAL TESTIMONY, MR. VAN DE WATER LISTS FOUR CONCERNS WITH HOW THE PWC TEST WAS CONDUCTED, AND THE RESULTS. PLEASE ADDRESS HIS CONCERNS.

A. Mr. Van de Water raises the following four "concerns" 1) Over what period of time pre-wiring was completed; 2) How was non-cut related central office work

handled during this time; 3) BellSouth implemented the cuts using 80% non-coordinated cuts and 4) PwC observed 64 deviations out of 724 cuts. I will address each one individually.

The period of time associated with the pre-wiring prior to the hot cuts followed standard procedures and processes. Specifically, BellSouth must manage internal work loads to complete any pre-wiring between when the order is placed, and when the hot-cut is performed. The specific pre-wiring for each day of the test was performed as follows:

> Day 1 of testing on December 2, 2003—West Hollywood Central Office (total of 125 Hot Cuts)
> 11/28—50%, 11/29—50%
>
> Day 2 of testing on December 4, 2003—Arch Creek Central Office (total of 125 Hot Cuts)
> 11/24—25%, 11/25—25%, 11/26—25%, 11/27—25%
>
> Day 3 of testing on December 5, 2003—Perrine Central Office (total of 125 Hot Cuts)
> 12/1—12%, 12/2—24%, 12/3—24%, 12/4—40%
>
> Day 4 of Testing on December 11, 2003—West Hollywood, Arch Creek and Perrine Central Offices (total of 383 Hot Cuts)
> West Hollywood: 12/3—50%, 12/4—30%, 12/5—20%
> Arch Creek: 12/4—33%, 12/5—33%, 12/8—33%
> Perrine: 12/7—15%, 12/8—30%, 12/9—30%, 12/10—25%

BellSouth has provided this same information regarding pre-wiring to AT&T on January 22, 2004 in response to an interrogatory filed in the Florida proceeding.

Mr. Van de Waters concerns for BellSouth's ability to perform other work within the central office while performing hot cuts is appreciated but unwarranted. The

pre-wiring and the tests were conducted within live central offices, and work for other customers (both BellSouth's retail customers as well as BellSouth's wholesale customers including CLECs) was continuing throughout the pre-wiring and testing phases, as would be done during implementation.

BellSouth performed the Batch hot cut test utilizing 80% non-coordinated orders simply because that is the method that BellSouth expects CLECs will use when performing bulk conversions from UNE-P to UNE-L. In fact, even Ms. Lichtenberg states on page 15 of her rebuttal testimony that MCI plans to utilize non-coordinated hot cuts for residential customers. So, even though 80% non-coordinated hot cuts does not compare with the limited number of coordinated migrations performed today, it does accurately reflect the expectations of both the CLECs and BellSouth to perform a majority of non-coordinated hot cuts in the future.

Finally, Mr. Van de Water indicates that PwC reported 64 deviations on 724 migrations. Although he does not provide any detail as to which deviations he includes in his count of 64, a complete detailed review of each PwC reported deviation can be found in my direct testimony. The fact is that 99% of the batch cuts were performed within a 15 minute interval, which exceeds the Commissions 95% standard measure for its Service Quality Measurement.

Q. ON PAGE 19 OF HIS REBUTTAL TESTIMONY, MR. VAN DE WATER ARGUES THAT PRE- AND POST-IMPLEMENTATION TESTING OF BELLSOUTH'S BATCH PROCESS IS NECESSARY. DO YOU AGREE?

A. No, to the extent that AT&T advocates pre-implementation testing, the time for that has passed as BellSouth implemented this process in March 2003. Since its implementation, however, BellSouth has tested the process by engaging PwC to conduct an independent audit of the process. PwC's work was twofold: first, PwC observed a test of the Bulk Migration Process using a pseudo CLEC; and second, PwC observed a number of live UNE-L migrations or hot cuts in several states. A full recount of the test, the test results and an affidavit by Mr. Paul Gaynor of PwC can be seen in my earlier testimony in this proceeding.

Moreover, BellSouth has a proven record of its ability to successfully migrate end user customers from a BellSouth switch to a CLEC switch. This is evidenced by the extent of the commercial activity of hot cuts across the BellSouth region as described in Mr. Ainsworth's testimony.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared W. Keith Milner, who being by me first duly sworn deposed and said that he is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his statements would be set forth in the annexed Surrebuttal testimony consisting of 14 pages and 0 exhibits.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF W. KEITH MILNER

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054 (PHASE II)

MARCH 24, 2004

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

A. My name is W. Keith Milner. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am Assistant Vice President - Interconnection Operations for BellSouth.

Q. ARE YOU THE SAME W. KEITH MILNER THAT FILED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes.

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

A. The first part of my surrebuttal testimony responds to criticisms of BellSouth's Analysis of Competitive Entry ("BACE") model. For example, on pages 6 – 7 of Mr. James Webber's rebuttal testimony on behalf of

MCIMetro Access Transmission Services, LLC and MCI WORLDCOM Communications, Inc., he discusses the assumption within the BACE model that Competitive Local Exchange Carriers ("CLECs") can serve some or all of their end users with so-called Enhanced Extended Links ("EELs"). To respond to such criticisms, I discuss several areas in which the default inputs to the BACE model cause the model to yield financially conservative results. The second part of my testimony provides surrebuttal to the rebuttal testimony of Mr. Jay Bradbury and Mr. Mark David Van de Water on behalf of AT&T Communications of the Southern States, LLC ("AT&T").

<u>BACE Model Assumptions</u>

Q. PLEASE EXPLAIN YOUR BELIEF THAT BELLSOUTH'S BACE MODEL USES CONSERVATIVE INPUTS AND THUS YIELDS CONSERVATIVE OUTPUTS.

A. In my opinion, BellSouth's BACE model yields conservative results based on inputs made for the following elements:

1. The quantity of switches a CLEC will operate in a Local Access and Transport Area ("LATA")
2. The quantity of trunk groups between a CLEC's switch and the E911 tandems in a LATA
3. The use of Special Access transport instead of CLEC-provided transport between the CLEC's central office and the BellSouth access tandem

4. The use of Special Access transport instead of CLEC-provided transport between the CLEC's switch and the CLEC's choice of Directory Assistance and Operator Services platforms
5. The deployment of a voicemail platform per LATA
6. The portion of unbundled loops provisioned as Service Level 2 ("SL2") loops rather than lower priced Service Level 1 ("SL1") loops
7. The use of current "full price" Non-Recurring Charge ("NRC") levels rather than discounted levels for all cutover of unbundled loops

I discuss each of these issues in greater detail below.

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING THE QUANTITY OF SWITCHES A CLEC WILL OPERATE IN A LATA WILL YIELD A CONSERVATIVE RESULT.

A. The default BACE inputs assume a CLEC will deploy at least one (1) switch per LATA. As was discussed in my direct and rebuttal testimony in this proceeding, CLECs can deploy a single switch and provide service to end users over a very large geographic area, perhaps even over an entire state or more. Thus, the default assumption that a CLEC will place at least one (1) switch per LATA results in a higher quantity of switches deployed.

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING THE QUANTITY OF TRUNK GROUPS BETWEEN A CLEC's SWITCH

AND THE E911 TANDEMS IN A LATA WILL YIELD A CONSERVATIVE RESULT.

A. In developing the default input for the quantity of E911 trunks a CLEC would deploy, I found that the maximum quantity of E911 tandems in a single LATA in BellSouth's region is six (6). Thus, the BACE default assumption is that a CLEC will equip its switch for six (6) DS-1 transport facilities (one each to the E911 tandem switches) which, if fully equipped, would provide for 144 simultaneous calls to E911 operators from the CLEC's switch. Since most end office switches have only one or two trunk groups to E911 tandem switches, this assumption results in a higher quantity of E911 trunk groups being equipped.

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING THE USE OF SPECIAL ACCESS TRANSPORT INSTEAD OF CLEC-PROVIDED TRANSPORT BETWEEN THE CLEC's CENTRAL OFFICE AND THE BELLSOUTH ACCESS TANDEM WILL YIELD A CONSERVATIVE RESULT.

A. The default assumption in the BACE model is that a CLEC will use Special Access facilities rather than CLEC-provided facilities to connect the CLEC's switch to BellSouth's access tandem. In cases where the CLEC self-provides this transport and where the resulting costs are less, BACE derives a higher cost than would actually be incurred. Further, BACE determines the quantity of DS-1 or DS-3 equivalents required based on

traffic loads. Since BACE does not assume the use of higher transport facilities than DS-3, BACE will, depending on traffic demand, deploy multiple DS-3 circuits rather than Optical Carrier ("OCn") circuits, which in some situations would be more efficient and thus less costly.

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING THE USE OF SPECIAL ACCESS TRANSPORT INSTEAD OF CLEC-PROVIDED TRANSPORT BETWEEN THE CLEC's SWITCH AND THE CLEC's CHOICE OF DIRECTORY ASSISTANCE AND OPERATOR SERVICES PLATFORMS WILL YIELD A CONSERVATIVE RESULT.

A. The default assumption is that a CLEC will elect the use of Special Access facilities rather than self-provided facilities between the CLEC's switch and the CLEC's choice of director assistance platform. Likewise, BACE assumes the use of Special Access rather than CLEC-provided facilities to transport traffic between the CLEC's switch and the CLEC's choice of operator services platform. In any case where the CLEC self-provides this transport and the resulting cost is less than Special Access charges, BACE will have assumed a higher cost to the CLEC than would actually be incurred.

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING THE DEPLOYMENT OF A VOICEMAIL PLATFORM PER LATA WILL YIELD A CONSERVATIVE RESULT.

A. As with switches, voicemail platforms can be equipped to handle demand over a very large geographic area, often over an entire state or even larger. Thus, the default assumption within the BACE model yields a conservative result because the quantity of voicemail platforms assumed to be deployed would be larger than a CLEC would actually probably deploy.

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING THE PORTION OF UNBUNDLED LOOPS PROVISIONED AS SERVICE LEVEL 2 ("SL2") LOOPS RATHER THAN LOWER PRICED SERVICE LEVEL 1 ("SL1") LOOPS WILL YIELD A CONSERVATIVE RESULT.

A. The model assumes a high proportion (45% of non-DSL customers) of mass market unbundled loops will be purchased as SL2 loops. This level was chosen assuming that CLECs would continue to order the higher-priced SL2 loops as they have in the recent past. SL2 loops are designed loops that are provisioned with test points that allow automated testing. The CLEC also receives a Detailed Layout Record ("DLR") depicting the loop makeup. Providing the test points and DLRs adds cost over those incurred in the provisioning of SL1 loops that are not equipped with test points and do not come with a DLR. In my opinion, CLECs will not choose SL2 loops for residential end users. For small business customers, the CLECs may sometimes choose SL2 loops over SL1 loops. Since the existing UNE-P base is predominantly residential customers, the default assumption in the BACE model that 45% of all unbundled loops will be

provided as SL2 loops is probably overstated and thus results in the model deriving higher CLEC costs.

Q. PLEASE EXPLAIN HOW BELLSOUTH'S ASSUMPTION REGARDING ALL CUTOVER OF UNBUNDLED LOOPS WILL BE PRICED AT THE CURRENT NON-RECURRING CHARGE ("NRC") LEVELS RATHER THAN DISCOUNTED LEVELS WILL YIELD A CONSERVATIVE RESULT.

A. The BACE model assumes that all NRCs for unbundled loop provisioning are the current NRCs. BellSouth has announced discounts off the NRC for CLECs using the Batch Hot Cut method. For CLECs using the Mass Migration method described in the surrebuttal testimony of BellSouth witness Milton McElroy, the discounts are even steeper. Thus, the BACE model calculates NRCs higher than will be experienced by CLECs using the Batch Hot Cut method or the Mass Migration method.

<u>Surrebuttal to Mr. Jay Bradbury</u>

Q. ON PAGE 15 OF HIS TESTIMONY, MR. BRADBURY CONTENDS THAT, IN REGARD TO CLEC NETWORK ARCHITECTURAL CONSIDERATIONS, THE STATEMENT MR. MILNER MADE IN HIS DIRECT TESTIMONY "AT&T HAS THE ABILITY TO CONNECT…" MISSES THE MARK AND "DOES NOT PROVIDE ANY INFORMATION ABOUT HOW AT&T, OR ANY OTHER CLEC, DETERMINES WHETHER IT IS ECONOMIC TO MAKE SUCH CONNECTIONS." PLEASE

COMMENT.

A. I was not making an economic determination of CLEC profitability as Mr. Bradbury implies. Instead, I was making a statement regarding the technical capabilities of CLECs' switches. As Mr. Bradbury says in his testimony beginning at the top of page 16, "As I indicated in my direct testimony, a crucial issue in this proceeding is not whether a CLEC simply 'can' connect its switch with the local loops of the end user, but whether a CLEC can 'efficiently use' its own switch to connect to the local loops of end users. In contrast, the issue being discussed in the testimony Mr. Milner has selected was geographic comparability not the actual deployment of network facilities to serve customers." Importantly, Mr. Bradbury does not dispute that CLECs' switches have the potential to serve large geographic areas (for example, at least as large as the geographic area served by a BellSouth tandem switch), which corroborates my statement in direct testimony regarding same. I did not perform an independent analysis of the economics of using fewer switches and consequently longer loops simply because BellSouth's BACE model provides such an analytic tool.

<u>Rebuttal to Mr. Van de Water</u>

Q. ON PAGE 27 OF HIS TESTIMONY, MR. VAN DE WATER CONTENDS THAT THE SPECIFIC ISSUES HE IS CONCERNED ABOUT ARE COLLOCATION SPACE AND TRUNK BLOCKING. MR. VAN DE WATER CONTENDS THAT IF UNBUNDLED LOCAL SWITCHING IS NO

LONGER AVAILABLE AT COST-BASED RATES TO CLECs, CUSTOMER SERVICE WILL BE NEGATIVELY IMPACTED. DO YOU AGREE?

A. No. I will address Mr. Van de Water's concerns regarding the adequacy of BellSouth's trunking facilities and BellSouth's witness Mr. Wayne Gray will address Mr. Van de Water's concerns regarding collocation space.

Q. PLEASE BRIEFLY DESCRIBE THE CONSIDERATIONS TAKEN INTO ACCOUNT WHEN DESIGNING AND DEPLOYING TRUNKING FACILITIES.

A. Traffic volumes (that is, levels of simultaneous customer calling) reach peaks during certain hours of the day or week. Trunks connecting the various switches in a local calling area are usually engineered to care for average-time consistent busy-hour loads in the busy season of the year, typically the three highest months in a year for traffic volumes. Switching systems in a Local Access Transport Area ("LATA") are interconnected by a network of trunks. The interconnections provide for both intraLATA and interLATA services. For interLATA services, trunks connect most Local Exchange Carrier ("LEC") networks to the networks of the Interexchange Carriers ("IXCs"). For intraLATA services, trunks connect the various end office switches (both incumbents' switches and CLECs' switches) and, if used, the tandem switches. Trunks between switching systems are most commonly carried on channels of digital carrier systems (Digital Signal

level 1 or “DS-1” and higher-order systems). The successful completion of traffic dialed by customers and operators depends upon a trunking network in which no-circuit conditions are rarely encountered under expected conditions.

Q. PLEASE BRIEFLY DESCRIBE MR. VAN DE WATER’S CONCERN REGARDING TRUNKING FACILTIES.

A. Mr. Van de Water suggests that once CLECs serve their customers from the CLECs’ switches rather than from the incumbent’s switches, traffic congestion and call blockage will occur due to traffic displacement. Let me give an example of how traffic displacement might occur. Let us assume that in a given local calling area there is at present only three switches (Switches A, B, and C) handling all the customers. Assume that each switch handles 10,000 customers and that all customers have similar calling habits. A CLEC has won 25% of the customers and serves those customers via UNE-P arrangements acquired from the switch owner. Further assume that within a given switch the 10,000 customers each make three calls and that 50% of those calls are to other customers served by that same switch and that the remaining 50% of the calls area split evenly to the customers served by the other two switches. Lastly, assume the use of one-way rather than two-way trunking.

Thus, in my hypothetical example, Switch A handles 30,000 calls in the busy hour. Half (50%) of those calls are intra-switch calls so no external

trunking is needed for those calls to be completed. Trunking facilities to the other two switches (Switches B and C) must be sized to handle 15,000 simultaneous calls in the busy hour. In this simple example, each of the three (3) switches would each have two (2) outgoing trunk groups (one trunk to each of the other two switches) and two (2) incoming trunk groups (one trunk from each of the other two switches).

If a fourth switch (let us assume that the new switch is the CLEC's switch referred to as Switch D) is introduced into the local calling area and if the CLEC moves all of its 7,500 customers to that switch (30,000 * 0.25) then traffic is displaced from the existing trunk groups connecting Switches A, B, and C onto new trunk groups connecting Switches A and D, Switches B and D, and Switches C and D. Even though the total traffic load is precisely the same before and after the CLEC moved its own customers to its own switches, the "old trunk groups" are over-sized in that they were sized for larger loads than they will now be required to carry. The traffic volume that was displaced from the "old trunk groups" is displaced to new trunk groups from Switches A, B, and C respectively to new Switch D.

Q. HOW DO TRUNKING ENGINEERS HANDLE TRAFFIC DISPLACEMENT ISSUES?

A. In my simple example above, the situation calls for building new trunk groups between Switches A, B, and C respectively to the new Switch D. Once those trunk groups are operational and the traffic displacement has

occurred (that is, the CLEC has moved its customers to its own switches), the “old trunk groups” may be re-sized (decremented) in response to the smaller loads on them or they can be left alone if the excess capacity is expected to be consumed (due to overall customer growth) in a reasonable period.

Q. IS TRAFFIC DISPLACEMENT AN ARTIFACT OF CLECs DEPLOYING THEIR OWN SWITCHES?

A. Certainly not. For many years, telecommunications engineers have confronted and successfully handled traffic displacement. Just a few examples include the following:

- The introduction of new wire centers (central offices) and thus additional switching systems
- The replacement of older switching system technology with newer switching system technology
- The introduction or expansion of so-called Extended Area Service (“EAS”) toll-free calling areas

Q. DO YOU BELIEVE IT IS A REASONABLE EXPECTATION THAT CALL BLOCKING WILL OCCUR ONCE CUSTOMERS ARE MOVED FROM INCUMBENTS’ SWITCHES TO CLECs’ SWITCHES?

A. No. Just as trunking engineers have successfully planned for large-scale traffic displacement in the past, they will do so in the situation where

CLECs begin using their own switches. I expect the trunking engineers will create new trunk groups in response to CLEC requests and that those trunk groups will be of sufficient size so as to not cause traffic congestion or call blockage. Once the customers are moved, trunking engineers will use the extensive traffic reporting capabilities already available to them to ensure that trunking facilities are adequately sized.

Q. MR. VAN DE WATER, ON PAGE 29 OF HIS TESTIMONY, EXPRESSES CONCERN ABOUT THE MOVEMENT OF TRAFFIC FROM BELLSOUTH'S EXISTING LOCAL SWITCH NETWORK ONTO ITS TANDEM TRANSPORT NETWORK NECESSITATED BY THE CONVERSION OF THE EMBEDDED BASE OF UNE-P CUSTOMERS TO CLECs' SWITCHES. DO YOU CONCUR?

A. No. This is essentially the same concern as Mr. Van de Water expresses for individual trunk groups. Here he opines that the tandem switches and the trunk groups connecting end office switches and tandem switches are insufficiently sized and that call blockage will occur. I disagree with his conclusions regarding tandem switching capacities for the same reasons as I set out in response to his concerns regarding trunk group adequacy. Essentially, the same call volumes will be present whether the calls are handled over the incumbents' switches (that is, their own customers' calling plus the CLECs' customers' calling) or in the case where CLECs move their customers to their own switches. While I agree that traffic displacement will occur, that situation has occurred countless times in the

past and trunking engineers have successfully handled those transitions. I fully expect that this situation will be no different in that respect.

Q. ON PAGE 31 OF HIS TESTIMONY, MR. VAN DE WATER EXPRESSES CONCERN OVER WHETHER BELLSOUTH'S TANDEM SWITCHES CAN HANDLE THE INCREASED TRAFFIC LOAD RESULTING FROM UNE-P TO UNE-L CONVERSION. PLEASE COMMENT.

A. There is no increased call volume as a result of CLECs moving their customers to their own switches. Instead, the same amount of calling must be handled in a different way. Just as has happened in the past, certain trunk groups will be added (or augmented) to handle traffic that was handled differently before the traffic displacement while after the transition certain trunk groups can de decremented. While there may be a need to augment tandem switching capacity should CLECs initially route their traffic exclusively through the tandem switches to reach all other local switches, over time I expect that CLECs will elect direct trunking between their switches and certain other switches in a given local calling area thus diminishing the total traffic load handled by the tandem switches.

Q. DOES THAT CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Ronald M. Pate, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 13 pages and 5 exhibits.

Ronald M. Pate

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Micheale F. Bixler Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF RONALD M. PATE

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, PHASE II

March 24, 2004

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

A. My name is Ronald M. Pate. I am employed by BellSouth Telecommunications, Inc. ("BellSouth") as a Director, Interconnection Services. In this position, I handle certain issues related to local interconnection matters, primarily operations support systems ("OSS"). My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. ARE YOU THE SAME RONALD M. PATE WHO PREVIOUSLY FILED DIRECT AND REBUTTAL TESTIMONY IN THIS DOCKET?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to respond to certain issues raised in the testimony of Mark David Van de Water of AT&T Communications of the Southern States, LLC (“AT&T”), and Sherry Lichtenberg of MCI WorldCom Communications, Inc. and MCIMetro Access Transmission Services, Inc. (“MCI”). The issues I will respond to are

related to the ordering of batch migrations, CLEC-to-CLEC migrations, flow-through, and the ability of BellSouth to scale its systems.

Throughout this testimony, I will use the terms “batch” and “bulk” interchangeably when referring to the process of migrating UNE-P to UNE-L in batches.

ORDERING UNE-TO-UNE BATCH MIGRATIONS

Q. ON PAGE 11 OF HIS TESTIMONY, MR. VAN DE WATER OF AT&T STATES THAT YOUR TESTIMONY DID NOT ACCURATELY REFLECT AT&T’S CHANGE REQUEST FOR THE UNE-TO-UNE BATCH MIGRATION PROCESS. DO YOU AGREE?

A. No, I do not. In my testimony, I referred to the portion of the change request CR0215 that dealt with the establishment of electronic ordering process for UNE-to-UNE batch migrations, but I included the entire change request document as an exhibit to my direct testimony (Exhibit RMP-1). As I discussed in my rebuttal testimony, on pages 2-3, part of its request, AT&T did, indeed, suggest an *option* for the provisioning of the cuts: on the weekend. What is most notable about Mr. Van de Water’s testimony is that he focuses on the small issue of weekend cutovers (which, as an aside, AT&T wanted BellSouth to perform at no additional charge) in an attempt to gloss over the fact that AT&T actively participated in, and advocated the development of, the UNE-to-UNE batch migration process. AT&T's attempt to disavow the batch ordering mechanism in this proceeding is disingenuous given AT&T’s prior advocacy of the change request.

At the time it implemented CR0215, BellSouth determined that the practice of providing either coordinated or non-coordinated hot cuts for the CLECs' UNE-to-UNE batch migrations is more flexible than limiting cutovers to just the weekends. Nonetheless, as I discussed in my rebuttal testimony on page 6, BellSouth established Saturday cutovers as part of the batch hot cut process starting February 18, 2004. Thus, Mr. Van de Water's complaint is moot.

Q. MS. LICHTENBERG, ON PAGE 9 OF HER REBUTTAL TESTIMONY, COMPLAINS THAT "BELLSOUTH HAS NOT PROVIDED DETAILED DOCUMENTATION ON HOW THE BATCH MIGRATION ORDERING PROCESS WORKS, ONLY THE BRIEF DOCUMENTATION AVAILABLE ON THE BELLSOUTH CLEC WEB SITE." IS SHE CORRECT?

A. No, she is not. As I described in my direct testimony, on page 6, BellSouth has provided CLECs with user requirements, business rules (contained in the *Local Ordering Handbook* or "LOH"), and the *UNE-Port/Loop Combination (UNE-P) to UNE-Loop (UNE-L) Bulk Migration CLEC Information Package* ("CLEC information package"). The original version of the CLEC information package was attached to my direct testimony as Exhibit RMP-2. The revised version was attached as Exhibit RMP-4 to my rebuttal testimony.[1] The business rules (an excerpt from the LOH) and the user requirements are attached to this testimony as Exhibits RMP-5 and RMP-6. This is some of the detailed documentation that the CLECs may use to order batch migrations. The user requirements were first distributed via the CCP (of which MCI is a member), and also are posted in the password-protected areas of the CCP web site. The CLEC

[1] BellSouth published the updated documentation on February 18, 2004. See Carrier Notification Letter SN91083967 at http://www.interconnection.bellsouth.com/notifications/carrier/carrier_pdf/91083967.pdf.

information package and the LOH are both available on BellSouth's interconnection web site.[2] For CLECs that use the EDI ordering interface, like MCI, BellSouth has prepared a specifications document for EDI. This document is attached as Exhibit RMP-7, and is also available on BellSouth's interconnection web site.[3] Further, as shown in the chronology on pages 4-5 of my direct testimony, BellSouth held two meetings to discuss the user requirements with the CLECs. MCI did not send a representative to either meeting, which may explain Ms. Lichtenberg's lack of knowledge about the documentation for BellSouth's batch migration ordering process.

In addition, for CLECs that use LENS, BellSouth has provided instructions for ordering batch migrations in the *LENS User Guide* ("LENS Guide") that is posted on BellSouth's interconnection web site for CLECs.[4] Attached to my surrebuttal testimony as Exhibit RMP-8 is the section from the LENS Guide that explains how CLECs can submit requests for batch migrations electronically via LENS.

Q. ON PAGES 9-10 OF HER TESTIMONY, MS. LICHTENBERG STATES THAT CLECS MUST "DEVELOP NEW SOFTWARE TO DEVELOP AND SEND THE BATCH LSR." SHE ADDS THAT "ADDITIONAL SOFTWARE MAY ALSO BE NECESSARY TO ACCEPT THE NOTIFIERS ISSUED FOR THE INDIVIDUAL LSRS CREATED BY THE BELLSOUTH INTERNAL SYSTEMS…THUS, IF A CLEC SUBMITTED A BULK LSR VIA EDI, IT WOULD EXPECT TO RECEIVE AN FOC

[2] The CLEC information package is located at http://interconnection.bellsouth.com/guides/html/unes.html. The LOH is located at http://www.interconnection.bellsouth.com/guides/html/leo.html.
[3] The specifications for ELMS6 and for TCIF9 are located at http://www.interconnection.bellsouth.com/guides/html/leo.html. ELMS6 and TCIF9 are the two industry standards supported by BellSouth.
[4] The LENS Guide is located at http://www.interconnection.bellsouth.com/guides/html/lens_tafi.html.

FOR THIS SUBMISSION, RATHER THAN FOCS FOR EACH OF THE ORDERS INCLUDED IN THE BULK LSR." PLEASE COMMENT.

A. With respect to Ms. Lichtenberg's comments about software development, if a CLEC chooses to use machine-to-machine electronic ordering interfaces, such as EDI or TAG, the CLEC must program its side of the interface whenever it chooses to use any new functionality that BellSouth has implemented. That is the nature of machine-to-machine interfaces. As the Commission will recall, the CLECs were vocal advocates for the necessity of machine-to-machine interfaces. Moreover, given that a CLEC submitted this change request (CR0215), and the CLECs prioritized it and publicly criticized BellSouth until it was implemented, they should not now be heard to complain that the change requires software work on their side of the interface.

With respect to Ms. Lichtenberg's comments about FOCs, after BellSouth's OSS has received the batch migration request, BellSouth's sends an acknowledgement to the CLEC. This is not an FOC. If the CLEC were sending individual LSRs instead of the batch migration request, the CLECs would receive an acknowledgement for each LSR. Thus, there is nothing new or different with this process. BellSouth only sends an FOC to the CLEC after the individual LSRs have been accepted by BellSouth's Service Order Communications System (SOCS). Again, this same sequence of notification is also followed for individually-submitted LSRs.

Q. MR. VAN DE WATER OF AT&T, ON PAGE 8, COMPLAINS THAT BELLSOUTH IS NOT WILLING TO ESTABLISH A COLLABORATIVE FOR THE BATCH HOT CUTS PROCESS. FURTHER, MR. VAN DE WATER NOTES THAT BELLSOUTH

HAS ASKED CLECS TO SUBMIT CHANGES TO THE UNE-TO-UNE BATCH MIGRATION PROCESS VIA THE CCP. HE ALSO REMARKS THAT BELLSOUTH HAS ANNOUNCED CHANGES TO THE PROCESS THAT HAVE NOT BEEN SUBMITTED TO THE CCP. PLEASE COMMENT.

A. As I stated in my rebuttal testimony on pages 3-5, given the CLECs' position in this case, their demands that BellSouth collaborate on improvements to the UNE-to-UNE batch migration manual processes is an attempt by the CLECs to divert BellSouth's resources from this case. Under ordinary circumstances BellSouth fully supports collaborative improvements to its processes, such as the Line Sharing Collaborative. As both I and Mr. Ainsworth have testified in our rebuttal testimony, in this instance, BellSouth cannot support the CLECs' requests for collaboration. 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 a massive retrofit of BellSouth's network to allow for automated hot cuts. Considering this fact, coupled with the requirement that the Commission must make a determination in nine (9) months, it does not make sense for BellSouth to devote the time and resources at this juncture to a process that the CLECs will never endorse.

Also, as I discussed in my rebuttal testimony, CLECs had the opportunity to collaborate on the development of the batch ordering component of the batch hot cut process when BellSouth developed the process in response to change request CR0215. Very few CLECs attended the user requirements meetings in 2002. Only when the state impairment proceedings started did the CLECs begin to complain about this process.

That being said, as I stated in my rebuttal testimony on page 5, and as Mr. Van de Water notes, BellSouth has told the CLECs that the CCP will review recommended process changes for the batch migration process. BellSouth has asked the CLECs to submit specific process changes within the scope of CCP via change requests. Consequently, although BellSouth has declined to hold a collaborative, it has not refused to collaborate with the CLECs. BellSouth's request that the CLECs submit suggested changes to the CCP is completely reasonable, as it provides the CLECs with a single point of contact for submissions. Not until the week of February 23, 2004 (the week of the first state TRO hearing) did the CLECs submit any change requests related to the UNE-to-UNE batch migration process to the CCP.[5] Until the CLECs took that action, BellSouth was between a rock and a hard place. The CLECs would criticize the process, yet they had declined to provide BellSouth with any specific suggested changes, except through regulatory proceedings. In an effort to make this Commission's job easier, BellSouth reasonably decided to address virtually all of the CLECs' criticisms by enhancing its already-compliant batch hot cut process based on the comments the CLECs made during regulatory proceedings.

Q. HAS BELLSOUTH AGREED TO MAKE CHANGES TO ITS BATCH MIGRATION PROCESS?

A. Yes, as I discussed in my rebuttal testimony (page 5), despite the fact that the CLECs did not submit any changes to the batch migration process to the CCP until the week of February 23, 2004 (the week of the first TRO hearing), BellSouth has been listening to

[5] The CLECs have submitted seven (7) change requests. As of March 11, 2004, BellSouth had requested clarification from the CLECs on four of the change requests (CR1733, CR1736, CR1737, and CR1739) and rejected three change requests (CR1734, CR1735, and CR1738) either because of cost or because of technical feasibility.

the CLECs' criticisms raised during the hot cut workshops held in its region. Although I discussed these enhancements on pages 6-8 of my rebuttal testimony, here is a summary of the changes that BellSouth made to its already seamless and effective UNE-to-UNE batch migration process on February 18, 2004:

- After Hours/Weekend Migrations
- Two-Hour Go Ahead Notifications for SL1 non-coordinated migrations
- Time Windows for coordinated conversions
- Pre and Post order completion restoral process (Throwback)
- Same-Day end-user account migration
- CLEC to CLEC migration (UNE-P to UNE-L)

BellSouth also reduced the interval for the project manager to return the bulk notification form to four business days (from seven) for 2 to 99 telephone numbers and to six business days (from 10) for 100-200 telephone numbers. Most of these enhancements are to the provisioning side of the process, which is under Mr. Ainsworth's purview. This process is also described in the CLEC information package. The revised CLEC information package was attached to my rebuttal testimony as Exhibit RMP-4.

<u>CLEC-TO-CLEC MIGRATIONS</u>

Q. ON PAGE 7 OF HER TESTIMONY, MS. LICHTENBERG OF MCI COMPLAINS THAT BELLSOUTH IGNORES CLEC-TO-CLEC BULK MIGRATIONS. WHAT IS YOUR RESPONSE?

A. I discussed CLEC-to-CLEC migrations on pages 21-27 of my rebuttal testimony, so it is clear that BellSouth is not ignoring this type of transaction. To reiterate, BellSouth does

perform CLEC-to-CLEC conversions of unbundled loops. The issues that Ms Lichtenberg describes, however, have nothing to do with BellSouth's already seamless and effective hot cut process. Rather, they are issues related to the CLECs' transactions with each other, such as obtaining customer service record information and circuit IDs, and their apparent inability to cooperate and share with each other. BellSouth's CLEC-to-CLEC conversion product is described in the *CLEC to CLEC Conversion for Unbundled Loops* document, which is located at the Interconnection web site.[6] As Mr. Ainsworth has testified, CLEC-to-CLEC loop conversions may be ordered individually or as a project. As I stated in my rebuttal testimony (page 21), BellSouth has agreed to implement CLEC-to-CLEC UNE-L migrations in the batch hot cut process.

Q. IN YOUR REBUTTAL TESTIMONY YOU DISCUSSED OTHER VENUES IN WHICH THE PARTIES ARE CONSIDERING ISSUES RELATED TO CLEC-TO-CLEC MIGRATIONS. PLEASE COMMENT.

A. As I discussed, starting on page 22 of my rebuttal testimony, the end user collaborative of the Florida Commission's Telecommunications Competitive Interests Forum is considering the rules for CLEC-to-CLEC migrations. The parties involved in this collaborative have developed draft rules for voice grade circuits and have submitted them to the Commission. Once the rules for voice grade loops have been finalized, the parties will develop rules for data circuits. After the rules have been established in Florida, the participants plan to use the Florida rules as the guidelines for establishing rules in the other states in BellSouth's region. I also discussed, on pages 26-27 of my rebuttal, the fact that the Ordering and Billing Forum ("OBF"), the industry standards organization, is

[6] http://www.interconnection.bellsouth.com/guides/unedocs/c2c.pdf

considering the issue of multi-provider migrations, including CLEC-to-CLEC migrations. Thus, the interested parties are already working collaboratively to resolve the issues related to CLEC-to-CLEC migrations.

FLOW-THROUGH

Q. IN HER REBUTTAL TESTIMONY ON PAGES 3-4, MCI'S MS. LICHTENBERG DISCUSSES WHAT SHE PERCEIVES TO BE BELLSOUTH'S RELATIVE FLOW-THROUGH RATES FOR UNE-P AND UNE-L LSRS. PLEASE COMMENT.

A. Unfortunately, Ms. Lichtenberg did not have the opportunity to read my rebuttal testimony in this docket prior to filing her own rebuttal testimony. AT&T's Mr. Van de Water, on page 11 of his direct testimony, made a similar mischaracterization of the data I provided in response to AT&T's Interrogatory No. 28. On pages 14-15 of my rebuttal testimony, I provided a full explanation of the true meaning of the numbers provided in that interrogatory, and stated that the numbers do *not* represent flow-through, nor did the AT&T interrogatory specifically request flow-through information.

Q. REGARDLESS OF MS. LICHTENBERG'S CONFUSION, DID BELLSOUTH'S UNE-P AND UNE-L FLOW-THROUGH PERFORMANCE FOR ALABAMA EXCEED THE COMMISSION'S BENCHMARKS FOR THE PERIOD IN QUESTION?

A. As I explained on pages 15-16 of my rebuttal testimony, BellSouth's flow-through rate for UNE-P (96.40% vs. 85% benchmark) and UNE-L (86.19% vs. 85% benchmark) both exceeded the Commission's benchmarks for August 2003.

Q. MS. LICHTENBERG FURTHER STATES ON PAGE 4 OF HER TESTIMONY THAT "LOW FLOW THROUGH MEANS THAT A SIGNIFICANT NUMBER OF UNE-L ORDERS WILL FALL OUT OF THE SYSTEMS AND MUST BE PROCESSED MANUALLY." PLEASE COMMENT.

A. I responded to similar allegations by Ms. Lichtenberg and Mr. Van de Water on pages 12-13 of my rebuttal testimony. From the previous answer, it is clear that "the majority of" UNE-L requests *do* flow through the ordering systems, and are not manually processed. Further, as I reported on pages 10-11 of my rebuttal testimony, BellSouth has initiatives underway to improve flow-through such that all segments consistently meet the flow-through benchmarks. Attached as Exhibit RMP-3 to my rebuttal testimony, was the December 2003 quarterly report that BellSouth files with Florida Public Service Commission that details these efforts, including the efforts to improve the flow-through of LNP. BellSouth has now filed a quarterly report for March 2004. It is attached to this testimony as Exhibit RMP-9.

Q. WHAT OTHER EVIDENCE HAS BELLSOUTH PROVIDED THAT THE FLOW-THROUGH RATE FOR LNP IS IMPROVING?

A. As I discussed in my rebuttal testimony, on pages 11-12, recent data shows excellent flow-through rates for UNE-P to UNE-L migration, which include UNE-L with LNP. To summarize, in December 2003 and January 2004, using the LENS interface, one Florida-based CLEC submitted electronically via the LENS interface 8,740 LSRs and 5,662 LSRs respectively to migrate its embedded base of UNE-P to UNE-L with LNP, which accounted for approximately 45% of all electronic LNP submissions in December and

31% for January. As a consequence of this CLEC's results, the overall LNP flow-through rate was 93.4% for December and 93.3% for January.

As I noted in my rebuttal testimony, a portion of these electronic LSRs did fall out by design for manual processing. During these two months, a total of 2,267 of the submissions fell out by design for manual processing by BellSouth's center personnel. What is interesting is why these LSRs fell out by design. From an analysis of the 2,267 LSRs that fell out, it was determined that the vast majority, 2,160 LSRs, or 95%, fell out due to pending service orders. In other words, this CLEC had pending service orders in process for its own accounts that had not cleared before the CLEC submitted LSRs to migrate the accounts to UNE-L. If the CLEC only had checked its systems for pending service orders, which it should do in the normal course of its operations, these migration requests likely would have flowed through BellSouth's systems as well.

Thus, BellSouth clearly is not saying "trust me," as Ms. Lichtenberg states on page 6 of her testimony. Rather, BellSouth has provided proof that it can handle the CLECs' requests.

Commercial usage indicates that BellSouth does not now (nor will it in the future) impair CLECs in their ability to order UNE loops. For a discussion of her allegation regarding manual provisioning, I refer the Commission to the testimony of Mr. Ainsworth.

<u>SCALABILITY/THIRD PARTY TESTING</u>

Q. MS. LICHTENBERG, IN HER REBUTTAL TESTIMONY (PAGE 5), AND MR. VAN DE WATER, IN HIS REBUTTAL TESTIMONY (PAGES 5-6), DISMISS YOUR

DIRECT TESTIMONY REGARDING THE FLORIDA THIRD PARTY TEST, SPECIFICALLY, THE CRITERIA AND RESULTS OF TEST TVV-2. PLEASE RESPOND.

A. The purpose of the KPMG (now BearingPoint) TVV-2 was to test the ability of BellSouth's systems to handle future CLEC ordering volumes over a wide range of product/service requests types, including various UNE-L scenarios. As I stated on page 13 of my direct testimony, BellSouth's systems were judged capable of handling a significant increase in CLEC ordering volumes, regardless of whether the CLEC orders are the types of orders involved in hot cuts. BellSouth's Mr. Ainsworth and Mr. McElroy have additional testimony on the KPMG tests of hot-cut provisioning capability.

Q, DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

BELLSOUTH
Local Ordering Handbook

Section 3
Ordering

LSOG6 / ELMS6

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PUBLIC

2.12 REQTYP B - UNE to UNE Bulk Migration

General Business Rules

UNE to UNE Bulk Migrations is an electronic process designed to allow BellSouth® CLEC customers to submit a minimum of 2 and up to and including a maximum of 99 LSR requests at one time with minimal field input to migrate existing non-complex services [Residence/Business] Port/Loop Combinations (UNE-P) to Loop w/LNP.

A new outbound reject message for bulk packages shall be used for bulk package rejects and shall consist of the following fields:
CC
BOPI
BULK VER
STATUS CODE
STATUS MESSAGE
ERROR CODE(s)
ERROR MESSAGE(s)
PON Statuses---Bulk Package summary

The PON status shall consist of the following statuses:

- LSR clarified, with the system sending a clarification or autoclarification = **Clarified**
- LSR cancelled, with FOC sent on SUP 01 sent to the CLEC = **Cancelled**
- LSR completed, completion notice sent when all service orders completed and all TNs have been ported = **Completed**
- LSR FOC'd, with FOC sent to the CLEC = **FOC**
- LSRs have been accepted by the solution, but they have not been processed enough to be clarified or FOC'd = **Pending**

The following general business rules apply to UNE to UNE Bulk Migrations BULK packages:

- **All Bulk orders are project managed.**
- **Shall only apply to migrating existing non-complex (RES/BUS) Port/Loop Combination (UNE-P) services to Loop w/LNP LSRs, REQTYP B, with ACT of V, LNA of V, NPT is 'D' (LNP).**
- **The fields BOPI (Bulk Ordering Package Identifier) and BULK VER (Bulk Version) shall be added to the ELMS 6 map for all return transactions, FOCs, CNs, POS, Rejects, Clarifications and Jeopardies.**
- **When a Mechanized Loop Make Up/w FRN (Facility Reservation Number) is requested, CLEC must submit Bulk order package to BellSouth® within 24 hours of receiving FRN.**

- **The web based application [UNE to UNE Bulk Migration Bulk Package GUI] will allow users to submit individual SUPs, types 01, 02, and 03, on individual LSRs associated with a bulk package.**
- **CLECs shall have the ability to submit a supplement to cancel the entire UNE to UNE BULK package, which includes canceling all remaining PONs associated with a BULK package, or have the ability to cancel an individual LSR via SUP.**
- **Service order processing shall be the same as REQTYP BB today, *unless specified otherwise in this document.***
- **For BULK Ordering, the fields shown in the R/C/O tables for UNE to UNE BULK Migrations will be supplied by the CLEC via the BULK Order.**
- **For BULK Ordering, current SOMEC charges will apply.**
- **A Complex Service EATN must be resubmitted as a single LSR, with a different PON#.**
- **UNE to UNE Bulk migration is applicable for ELMS 6 *only*.**
- **A UNE Loop will be provided for each Porting TN.**
- **CLECs shall have the ability to view a summary of the BULK LSR in both the raw data form and individual LSR form for each EATN.**
- **Manual (Faxed) LSR Requests are *prohibited* for UNE to UNE Bulk Migrations.**
- **If a UNE bulk package is received without a required field, it will be rejected.**
- **If any of the individual LSRs cannot be created from the bulk package due to error conditions, the entire bulk package shall be rejected. This applies to both initial and supplemental Bulk Packages.**
- **When requesting a SUP to Cancel on a UNE to UNE BULK Package, the Company Code, Supplement, Bulk Order Package ID and BULK Version will be required.**
- **For UNE BULK ordering, a mixture of Loop types can*not* be handled as a part of the same Bulk request.**
- **Complex UNE P accounts are *prohibited* on a UNE to UNE Bulk request.**
- **For UNE to UNE BULK package Supplemental LSRs, SUP 02 and 03 are prohibited (at the Global level), but are allowed at the account level.**
- **For UNE to UNE BULK package Supplemental LSRs, individual PON data is prohibited (at the Global level), but is allowed at the account level.**
- **If a supplemental LSR (at the Global level) is sent, and the initial BULK request has not been received, the SUP LSR will be rejected.**

- **For all initial and supplemental with BOPI field populated, the LNP-GW (LNP GateWay) will always return a clarification, regardless of the error type [i.e., 1st or 2nd level edits].**
- **If CLEC is requesting specific EATNs to be ported together, CLECs may indicate Desired Due Dates (DDD) via Project Manager BellSouth® UNE P to UNE L Bulk Migration Project Notification form, IF APPROVED; CLECs would then enter the negotiated DDD(s) on the LSR at the Account level.**

This unique ordering process allows the CLEC to populate a specific set of fields at a Global level (one time), and a specific set of fields at the Account and Line level to generate multiple LSR's.

A unique Graphical User Interface (GUI) has been developed for processing UNE to UNE Bulk Migration orders. The GUI will utilize most of the same fields from the existing LSR, EU, and LS forms, however the GUI will present them in a Global, or Account level format for order submission. To assist BellSouth® customers in determining which section of the Data Element Dictionary the fields may be found in the following matrix may be used:

Field Name	R/C/O Table	Data Dictionary Section
BOPI	Global	LSR-Admin section
BULK VER	Global	LSR-Admin section
CC	Global	LSR-Admin section
REQTYP	Global	LSR-Admin section
ACT	Global	LSR-Admin section
LNA	Global	LSR-Service Detail section
TOS (Default)	Global	LSR-Admin section
CCNA	Global	LSR-Admin section
ACNA	Global	LSR-Bill section
CIC	Global	LSR-Admin section
NNSP	Global	LSR-Admin section
INIT	Global	LSR-Contact section
INIT-TEL-NO.	Global	LSR-Contact section
INIT-FAX-NO.	Global	LSR-Contact section
IMPCON	Global	LSR-Contact section
IMPCON-TEL-NO.	Global	LSR-Contact section
DSGCON	Global	LSR-Contact section
DSGCON-STREET	Global	LSR-Contact section
DSGCON-CITY	Global	LSR-Contact section
DSGCON-STATE	Global	LSR-Contact section

4.13 UNE to UNE Bulk Migration

Product Listing

UNE to UNE Bulk Migrations

(LSR) Package Entry Screens

The following chart illustrates the required, conditional and optional forms/screens for ordering this service. Detailed information will follow to assist you in filling out each of these screens.

Package UNE to UNE Bulk Migrations		
Global level	Account level*	Line level**
R	R	R
R = Required C = Conditional O = Optional		

* = per EATN
** = per PORTED TN.

Completing the (LSR) Package Entry Screen

The Required, Conditional and Optional (R/C/O) fields on the (LSR) Package Entries will be given for the valid **REQTYP/ACT combination** in the Section.

The following chart shows all of the valid account level activities for this requisition type.

REQTYP	ACTIVITY LEVEL
B - UNE to UNE Bulk Migrations	V

THE ONLY VALID ACT is V

Account level activities (ACT) apply to the entire account. The ACTs are defined below:

V = Full Conversion of service **as specified** to new Local Service Provider (LSP), includes UNE to UNE Bulk Migrations

Line level activities (LNA) apply to the specified line only. The valid LNAs are listed below:

V = Conversion or Migration to new LSP **as specified** (specify only those changes from existing service), includes UNE to UNE Bulk Migrations

The following chart gives the valid LNAs for each account level activity (ACT) and the associated LSNP screen usage.

REQTYP is:	Global ACT is:	Account ACT is:	Line Level (Entry) is:
B - UNE to UNE Bulk Migrations	V	V	Required

The Required, Conditional and Optional (R/C/O) fields for the UNE to UNE Bulk Migration (LSR) Package is listed according to the LINE Level in the **Line Level Table(s)**.

The following tables show the Required, Conditional and Optional (R/C/O) fields on the valid forms/screens for this product. All unmentioned fields are either invalid, not applicable, prohibited or not supported. When fields are populated which are not supported by BellSouth, these not supported fields will be ignored. Populating any other fields may result in a fatal reject or a clarification of the service request.

Please note the following codes:
- Optional fields marked with an asterisk (*) force at least one of the conditional fields to become required when populated.
- Fields used only for manual orders are followed by (M).
- Fields used only for electronic orders are followed by (E).
- For fields marked with a DOUBLE asterisk (**) please refer to the Data Dictionary for clarification.

See the Data Dictionary Section for additional information on each field.

ACT Tables: Reqtyp B, UNE to UNE Bulk Migrations

ACT= V: LSR Account

Required

AN (E)	BAN1 (E)	BI1 (E)
DDD (E)	EATN (E)	ELT (E)
MI (E)	NAME (E)	PON (E)

Conditional

BAN2 (E)	BI2 (E)	RESID (E)

Optional

CHC (E)	TOS (Override) (E)	VER (E)

ACT= V: LSR Global

Required

ACNA (E)	ACT (E)	ACTL (E)
BOPI (E)	CC (E)	CCNA (E)
D/TSENT (E)	IMPCON (E)	IMPCON-TEL NO. (E)
INIT (E)	INIT-FAX NO. (E)	INIT-TEL NO. (E)
LNA (E)	NC (E)	REQTYP (E)
TOS (Default) (E)		

Conditional

DSGCON (E)	DSGCON-CITY (E)	DSGCON-STATE (E)
DSGCON-STREET (E)	DSGCON-TEL NO. (E)	DSGCON-ZIP CODE (E)
NCI (E)	SECNCI (E)	

ACT Tables: Reqtyp B, UNE to UNE Bulk Migrations

Optional

BULK VER (E)	CIC (E)	DRC (E)
DSGCON-FAX NO. (E)	DSGCON-FLOOR (E)	DSGCON-ROOM (E)
NNSP (E)		

ACT= V: LSR Line

Required

LNUM (E)	PORTED NBR (E)

Conditional

CABLE ID (E)	CFA (E)	CHAN/PAIR (E)
CHAN/PAIR 2 (E)		

BELLSOUTH

ENCORE User Requirements for

UNE to UNE Bulk Migrations

FINAL

CCP CR 0215

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SCOPE

1.1 BUSINESS IMPLICATIONS

This feature will allow the users (CLEC community) to submit a specific type of LSR in a bulk order format through Bellsouth's CLEC interfaces: EDI, LENS, TAG, and SERVICEGATE GATEWAY when available. Those LSR types will be to migrate existing Port/Loop Combination services to Loop with Local Number Portability (LNP) services.

.1.1.1. Current Process

Current Process	
•	Currently, there are no bulk ordering processes to allow migrations of Port Loop Combo services to Loop with LNP services.
•	Currently, LNP applications do not interface with LENS.
•	Individual LSRs for REQTYP B's are available via EDI and TAG, as well as individual FAX LSRs.

.1.1.2. Expected Process

Expected Process	
•	Bellsouth's CLEC Interfaces: EDI, LENS, TAG, and SERVICEGATE GATEWAY, when available, will allow a bulk order process for LSRs, migrating existing port/loop combination services to Loop w/LNP services. (REQTYP B, ACT V, all LNA V)
•	The feature allows the ability to request and receive status and image of a single LSR of REQTYP B or a status and image of a bulk order of REQTYP B via LENS, TAG, and SERVICEGATE GATEWAY, when available.

2. USER REQUIREMENTS

Requirement No.	User Requirement
UR13780.0010	This feature is applicable for TCIF Issue 9.
UR13780.0020	The bulk order LSRs, allowable via EDI, LENS, TAG and ServiceGate Gateway, when available, shall only apply to migrating existing non-complex Port/Loop Combination services to Loop w/LNP LSRs, REQTYP B, with ACT of V, all LNA of V. The specific applicable Port/Loop Combination products are outlined in Appendix A.
UR13780.0022	Moved to Requirement .0064
UR13780.0025	Requirement Deleted
UR13780.0030	The bulk order LSR package may consist of a minimum of 2 and up to and including 99 EATNs. This will be a BellSouth tunable value and initially set as a minimum of 2 and a maximum of 99.
UR13780.0035	Requirement Deleted
UR13780.0038	If the conditions in Requirement .0030 are not met, the following error message shall be returned to the user: Bulk Order Package must be a minimum of 2 and up to and including 99 EATNs

Requirement No.	User Requirement
UR13780.0040	The initial bulk order LSR package shall consist of the following Common Level fields, once per package: BOPI-Bulk Order Package Identifier (Required, .0045, .0045a, .0045b, .0045c) BULK VER (Optional) CC (Required) REQTYP (Required) ACT (Required) LNA (Required) TOS (Default) (Required) CCNA (Required) ACNA (Required) CIC (Required) NNSP (Optional) INIT (Required) TEL-NO-INIT (Required) FAX-NO-INIT (Required) IMPCON (Required) TEL-NO-IMPCON (Required) DSGCON (Conditional) STREET-DSGCON (Conditional) CITY-DSGCON (Conditional) STATE-DSGCON (Conditional) ZIP-CODE-DSGCON (Conditional) FLOOR-DSGCON (Optional) ROOM-MAIL-STOP-DSGCON (Optional) TEL-NO-DSGCON (Conditional) FAX-NO-DSGCON (Optional) NC (Required) NCI (conditional) SECNCI (conditional) ACTL (Required) DRC (Optional) D/T SENT (Required)
UR13780.0041	For initial bulk order LSR packages, SUP is prohibited.
UR13780.0042	If the condition in Requirement .0041 is not met, the following error message shall be returned to the user: SUP prohibited on initial Bulk Order Package
UR13780.0043	If any of the fields identified in .0040, with the exception of BULK VER, D/T SENT, or DRC, are different on the individually submitted Supplemental 02 and 03 LSRs when compared to the original LSR, the Supplemental should be auto-clarified.

Requirement No.	User Requirement
UR13780.0043a	If the ERL field is different on the individually submitted Supplemental 03 LSRs when compared to the original bulk ordered LSR, the Supplemental should be auto-clarified
UR13780.0044	If the conditions in Requirement .0043 or .0043a are not met, the following error message shall be returned to the user: &Field Name&can not change from original to supplemental LSR.
UR13780.0045	A new field shall be added to the incoming and outbound transactions to support bulk order LSR packages. **BOPI** (Bulk Order Package Identifier) The field shall allow up to 12 A/N characters and will have the same valid characters as the PON field.
UR13780.0045a	If the conditions in Requirement .0045 are not met, the following error message shall be returned to the user: The BOPI valid values are upper case alpha a thru z, numeric 0 thru 9, and symbols. , - ‘
UR13780.0045b	Requirement Deleted
UR13780.0045c	Requirement Deleted
UR13780.0046	A new field shall be added to the incoming and outbound transactions to support bulk order LSR packages. **BULK VER** The field shall be 2 numeric characters. The field shall be optional on original bulk orders, with values of blank or 00, and required on Supplemental bulk orders, with values of 01 or greater.
UR13780.0046a	Requirement Deleted
UR13780.0046b	If the conditions in Requirement .0046 are not met on a Bulk SUP, the following error message shall be returned to the user: BULK VER must be two numerics-01 or greater for supplemental bulk packages
UR13780.0046c	If the conditions in Requirement .0046 are not met on initial Bulk requests, the following error message shall be returned to the user: BULK VER must be spaces or zeros for initial bulk package
UR13780.0047	If the conditions in Requirement .0046 are not met on a Bulk SUP, the following error message shall be returned to the user: BULK VER required on Supplemental Bulk Order packages
UR13780.0048	Requirement Deleted
UR13780.0049	Requirement Deleted

Requirement No.	User Requirement
UR13780.0050	The initial bulk order LSR package may consist of the following fields, once per account (EATN): PON (Required) VER (Optional) TOS (Optional) DDD (Required) AN (Required) BI1 (Required) BAN1 (Required) BI2 (Conditional) BAN2 (Conditional) ERL (Required) EATN (Required) NAME EU (Required) RESID (Conditional)
UR13780.0060	The bulk order LSR package may consist of the following Line Level fields, once per PORTED TN: LNUM (Required) PORTED TN (Required) CHANPAIR (Conditional) CHANPAIR2 (Conditional) CFA (Conditional) CABLEID (Conditional)
UR13780.0061	If any additional fields other than the fields defined in .0040, .0041 .0050, and .0060 are populated, the solution shall ignore them.
UR13780.0062	The above fields, as documented in .0040, .0050, and .0060, for the bulk order package will be validated based on existing rules for REQTYP B, ACT V, LNA V, except where specifically noted within this document.
UR13780.0064	If the REQTYP/ACT combination conditions in Requirement .0020 are not met, the following error message will be returned to the user: For Bulk Order Requests, only REQTYP B, ACT V, LNA V LSRs are applicable.
UR13780.0065	If a bulk package is received without a required field, the following error message shall be returned: &BOPI&&PON (if applicable) &&field name&&current error message&
UR13780.0066	If any of the individual LSRs cannot be created from the bulk package due to error conditions, the entire bulk package shall be rejected. This applies to both initial and supplemental Bulk Packages.
UR13780.0068	The new field “BOPI” with the value of “BULK” appended shall be mapped to the PROJECT field on the individual LSRs.

Requirement No.	User Requirement
UR13780.0069	The PROJECT field value must match when comparing the supplemental LSR, except for a SUP 01 to cancel, to the original bulk ordered LSR.
UR13780.0069a	If the condition in Requirement .0069 is not met, the following error message shall be returned to the user: For Bulk Ordered LSRs, the PROJECT field on Supplemental LSRs must match Initial LSRs.
UR13780.0070	Requirement Deleted
UR13780.0075	Requirement Deleted
UR13780.0080	Requirement Deleted
UR13780.0085	Requirement Deleted
UR13780.0090	Requirement Deleted
UR13780.0094	The BI2 and BAN2 fields shall be required when the ERL field = Y, otherwise the fields shall be optional.
UR13780.0095	Requirement Deleted
UR13780.0099	If the conditions in Requirement .0094 are not met, the following error message shall be returned to the user: &BOPI&&PON&BI2 and BAN2 required when ERL = Y on Bulk Order LSRs.
UR13780.0100	Requirement Deleted
UR13780.0103	For LNP applications, REQTYP B global processing, the BI2 and BAN2 fields shall be required when the ERL = Y, otherwise the fields shall be optional.
UR13780.0107	If the conditions in Requirement .0103 are not met, the following error message shall be returned to the user: BI2 and BAN2 required when ERL = Y
UR13780.0110	Requirement Deleted
UR13780.0113	The solution shall not allow the BI1 and BI2 fields to be populated with the same data on individually entered Bulk related SUP LSRs.
UR13780.0117	If the condition in Requirement .0113 is met, the following error message shall be returned to the user: BI2 must not equal BI1 on Bulk Ordered LSRs
UR13780.0120	Requirement Deleted
UR13780.0122	The solution shall not allow the BI1 and BI2 fields to be populated with the same data for initial Bulk Package requests.
UR13780.0123	If the condition in Requirement .0122 is met, the following error message shall be returned to the user: &BOPI&&PON&BI2 must not equal BI1 on Bulk Package requests
UR13780.0125	Requirement Deleted
UR13780.0130	Requirement Deleted
UR13780.0132	Requirement Deleted
UR13780.0135	Requirement Deleted
UR13780.0137	Requirement Deleted

Requirement No.	User Requirement
UR13780.0140	Requirement deleted
UR13780.0150	Requirement deleted
UR13780.0160	Requirement deleted
UR13780.0170	The solutions shall compare the first 8 characters of the ACTL with the first 8 characters of the SWC CLLI returned from RSAG for each EATN to ensure all accounts are from same wire center. If any accounts do not match, the solution shall reject the entire package.
UR13780.0175	If the condition in Requirement .0170 is not met, the following error message shall be returned to the user. &BOPI&&PON& Account not found in same serving wire center as Bulk Order ACTL
UR13780.0180	Requirement deleted
UR13780.0190	Requirement deleted
UR13780.0191	Requirement moved to .0587
UR13780.0200	Supplemental requests on original bulk order LSRs shall be accepted on individual LSR basis, as normal processing done today.
UR13780.0203	BOPI is required on SUPs issued on LSRs that are part of an original Bulk order package.
UR13780.0204	If the condition in Requirement .0203 is not met, the following error message shall be returned to the user. BOPI is required on SUPs issued on LSRs that are part of an original Bulk order package.
UR13780.0210	Supplemental Bulk ordering shall be allowed for SUP 01 (cancel). The bulk order SUP request shall apply to all remaining LSRs included in the original bulk order request and the solution shall increment those LSRs VER by 1.
UR13780.0211	Supplemental Bulk ordering for SUP 01 shall consist only of the following fields: CC (Required) SUP (Required) BOPI (Required) BULK VER (Required) D/T SENT. (Required)
UR13780.0211a	If the conditions in Requirement .0211 are not met, the following error message shall be returned to the user. &field name& is required for Bulk Order Supplemental Package
UR13780.0211b	If any additional fields other than the fields defined in .0211 are populated, the solution shall ignore them.
UR13780.0211c	Requirement Deleted
UR13780.0212	SUP 02 (due date changes) and 03 (all other changes) shall be prohibited with bulk order.

Requirement No.	User Requirement
UR13780.0215	If the conditions in Requirement .0212 are not met, the following error message shall be returned to the user. Only SUP 01 allowed on Bulk order REQTYP B requests.
UR13780.0216	If a Bulk Order Supplemental package is received and the original Bulk Order package was not found, the solution shall reject the Supplemental Bulk Order package.
UR13780.0216a	If the conditions in Requirement .0216 are met, the following error message shall be returned to the user. Can not process. Original Bulk Order Package not found.
UR13780.0216b	If a bulk order supplemental package to cancel is received and all of the associated LSRs are either cancelled or completed, the solution shall reject the package.
UR13780.0216c	If the conditions in Requirement .0216b are met, the following error message shall be returned to the user. Can not process. All LSRs in the bulk package are cancelled or completed.
UR13780.0217	Moved to .0211
UR13780.0218	Moved to .0211a
UR13780.0220	All return transactions, i.e., FOCs, CNs, POS, Rejects, Clarifications and Jeopardies shall be sent to the CLECs in individual transactions for each associated EATN submitted via bulk ordering.
UR13780.0222	A new internal only POS transaction for cancelled service orders shall be submitted by the LNP application to the solution for storage and system retrieval. This new POS shall not be submitted to the CLEC Users.
UR13780.0225	The fields BOPI and BULK VER shall be added to the map for all return transactions, FOCs, CNs, POS, Rejects, Clarifications and Jeopardies.
UR13780.0230	Requirement Deleted
UR13780.0240	The BOPI is prohibited on initial individually entered LSRs.
UR13780.0250	If the conditions in Requirement .0240 are not met, the following error message will be returned to the user: BOPI prohibited on initial individually entered LSRs.
UR13780.0252	The BULK VER is prohibited on any individually entered LSRs.
UR13780.0254	If the conditions in Requirement .0252 are not met, the following error message will be returned to the user: BULK VER prohibited on individually entered LSRs.
UR13780.0260	For all LSRs with BOPI populated, CHC is prohibited.
UR13780.0265	If the conditions in Requirement .0260 are not met, the following error message will be returned to the user: CHC prohibited on Bulk Order LSRs
UR13780.0268	For all LSRs with BOPI populated, DFDT is prohibited.

Requirement No.	User Requirement
UR13780.0270	If the conditions in Requirement .0268 are not met, the following error message will be returned to the user: DFDT prohibited on Bulk Order LSRs
UR13780.0275	For all LSRs with BOPI populated, DNUM is prohibited.
UR13780.0280	Requirement Deleted
UR13780.0285	If the conditions in Requirement .0275 are not met, the following error message will be returned to the user: DNUM prohibited on Bulk Order LSRs
UR13780.0290	Requirement Deleted
UR13780.0300	Requirement Deleted
UR13780.0310	Requirement Deleted
UR13780.0320	Requirement Deleted
UR13780.0330	Requirement Deleted
UR13780.0340	Requirement Deleted
UR13780.0350	Requirement Deleted
UR13780.0500	Requirement deleted
UR13780.0510	Requirement deleted
UR13780.0512	Requirement Deleted
UR13780.0515	Requirement deleted
UR13780.0517	Requirement deleted
UR13780.0520	Manual LSRs (Fax) are not applicable for bulk ordering.
UR13780.0530	For all LSRs with BOPI populated, EUMI of "Y" shall be prohibited.
UR13780.0535	If the conditions in Requirement .0530 are not met, the following error message will be returned to the user: EUMI prohibited on Bulk Order LSRs
UR13780.0536	For all LSRs with BOPI populated, EXP shall be prohibited.
UR13780.0537	If the conditions in Requirement .0536 are not met, the following error message will be returned to the user: EXP Prohibited on Bulk Order LSRs
UR13780.0540	The solution shall accept the bulk order package, break the individual PONs into separate LSRs and populate the remaining **required** LSR fields from the applicable legacy systems prior to sending the individual LSRs downstream to the LNP applications.
UR13780.0550	Requirement deleted
UR13780.0551	For LSRs with the BOPI populated, the class of service on the CSR of each EATN must match Appendix A.
UR13780.0552	If the conditions in Requirement .0551 are not met, the following error message will be returned to the user: Only Port/Loop Combination products can be migrated via Bulk Ordering Process.
UR13780.0560	Requirement Deleted.
UR13780.0570	Requirement Deleted.

Requirement No.	User Requirement
UR13780.0580	Requirement moved to .1000
UR13780.0585	Requirement moved to .1010
UR13780.0587	Requirement moved to .1020
UR13780.0587a	LENS users shall be allowed to submit individual SUPs, types 01, 02, and 03, on LENS bulk order originating LSRs.
UR13780.0588	The solution shall auto-clarify an individual SUP 01 LSR received on a previously cancelled LSR.
UR13780.0589	If the conditions in Requirement .0588 are met, the following error message will be returned to the user: Cannot SUP a previously cancelled LSR/PON
UR13780.0590	The service order processing shall be the same as REQTYP B today, unless specified otherwise in this document.
UR13780.0600	Requirement deleted
UR13780.0601	The solution shall auto-clarify an individual SUP 01 LSR received on a previously completed LSR.
UR13780.0605	If the conditions in Requirement .0601 are met, the following error message will be returned to the user: Invalid SUP, Subscription Version in state that cannot be changed.
UR13780.0610	Requirement Deleted.
UR13780.0620	Requirement Deleted.
UR13780.0630	Requirement Deleted
UR13780.0640	Requirement Deleted
UR13780.0650	Requirement Deleted
UR13780.0660	Requirement Deleted
UR13780.0661	Requirement deleted
UR13780.0662	Requirement deleted
UR13780.0665	The LCSC users shall have the ability, via LENS and LNPGUI, to retrieve a status summary of the bulk order LSRs, regardless of the CLEC interface.
UR13780.0667	The LCSC users shall have the ability, via LENS and LNPGUI, to retrieve the raw data of the bulk order LSRs, regardless of the CLEC interface.
UR13780.0670	The CLEC users, except for EDI users, shall have the ability to retrieve a status summary of the bulk order LSRs, via the interface the CLEC used to submit the bulk order package.
UR13780.0670a	Requirement deleted
UR13780.0670aa	All users, except for EDI users, shall have the ability to submit a raw data query by submitting the BOPI, BULK VER, CC.
UR13780.0670b	The CLEC users, except for EDI users, shall have the ability to retrieve the raw data of the bulk order LSRs, via the interface the CLEC used to submit the bulk order package.

<table>
<tr><th>Requirement No.</th><th>User Requirement</th></tr>
<tr><td>UR13780.0670c</td><td>The CLEC users, except for EDI users, shall have the ability to retrieve a status summary of the individually created LSRs, via the interface the CLEC used to submit the bulk order package.</td></tr>
<tr><td>UR13780.0670z</td><td>All users, except for EDI users, shall have the ability to submit a summary status query by submitting the BOPI and their CC.</td></tr>
<tr><td>UR13780.0671</td><td>All users, except for EDI users, shall have the summary status made up of the following fields:
CC, Bulk Order Package Identifier, Bulk VER
PON, Current PON VER, Current PON Status
Current Service Order Numbers, Current Service Order Status</td></tr>
<tr><td>UR13780.0671a</td><td>The PON status shall consist of the following statuses:
<table>
<tr><th>System process</th><th>PON status</th></tr>
<tr><td>LSR clarified, with the system sending a clarification or autoclarification</td><td>Clarified</td></tr>
<tr><td>LSR cancelled, with FOC sent on SUP 01 sent to the CLEC.</td><td>Cancelled</td></tr>
<tr><td>LSR completed, completion notice sent when all service orders completed and all TNs have gone number ported</td><td>Completed</td></tr>
<tr><td>LSR FOC’d, with FOC sent to the CLEC.</td><td>FOC</td></tr>
<tr><td>LSRs have been accepted by the solution, but they have not been processed enough to be clarified or FOC’d.</td><td>Pending</td></tr>
<tr><td>LSR has a Jeopardy notice returned to the CLEC.</td><td>Jeopardy</td></tr>
<tr><td>LSR has been rejected to the CLEC.</td><td>Rejected</td></tr>
<tr><td></td><td></td></tr>
</table></td></tr>
<tr><td>UR13780.0672</td><td>The raw data shall consist of the fields identified in Requirements .0040, .0050, .0060, for initial bulk order packages and .0211 for the bulk SUP 01 packages.</td></tr>
<tr><td>UR13780.0674</td><td>The bulk order status summary shall be created only from information returned to the CLEC by the solution.</td></tr>
<tr><td>UR13780.0679</td><td>If the CLEC submits a bulk order status summary query, and the bulk order package is not found, the solution shall return the following message:
Bulk Order Package does not exist in the database.</td></tr>
</table>

Requirement No.	User Requirement
UR13780.0680	Requirement Deleted
UR13780.0681	The notification messages associated to a bulk order LSRs and Package will be stored and available for system retrieval.
UR13780.0690	Requirement Deleted
UR13780.0700	Requirement Deleted
UR13780.0710	For global LNP processing, the CENT FID on the current EATN shall be used to determine the class of service and Routing code for the Directory Order.
UR13780.0720	TAG and LNP shall not recalculate the DDD on bulk order LSRs.
UR13780.0730	The DDD provided must be greater than or equal to 14 business days after the current system date of the bulk order package. This value shall be a tunable value for BellSouth. Non business days are defined as weekends and days defined by BellSouth.
UR13780.0740	If the conditions in Requirement .0730 are met, the following error message will be returned to the user: DDD must be greater than or equal to 14 business days after the date the Bulk Order Package is submitted.
UR13780.0743	The DDD provided on type 02 or 03 Supplemental LSRs with the BOPI populated must be greater than or equal to 14 business days after the current system date of the Supplemental LSR. This value shall be a tunable value for BellSouth. Non business days are defined as weekends and days defined by BellSouth.
UR13780.0746	If the conditions in Requirement .0743 are met, the following error message will be returned to the user: DDD on bulk ordered Supplemental must be greater than or equal to 14 business days after the date the Supplemental LSR is submitted.
UR13780.0750	Requirement deleted
UR13780.0760	Requirement deleted
UR13780.0770	Moved to .1030
UR13780.0780	Moved to .1040
UR13780.0790	Requirement Deleted
UR13780.0800	Requirement Deleted
UR13780.0810	Requirement deleted
UR13780.0815	Requirement deleted
UR13780.0820	Requirement deleted
UR13780.0825	Requirement deleted
UR13780.0826	Requirement deleted
UR13780.0830	Requirement deleted
UR13780.0840	Requirement deleted
UR13780.0850	When a request is made for changes to an LSR via the View LSR process, the solution shall not retrieve the BULK VER field.
UR13780.0860	Requirement Deleted

Requirement No.	User Requirement
UR13780.0870	For all original and SUP LSRs with the BOPI populated, the LNP GW will always return a clarification, regardless of the error type, i.e., 1st or 2nd level edits.
UR13780.0880	For Supplemental LSRs with the BOPI populated, Directory Listings shall be prohibited.
UR13780.0890	If the conditions in Requirement .0880 are met, the following error message will be returned to the user: Directory Listings prohibited on SUPs of Bulk Ordered LSRs
UR13780.0900	A new outbound reject message for bulk packages shall be used for bulk package rejects and shall consist of the following fields: CC BOPI BULK VER STATUS CODE STATUS MESSAGE ERROR CODE(s) ERROR MESSAGE(s)
UR13780.1000	Requirement Deleted
UR13780.1010	Requirement Deleted
UR13780.1020	Requirement Deleted
UR13780.1030	Requirement Deleted
UR13780.1040	Requirement Deleted

Appendix A

UNE-P USOCS—
Defined for UR13780

UNE USOC
UEPBX
UEPRX
UEPCO
UEPVB
UEPVR

BellSouth

UNE to UNE Bulk Ordering Specifications for EDI ELMS 6 Trading Partners

Publication Date: 07/11/03

Notices

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REVISION HISTORY

Version/ Date	Change #	Release#/ Documentation Defect	Description
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1 Purpose

This document will provide EDI Trading Partners with detailed specifications necessary for submitting an ELMS 6 bulk order for migrating existing Port/Loop Combination services to Loop with Local Number Portability (LNP) services via a comma-delimited file format. The Data Transformation Group (DTG) at BellSouth handles current EDI TCIF Issue 9 and ELMS 6 local exchange ordering transactions and will be the interface for EDI Trading Partners wishing to submit UNE to UNE bulk migration orders via this non-standard format.

For information concerning detailed specifications for the submission of TCIF Issue 9 bulk order local exchange ordering transactions, refer to the BellSouth UNE to UNE Bulk Ordering Specifications for EDI TCIF Issue 9 Trading Partners.

The rules and guidelines to be followed for successful electronic exchange of ELMS 6 bulk order documents are contained in this specifications guide.

EDI Trading Partners wishing to submit bulk order files should contact their BellSouth Electronic Commerce account team representative for assistance in setting up the appropriate connectivity parameters.

2 Intended Audience

This document is intended for CLECs and Software Vendors who are current EDI ELMS 6 Trading Partners, ordering local exchange products and services from BellSouth via EDI. Although these specifications are provided to allow current EDI ELMS 6 Trading Partners the ability to submit bulk migration orders, this bulk ordering process does not utilize standard EDI ANSI X12 transaction sets. Bulk ordering requires exchange of comma-delimited files as detailed in these specifications.

3 How To Use This Guide

This Guide is designed to assist Trading Partners in developing systems that can send and receive ELMS 6 bulk order related documents. Section 6 details the records that make up this data trading arrangement.

As with regular Local Service Ordering via EDI, Trading Partners must prepare and exchange electronic order documents that follow both the comma-delimited file specifications stated herein and the BellSouth usage rules as detailed in the BellSouth *Local Ordering Handbook.*

4 Assumptions

It is assumed that:

- The CLEC/Software Vendor is a current EDI Trading Partner ordering local services in the ELMS 6 arena.
- The CLEC/Software Vendor will use CONNECT:Direct® as their method of connectivity; VAN (Value Added Network) connectivity and IA (Interactive Agent) connectivity is not supported for UNE to UNE Bulk Orders. Bulk Ordering connectivity must be arranged with BellSouth's DTG group prior to sending orders.
- BellSouth will adhere to a 30-minute Acknowledgment turnaround to Trading Partners upon receipt of a bulk order.
- There will be at least a two-minute interval between bulk order files sent via CONNECT:Direct® to BellSouth.

- The sending party (CLEC/Vendor for initial or supplemental bulk orders; BellSouth for bulk order acknowledgments and reject notices) is responsible for ensuring successful submission of its bulk order data. The BellSouth translation jobs are operational 24 x 7, except during normal scheduled maintenance.
- BellSouth does not expect an Acknowledgment from the Trading Partner for bulk order Reject messages.

5 Bulk Ordering Process

Document flows are described below.

5.1 Initial Orders

- Trading Partner sends initial ELMS 6 bulk order package to DTG (comma-delimited format).
- DTG does initial validation of data, checking for correct trading partner information, record identifiers, etc.
  - If invalid data, negative Acknowledgment sent to Trading Partner (comma-delimited format).
    - < No further processing.
  - If valid data, positive Acknowledgment sent to Trading Partner (comma-delimited format).
    - < Processing continues.
- DTG forwards bulk package to BellSouth ordering systems for processing.
  - If invalid data, bulk order package reject notice prepared and sent to DTG for transfer to Trading Partner (comma-delimited format).
  - If valid data, bulk order package is “burst” into individual LSRs for processing.
    - < Processing continues.
- Response documents (FOCs, POS, CNs, etc.) for individual LSRs will be returned to Trading Partners via normal ELMS 6 855/865 transaction sets.
  - Trading Partners will respond to 855/865s with 997s, as normal.

5.2 Supplemental Orders (SUP)

- Trading Partner sends supplemental ELMS 6 bulk order to DTG.
- DTG does initial validation of data, checking for correct trading partner information, record identifiers, etc.
  - If invalid data, negative Acknowledgment sent to Trading Partner (comma-delimited format).
    - < No further processing.
  - If valid data, positive Acknowledgment sent to Trading Partner (comma-delimited format).
    - < Processing continues.
- DTG forwards supplemental bulk package to BellSouth ordering systems for processing.

6 Comma-delimited File Layout

The Order and Response specifications for submitting/receiving the comma-delimited bulk ordering files are described below. Because this service is designed for EDI ELMS 6 Trading Partners, data submitted must follow the same data characteristic rules as detailed in the BellSouth EDI Specifications Guide for ANSI ASC X12 Version 4030.

A comma-delimited “positional” record layout is used at BellSouth for exchanging bulk order data with its Trading Partners. Data in each record is separated by a comma (,). (Note: Because the comma is used as the data separator, the inclusion of a comma in actual data will result in an error condition.) A new record is indicated by a BellSouth-specified record identifier. Each record is terminated by a carriage return/line feed (HEX 0D0A), which is the default for most recent versions of Microsoft Excel.

Files must be transmitted via CONNECT:Direct® in binary mode with no translation.

6.1 Ordering Specifications

Initial Orders

Each initial bulk order file will consist of four record types:

- Bulk Order Envelope Record—once per file
- Bulk Order Package Record—once per file
- Purchase Order Record—multiple times per file
- Purchase Order Line Item Record—multiple times per Purchase Order Record

Supplemental Orders

Each SUP bulk order file will consist of only two record types:

- Bulk Order Envelope Record—once per file
- Bulk Order Package Record—once per file

Bulk Order Envelope Record

The first record is the Bulk Order Envelope Record. Each file will contain a Bulk Order Envelope Record.

Example:

RECID,TP-SENDER-ID,BS-RECEIVER-ID,TEST-PROD-IND,BULK-GEN-DATE,BULK-GEN–TIME

Field	Description
RECID	For the Bulk Order Envelope Record, the value of "**BOEV**"
TP-SENDER-ID	Trading Partner Sender Identification, provided when establishing connectivity
BS-RECEIVER-ID	BellSouth Receiver Identification, provided when establishing connectivity
TEST-PROD-IND	A "T" or a "P", indicating test or production order
BULK-GEN-DATE	The date the bulk order was sent to BellSouth in CCYYMMDD format
BULK-GEN–TIME	The date the bulk order was sent to BellSouth in HH:MM:SS format

Bulk Order Package Record

The second record is the Bulk Order Package Record. Each file may contain one Bulk Order Package Record.

Example:

RECID,BOPI,BULK VER,SUP,CC,REQTYP,ACT,LNA,TOS,CCNA,ACNA,CIC,NNSP,INIT,INIT-TEL-NO,INIT-FAX-NO,IMPCON, IMPCON-TEL-NO,DSGCON, DSGCON-STREET, DSGCON-CITY, DSGCON-STATE, DSGCON-ZIP-CODE,DSGCON-FLOOR, DSGCON-ROOM-MAIL-STOP,DSGCON-TEL-NO, DSGCON-FAX-NO,NC,NCI,SECNCI,ACTL,DRC,D/T SENT

Field	Description
RECID	For the Bulk Order Package Record, the value of "BOPI"
BOPI	Bulk Order Package Identifier
BULK VER	Bulk Package Version
SUP	Supplemental Type
CC	Company Code
REQTYP	Requisition Type
ACT	Activity Type

Field	Description
LNA	Line Activity
TOS	Type of Service
CCNA	Customer Carrier Name Abbreviation
ACNA	Access Customer Name Abbreviation
CIC	Carrier Identification Code
NNSP	New Network Service Provider Identification
INIT	Initiator Identification
INIT-TEL-NO	Initiator Telephone Number
INIT-FAX-NO	Initiator Fax Number
IMPCON	Implementation Contact
IMPCON-TEL-NO	Implementation Contact Telephone Number
DSGCON	Design/Engineering Contact
DSGCON-STREET	Design/Engineering Contact Street
DSGCON-CITY	Design/Engineering Contact City
DSGCON-STATE	Design/Engineering Contact State
DSGCON-ZIP-CODE	Design/Engineering Contact Zipcode
DSGCON-FLOOR	Design/Engineering Contact Floor
DSGCON-ROOM-MAIL-STOP	Design/Engineering Contact Email
DSGCON-TEL-NO	Design/Engineering Contact Telephone Number
DSGCON-FAX-NO	Design/Engineering Contact Fax Number
NC	Network Channel Code
NCI	Network Channel Interface Code
SECNCI	Secondary Network Channel Interface Code
ACTL	Access Customer Terminal Location
DRC	Design Routing Code
D/T SENT	Date Sent

Purchase Order Record

The third record is the Purchase Order Record. For each Bulk Order there may be multiple Purchase Order Records.

Example:

RECID,PON,VER,TOS,DDD,AN,BI1,BAN1,BI2,BAN2,ELT,EATN,NAME,RESID,MI

Field	Description
RECID	For the Purchase Order Record, the value of “BOPO”
PON	Purchase Order Number
VER	Version
TOS	Type of Service
DDD	Desired Due Date
AN	Account Number
BI1	Billing Account Number Identifier 1
BAN1	Billing Account Number 1
BI2	Billing Account Number Identifier 2
BAN2	Billing Account Number 2
ELT	End User Listing Treatment
EATN	Existing Account Telephone Number
NAME	Name
RESID	Response Identifier
MI	Migration Indicator

Purchase Order Line Item Record

The fourth record is the Purchase Order Line Item Record. For each Purchase Order Record, there may be multiple Purchase Order Line Item Records.

Example:
RECID,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID

Field	Description
RECID	For the Purchase Order Line Item Record, the value of "BOPL"
LNUM	Line Number
PORTED_NBR	Ported Number
CHAN/PAIR	Channel Pair
CHAN/PAIR2	Channel Pair 2
CFA	Connecting Facility Assignment
CABLEID	Cable ID

6.1.1 Example Bulk Order Files

The format of an ***initial*** file is illustrated below:

BOEV,TP-SENDER-ID,BS-RECEIVER-ID,TEST-PROD-IND,BULK-GEN-DATE,BULK-GEN–TIME
BOPI,BOPI,BULK VER,,CC,REQTYP,ACT,LNA,TOS,CCNA,ACNA,CIC,NNSP,INIT,INIT-TEL-NO,INIT-FAX-NO,IMPCON,IMPCON-TEL-NO,DSGCON,DSGCON-STREET,DSGCON-CITY,DSGCON-STATE,DSGCON-ZIP-CODE,DSGCON-FLOOR,DSGCON-ROOM-MAIL-STOP,DSGCON-TEL-NO,DSGCON-FAX-NO,NC,NCI,SECNCI,ACTL,DRC,D/T SENT
BOPO,PON,VER,TOS,DDD,AN,BI1,BAN1,BI2,BAN2,ELT,EATN,NAME,RESID,MI
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPO,PON,VER,TOS,DDD,AN,BI1,BAN1,BI2,BAN2,ELT,EATN,NAME,RESID,MI
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPO,PON,VER,TOS,DDD,AN,BI1,BAN1,BI2,BAN2,ELT,EATN,NAME,RESID,MI
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPO,PON,VER,TOS,DDD,AN,BI1,BAN1,BI2,BAN2,ELT,EATN,NAME,RESID,MI
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPO,PON,VER,TOS,DDD,AN,BI1,BAN1,BI2,BAN2,ELT,EATN,NAME,RESID,MI
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPO,PON,VER,TOS,DDD,AN,BI1,BAN1,BI2,BAN2,ELT,EATN,NAME,RESID,MI
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID
BOPL,LNUM,PORTED_NBR,CHAN/PAIR,CHAN/PAIR2,CFA,CABLEID

The format of a ***supplemental*** file is illustrated below:

BOEV,TP-SENDER-ID,BS-RECEIVER-ID,TEST-PROD-IND,BULK-GEN-DATE,BULK-GEN–TIME
BOPI,BOPI,BULK VER,SUP,CC,,,

Field	Description
BULK-GEN–TIME	The date the bulk order was sent to BellSouth in HH:MM:SS format
TRANSACTION-TYPE	"A" for Positive Acknowledgment "N" for Negative Acknowledgment "R" for Reject

Bulk Order Package Record

The second record is the Bulk Order Package Record. Each file will contain a Bulk Order Package Record.

Example:

RECID,BOPI,BULK VER

Field	Description
RECID	For the Bulk Order Package Record, the value of "**BOPI**"
BOPI	Bulk Order Package Identifier
BULK VER	Bulk Package Version

Bulk Order Message Record

The third record is the Bulk Order Message Record. Each file will contain a Bulk Order Message Record.

Example:

RECID,MESSAGE CODE,MESSAGE

Field	Description
RECID	For the Bulk Order Message Record, the value of "**BOMS**"
MESSAGE CODE	An Acknowledgment, Status, or Error Code
MESSAGE	An Acknowledgment, Status, or Error Message

6.2.1 Example Response Files

The format of a *response* file is illustrated below:

BOEV,TP-SENDER-ID,BS-RECEIVER-ID,TEST-PROD-IND,BULK-GEN-DATE,BULK-GEN–TIME,TRANSACTION-TYPE
BOPI,BOPI,BULK VER
BOMS,MESSAGE CODE,MESSAGE
BOMS,MESSAGE CODE,MESSAGE
BOMS,MESSAGE CODE,MESSAGE
BOMS,MESSAGE CODE,MESSAGE
BOMS,MESSAGE CODE,MESSAGE
BOMS,MESSAGE CODE,MESSAGE

7 Glossary

ANSI	American National Standards Institute
ASC	Accredited Standards Committee
CLEC	Competitive Local Exchange Carrier
CN	Completion Notice
DTG	Data Transformation Group
ELMS 6	EDI Local Service Order Guideline Mechanization Specifications, Version 6
EDI	Electronic Data Interchange
FOC	Firm Order Confirmation
LNP	Local Number Portability
LSR	Local Service Request
POS	Pending Order Status
SUP	Supplemental Order
TCIF Issue 9	Telecommunications Industry Forum, Version 9
Trading Partner	CLEC or Software Vendor exchanging documents with DTG
UNE	Unbundled Network Services
VAN	Value Added Network

UNE to UNE Bulk Migrations

You can now process bulk orders for LSRs that migrate existing port/loop combinations services to Loop w/LNP services (REQTYP B, ACT V, all LNA V). You can also request and receive the status and image of a single REQTYP B LSR or a REQTYP B bulk order.

Area of Impact	
State / MSA	All BST States
TOS (Type of Service)	All Applicable
REQTYP	B
ACT / LNA*	ACT= V, LNA = V

Applicable Port/Loop Combination Products

- The bulk order LSRs apply only to migrating existing non-complex Port/Loop Combination services to Loop w/LNP LSRs, REQTYP B, with ACT of V, all LNA of V. If the REQTYP/ACT combination conditions are not met, the message *For Bulk Order Requests, only REQTYP B, ACT V, LNA V LSRs are applicable* will be returned to the user.
- The specific applicable Port/Loop Combination products are listed below. For LSRs with the BOPI populated, the class of service on the CSR of each EATN must match one of these USOCs. If not, the user receives the message *Only Port/Loop Combination products can be migrated via Bulk Ordering Process.*

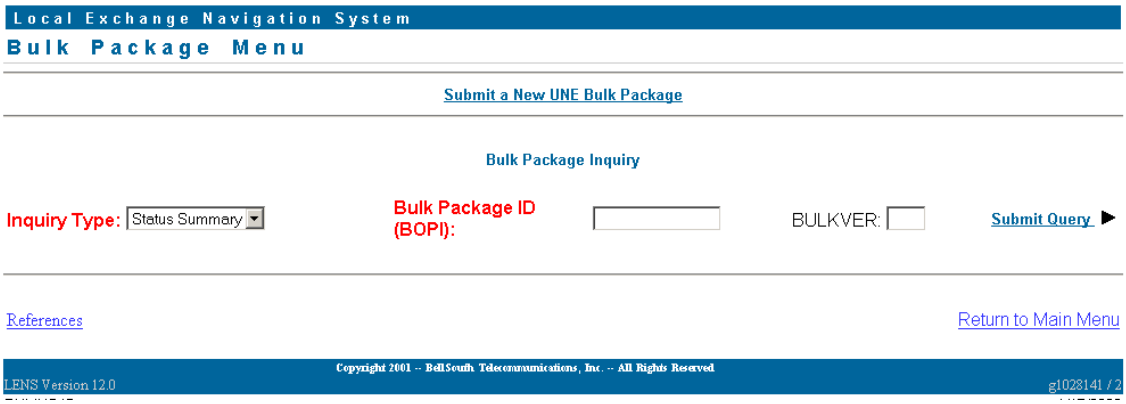
UNE USOC			
UEPAA	**UEPBC**	**UEPWA**	**UEPWB**
UEPAB	**UEPBL**	**UEPA1**	**UEPWD**
UEPAC	**UEPBM**	**UEPA8**	**UEPWP**
UEPAD		**UEPA9**	**UEPWF**
UEPAE	**UEPBO**	**UEPWC**	**UEPWH**
UEPAF	**UEPRC**	**UEPWQ**	**UEPBA**
UEPAG	**UEPRL**	**UEPWR**	**UEPWK**
UEPAH		**UEPWE**	**UEPWM**
UEPAJ	**UEPRM**	**UEPWG**	**UEPBB**
UEPAK	**UEPRO**	**UEPRQ**	**UEPWO**
UEPAL		**UEPWJ**	**UEPB2**
UEPAM		**UEPWL**	**UEPB3**
UEPAN		**UEPRS**	**UEPBE**
UEPAO		**UEPWN**	
UEPAP		**UEPRR**	
UEPB1		**UEPRT**	

Submitting Bulk Orders Manually

To submit bulk orders manually, follow the steps below.

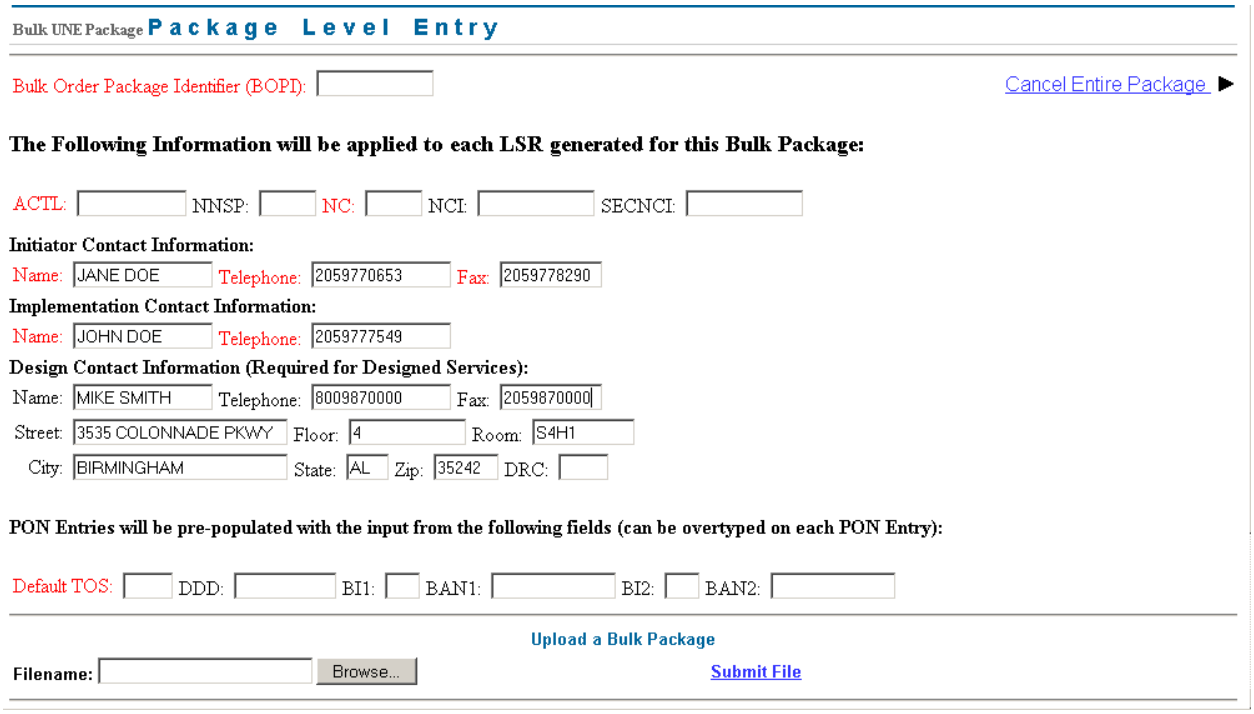
1. From the Main menu, click **Bulk UNE Packages**.

   The Bulk Package Menu screen appears (see below).



2. Click **Submit a New UNE Bulk Package**.

   The Package Level Entry screen appears (see below).



3. Enter the following information. It will be applied to each LSR generated for this bulk package.

Field	Description
Bulk Order Package Identifier (BOPI)	Required. • This field allows up to 12 A/N characters and has the same valid characters as the PON field. If the conditions are not met, the following error message is displayed: *The BOPI valid values are upper case alpha a thru z, numeric 0 thru 9, and symbols, - '.* • When *BULK* is appended to this field, it is mapped to the *Project* field on the individual LSRs.
ACTL	Required. The first 8 characters of the ACTL must match the first 8 characters of the SWC CLLI to ensure all accounts are from same wire center. If any accounts do not match, the entire package is rejected with the message *<BOPI> & <PON> & Account not found in same serving wire center as Bulk Order ACTL*.
NNSP	Optional
NC	Required
NCI	Conditional. Enter if required.
SECNCI	Conditional. Enter if required.

4. Enter the following Initiator Contact Information.

Field	Description
Name	Required
Telephone	Required
Fax	Required

5. Enter the following Implementation Contact Information.

Field	Description
Name	Required
Telephone	Required

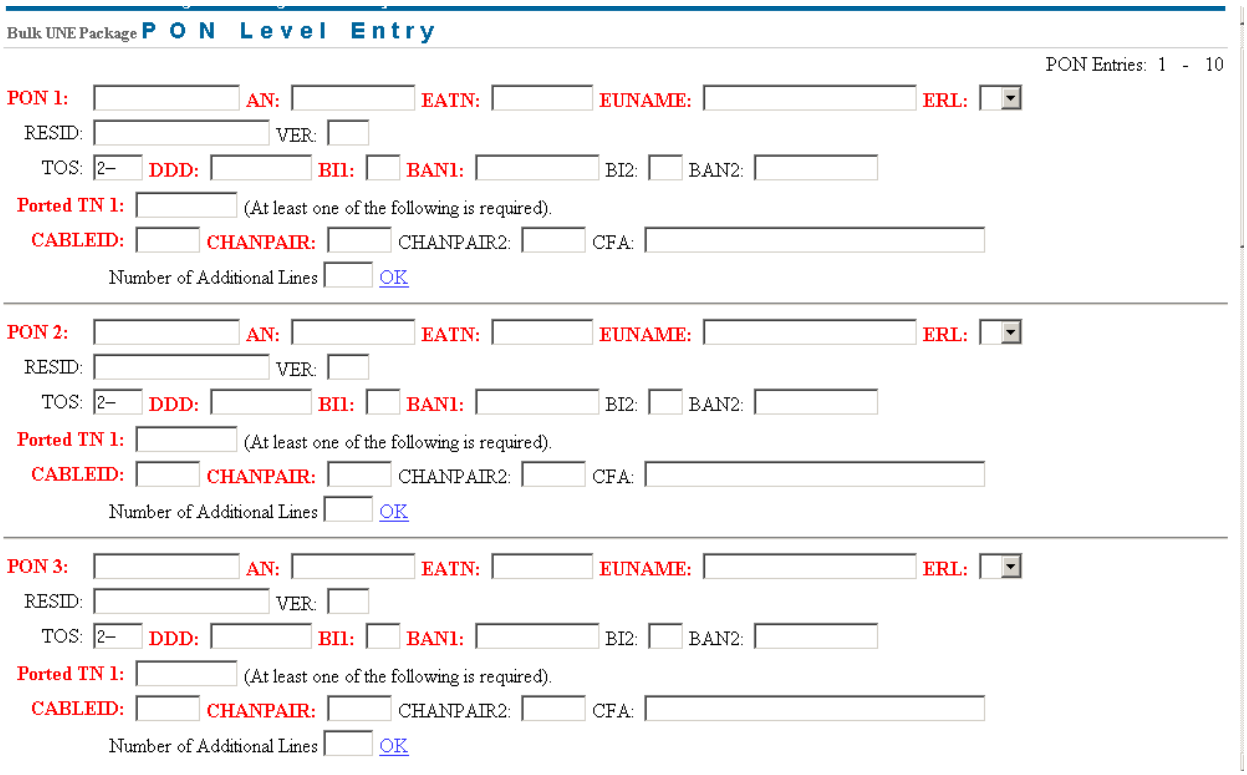
6. If the bulk order package is for designed services, enter the following Design Contact Information.

Field	Description
Name	Enter if required
Telephone	Enter if required
Fax	Optional
Street	Enter if required
Floor	Enter if required
Room	Optional
City	Enter if required
State	Optional
Zip	Optional
DRC	Optional

7. Enter the following fields if you want them pre-populated on the bulk order PONs. See Step 9 for field descriptions.
   - Default TOS
   - DDD
   - BI1
   - BAN1
   - BI2
   - BAN2

8. Click **Continue**.

   The PON Level Entry screen appears (see below).



9. Enter the following fields for each account (EATN)

Note: The bulk order LSR package must consist of a minimum of 2 and a maximum of 99 EATNs. Otherwise, LENS returns the message *Bulk Order Package must be a minimum of 2 and a maximum of 99 EATNs*.

Field	Description
PONx	Required
AN	Required
EATN	Required
EUNAME	Required
ERL	Required. Valid values are *A* or *B*.
RESID	Conditional. Enter if required.
VER	Optional on original bulk orders with values of blank or 00. If the conditions are not met on initial Bulk requests, the message *BULK VER must be spaces or zeros for initial bulk package* is returned to the user. •
TOS	Optional
DDD	Required. The DDD provided must be greater than or equal to 14 business days after the current system date of the bulk order package. If not, the following error message will be returned to the user: *DDD must be greater than or equal to 14 business days after the date the Bulk Order Package is submitted*
BI1	Required

Field	Description
BAN1	Required
BI2	• Required when the ERL field = Y, otherwise the fields is optional. If not met, the user receives the message *<BOPI> <PON> <BI2> and BAN2 required when ERL = Y on Bulk Order LSRs*. • For LNP applications, REQTYP B global processing, the BI2 and BAN2 fields are required when the ERL = Y, otherwise the fields are optional. If the conditions are not met, the following error message is returned to the user *BI2 and BAN2 required when ERL = Y*
BAN2	• Required when the ERL field = Y, otherwise the fields is optional. If not met, the user receives the message *<BOPI> <PON> <BI2> and BAN2 required when ERL = Y on Bulk Order LSRs*. • For LNP applications, REQTYP B global processing, the BI2 and BAN2 fields are required when the ERL = Y, otherwise the fields are optional. If the conditions are not met, the following error message is returned to the user *BI2 and BAN2 required when ERL = Y*

10. Enter the following fields for each ported TN if required.

Field	Description
LNUM	
PORTED TN 1	
CHANPAIR	Conditional
CHANPAIR2	Conditional
CFA	Conditional
CABLEID	Conditional

11. Enter the following additional fields if required.

Field	Description
Appointment Code	Enter *L* for Bulk Ordered LSRs.
NPT	Enter *D* for Bulk Ordered LSRs.

12. If you are entering more than 10 orders, click **Next** to display a new page.
13. When you have completed the final order, click **Submit Package**.

Uploading Bulk Order Files

If you do not want to type each bulk order manually, you can upload them in a file. See the sections that follow for details.

Creating a UNE-to-UNE Bulk Package File

Follow the steps below to create a bulk package file.

1. Open Microsoft Excel.
2. Create a row for each Ported TN (Line) using the rules below:
   - For a PON with multiple Lines, the first row (LNUM=1) should contain the PON, Line Details and PON Level Information for this PON. The rows for the additional Lines should contain only the PON, LNUM (=2, 3, 4, etc) and Line Details (Ported TN and either cable designation or CFA). An error will be generated if the PON Level Information (PON VER, EATN, Name EU, RESID, TOS, etc.) are populated on the rows for additional Lines for a PON.
   - LNUM is optional for a PON with a single Line.
   - The Default Values provided on the LENS upload page will be applied for each PON unless the corresponding field is populated. For example, the DDD populated on the LENS upload page will be used to populate the DDD for each PON unless a DDD is provided for a PON in this file. DDD must be populated on each PON in this file unless a Default DDD is provided via the LENS upload page.
   - EATN, Name EU and ERL are required for each PON. Ported TN is required on each row in this file. Either CFA or a Chan/Pair and Cable ID combination is required on each row in this file depending upon the NC/NCI/SECNCI value(s) provided on the LENS upload page.
3. Save the file as a Tab delimited text file (.txt) for upload.
4. Save the file also (Save As) in Microsoft Excel format so that future modifications can be made easily.

Uploading a UNE-to-UNE Bulk Package File

Follow the steps below to upload a bulk package file.

1. From the Bulk Package Menu, click **Submit a new UNE Bulk Package**.
2. Type the name and location of your file in the *Filename* field (for example, c:\orders\bulkorders\order7.txt).
   OR
   Click **Browse** to retrieve the file from your computer or company network. When the File Open dialog box appears, highlight the file and click Open. The file name will be populated in the *Filename* field.
3. Click **Submit File**.

   If all required fields are complete, an Acknowledgement is given indicating that the order was successfully completed and submitted to BellSouth.

FOCs, NCs, POS, Rejects, Clarifications, and Jeopardies

- All return transactions (FOCs, CNs, POS, Rejects, Clarifications and Jeopardies) will be sent to the CLECs in individual transactions for each associated EATN submitted via bulk ordering.
- The fields BOPI and BULK VER are displayed on all return transactions.
- If any of the individual LSRs cannot be created from the bulk package due to error conditions, the entire bulk package will be rejected. This applies to both initial and supplemental Bulk Packages.
- A new outbound reject message for bulk packages will be used for bulk package rejects and will consist of the following fields:

CC
BOPI
BULK VER
STATUS CODE
STATUS MESSAGE
ERROR CODE(s)
ERROR MESSAGE

PON Status

The PON status consists of the following statuses:

System Process	PON Status
LSR clarified, with the system sending a clarification or autoclarification	Clarified
LSR cancelled, with FOC sent on SUP 01 sent to the CLEC.	Cancelled
LSR completed, completion notice sent when all service orders completed and all TNs gone number ported	Completed
LSR FOC'd, with FOC sent to the CLEC.	FOC
LSRs have been accepted, but they have not been processed enough to be clarified or FOC'd.	Pending

Supplements

- SUP
  For initial bulk order LSR packages, SUP is prohibited. The error message *SUP prohibited on initial Bulk Order Package* will be returned to the user.
- BOPI (Bulk Order Package Identifier)
  BOPI is required on SUPs issued on LSRs that are part of an original Bulk order package. If not populated, the message *BOPI is required on SUPs issued on LSRs that are part of an original Bulk order package* will be returned to the user.
- BULK VER
  Required on Supplemental bulk orders, with values of 01 or greater. If condition not met on a Bulk SUP, the messages *BULK VER must be two numerics-01 or greater for supplemental bulk packages*
  and
  BULK VER required on Supplemental Bulk Order packages are returned to the user.
  - PROJECT
    The Project field value must match when comparing the supplemental LSR (except for a SUP 01 to cancel) to the original bulk ordered LSR. Otherwise, the message *For Bulk Ordered LSRs, the PROJECT field on Supplemental LSRs must match Initial LSRs* is returned to the user.
- ORIGINAL BULK ORDER PACKAGE NOT FOUND
  If a Bulk Order Supplemental package is received and the original Bulk Order package is not found, the Supplemental Bulk Order package will be rejected and the message *Cannot process. Original Bulk Order Package not found* is returned to the user.
- DIRECTORY LISTINGS
  For Supplemental LSRs with the BOPI populated, Directory Listings is prohibited. If populated, the following error message will be returned to the user: *Directory Listings prohibited on SUPs of Bulk Ordered LSRs*

SUP 01

- Supplemental Bulk ordering is allowed for SUP 01 (cancel). The bulk order SUP request applies to all remaining LSRs included in the original bulk order request and the LSRs VERs are incremented by 1.
- SUP01 Bulk Order Fields
  Supplemental Bulk ordering for SUP 01 consists of the following fields only. If the required values are not supplied, the message *<field name> is required for Bulk Order Supplemental Package.*

Field	Description
CC	Required
SUP	Required
BOPI	Required
BULK VER	Required
D/T SENT.	Required

- If a bulk order supplemental package to cancel is received and all of the associated LSRs are either cancelled or completed, the package will be rejected and the message *Can not process. All LSRs in the bulk package are cancelled or completed* will be returned to the user.

SUP 02 and SUP 03

- SUP 02 (due date changes) and 03 (all other changes) are prohibited with bulk order. If attempted, the user receives the message *Only SUP 01 allowed on Bulk order REQTYP B requests*.
- DESIRED DUE DATE
  The DDD provided on type 02 or 03 Supplemental LSRs with the BOPI populated must be greater than or equal to 14 business days after the current system date of the Supplemental LSR. If not, the following error message will be returned to the user: *DDD on bulk ordered Supplemental must be greater than or equal to 14 business days after the date the Supplemental LSR is submitted.*

Individual SUPS

- LENS users can submit individual SUPs, types 01, 02, and 03, on LENS bulk order originating LSRs.
- An individual SUP 01 LSR received on a previously cancelled LSR will be auto-clarified. The user will receive the message *Cannot SUP a previously cancelled LSR/PON*.
- An individual SUP 01 LSR received on a previously completed LSR will be auto-clarified. The user will receive the message *Invalid SUP, Subscription Version in state that cannot be changed.*
- ERL
  If the ERL field is different on the individually submitted Supplemental 03 LSRs

when compared to the original bulk ordered LSR, the Supplemental will be auto-clarified. The error message *<Field Name> cannot change from original to supplemental LSR* will be returned to the user.

- FIELD NAMES
  If any of the bulk order fields, with the exception of Bulk Ver, D/T Sent, or DRC, are different on the individually submitted Supplemental 02 and 03 LSRs when compared to the original LSR, the Supplemental will be auto-clarified. The error message *<Field Name> cannot change from original to supplemental LSR* will be returned to the user.

Manual LSRs

Manual LSRs (Fax) are not applicable for bulk ordering.

Performing Bulk Order Inquiries

LENS allows you to perform the following bulk order inquiries:

- Status Summary
- Raw Data

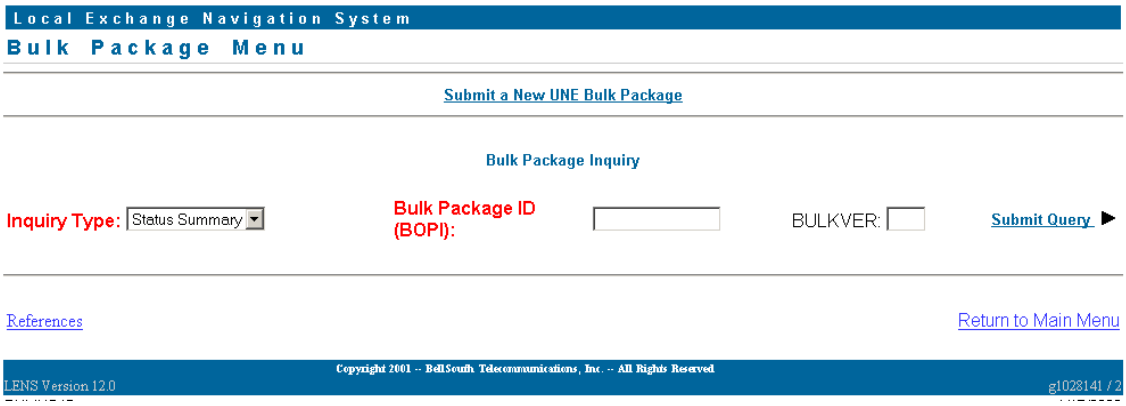
See the sections that follow for details.

Bulk Order Status Summary

To retrieve a bulk order status summary, follow the steps below.

1. From the Main menu, click **Bulk UNE Packages**.

   The Bulk Package Menu screen appears (see below).



2. Select **Status Summary** from the *Inquiry Type* pull down menu.
3. Enter the Bulk Package ID in the *Bulk Package ID (BOPI)* field.
4. Click **Submit Query**.

   The following fields are displayed (see below).

Summary Status Fields
CC
Bulk Order Package Identifier
Bulk VER
PON
Current PON VER
Current PON Status
Current Service Order Numbers
Current Service Order Status

If a bulk order status summary query is submitted and the bulk order package is not found, you receive the message *Bulk Order Package has either been rejected or does not exist in the database*.

Raw Data Summary

To retrieve a raw data summary, follow the steps below.

1. Display the Bulk Package Menu.
2. Select **Raw Data** from the *Inquiry Type* pull down menu.
3. Enter the Bulk Package ID in the *Bulk Package ID (BOPI)* field and the version in the *Bulkver* field.
4. Click **Submit Query**.

   Package level and PON level entry pages will be displayed with the data you entered when you created your bulk order package.

Exhibit No. RMP-9

BELLSOUTH

BellSouth Telecommunications, Inc
[illegible] Monroe Street
Tallahassee, FL 32301

850 224-5244
Fax 850 222-8640
Internet
Marytose.Sirianni@bridge.bellsouth.com

Maryrose Sirianni
Manager
Regulatory Relations

March 15, 2004

Lisa Harvey
Florida Public Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32302

RE: Docket No. 000121A – BellSouth Flow through Report

Dear Ms. Harvey,

Attached is a copy of BellSouth's Flow-Through improvement plan progress report. If you have any further questions, please do not hesitate to call me.

Sincerely,

Mary Rose Sirianni

Mary Rose Sirianni

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

Investigation into the establishment Of Operations Support Systems Permanent Performance Measures for Incumbent Local Exchange Telecommunications Companies	)))))	Docket No. 000121A-TP Filed: March 15, 2004

BELLSOUTH'S FLOW-THROUGH IMPROVEMENT PLAN PROGRESS REPORT

OVERVIEW

In its Performance Metrics Order, the Florida Public Service Commission ("Commission") ordered BellSouth to file a Flow-Through improvement plan by July 30, 2002 describing how it intends to achieve the Service Quality Measure Flow-Through benchmarks and show significant improvement in 2002. The Commission opened Docket No. 000121-TP to develop permanent performance metrics for the ongoing evaluation of Operations Support Systems ("OSS") provided for Competitive Local Exchange Carriers' ("CLECs") use by Incumbent Local Exchange Carriers ("ILECs"). Associated with the performance metrics is a monitoring and enforcement program to ensure that CLECs receive nondiscriminatory access to the ILEC's OSS.

BellSouth filed its first status update to the Commission on October 30, 2002. In response to the Commission's request dated August 18, 2003, BellSouth provided to the Commission, in a September 11, 2003 filing, performance updates in the categories outlined in its original plan report (actual and projected results), as well as the status of the implementation of flow-through improvement items.

At the time of that filing, BellSouth proposed – and the Commission agreed – that subsequent quarterly progress reports (beginning with the December 12, 2003 report) would focus solely upon segments that do not meet the benchmark for at least 2 out of 3 months within the subject quarter. The Commission further requested that the reports

include updates for segments that failed to meet the benchmark in any two consecutive months in order to capture segments that failed only the last month of the previous quarter and only the first month of the succeeding quarter.

In this report, the Commission will find that two (2) segments – Business Resale and LNP – fell within this category for the November 2003-January 2004 timeframe. Additionally, BellSouth provides an updated Flow-Through Improvement Projection chart for all categories.

Business Resale

As filed in previous reports, BellSouth expects to continue to make progress toward meeting the challenging Percent Flow-Through Business benchmark of 90%. BellSouth continues to reiterate that this segment's complexity – coupled with its low volume – makes it difficult to realize significant flow-through improvement that can be sustained much beyond 85%. The business segment comprised only 1.03% of total mechanized LSR volume for January 2004.

Results for November and December 2003 rose slightly following the implementation of Release 14.0 on November 22, 2003. Results can be easily swayed up and down for otherwise minor issues due to the low volume and complexity of orders in this sub-metric. Results for January 2004 shifted downward with a slight decline in CLEC order volume.

As noted in BellSouth's December 12, 2003 report, certain flow-through improvement items were deferred from the November 2003 Release 14.0 until the implementation of Release 15.0 on March 13, 2004. With the implementation of Release 15.0, BellSouth expects a corresponding improvement in results for this category to meet the benchmark. Based upon current performance and planned improvements, BellSouth now expects to reach the 90% benchmark for this segment in April 2004.

Local Number Portability (LNP)

As expected, and as projected in BellSouth's December 12, 2003 report, LNP results for November 2003 were similar to the September and October 2003 results provided in that last report. The low November results continued due to the facility-check-before-FOC defect that BellSouth described in the report, and for which a permanent correction was completed during the first week of December 2003.

LNP actually provided better-than-expected results in December 2003 and January 2004. BellSouth has determined that the increase was due to an unforeseen spike in CLEC volume of LNP request submissions. During December 2003 and January 2004, one Florida based CLEC alone submitted electronically, via the LENS interface, 8,740 LSRs and 5,662 LSRs respectively to migrate its embedded base of UNE-P to UNE-L with LNP. These submissions accounted for approximately 45% of all electronic LNP submissions in December, and approximately 31% for January. Data reflects a flow-through rate of 99.1% for that CLEC's LSRs for both months. The overall LNP flow-through rate was 93.40% for December and 93.33% for January, due partially to this CLEC's increased submissions and highly successful results.

Additionally, BellSouth had expected somewhat higher results for December and January following the implementation of LNP Flow Through Improvement items with Release 14.0 on November 23, 2003. It is noteworthy that BellSouth's LNP flow-through results for both December 2003 and January 2004 would have exceeded 87% without the activity of that single CLEC – a figure above both this Commission's benchmark and BellSouth's previous projections for those months.[1] BellSouth expects to continue to meet the benchmark for this flow-through category.

[1] BellSouth's LNP projections provided in the December 12, 2003 report were based upon conservative estimates as to what effect the correction of the facility-check-before-FOC defect would have on the LNP results. BellSouth underestimated the effect between 2% and 3% for the months covered by this report.

Conclusion

The Flow-Through Improvement (FTI) project continues to identify and implement items to improve the Business Resale segment that comprised approximately 1% of the total mechanized LSR volume for this reporting period. BellSouth is confident that the LNP improvement trend will continue, and that it will not be reporting on LNP in the next quarterly report.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Alameda
STATE OF California

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Christopher Pleatsikas who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed surrebuttal testimony consisting of 21 pages and 0 exhibits.
Pages + exhibits to be filled in later

Chris Pleatsikas

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 18th DAY OF MARCH 2004

Nancy P Adams Notary Public

NANCY P. ADAMS
COMM. #1322489
NOTARY PUBLIC-CALIFORNIA
ALAMEDA COUNTY
My Comm. Exp. Sept. 28, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

BEFORE THE

ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054 PHASE II

SURREBUTTAL TESTIMONY OF

DR. CHRISTOPER J. PLEATSIKAS

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME.

A. My name is Christopher J. Pleatsikas.

Q. ARE YOU THE SAME CHRISTOPHER J. PLEATSIKAS WHO FILED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I respond to comments regarding market definition made by Dr. Bryant (on behalf of MCI), Mr. Gillan (on behalf of CompSouth), Mr. Klick (on behalf of AT&T), and Mr. Bradbury (on behalf of AT&T).

Q. PLEASE PROVIDE YOUR OVERALL VIEW OF THE COMMENTS MADE BY THESE PARTIES.

A. I have several general observations regarding the comments and recommendations made by these parties. First, the various CLEC recommendations are inconsistent with one another in terms of geographic area. Dr. Bryant claims that each individual customer represents the appropriate economic market, although, he contends, a wire center would be administratively simpler. In contrast, Mr. Gillan recommends that the entire service footprint, or else the LATA should be considered a market. Thus, while Mr. Gillan disparages the use of UNE Rate Zone/CEAs as "gratuitously granular," Dr. Bryant and Mr. Bradbury both appear to advocate the even more granular wire center-based definition.

Second, no witness proposing a wire center-based definition has provided a compelling economic rationale to explain why wire center boundaries should be used as the basis for defining relevant geographic markets in this instance. While there is no question that certain data are available by wire center, this does not constitute an economic rationale for defining a market, particularly when data are

as readily available for aggregations of wire centers. In addition, the FCC's guidance on this issue is inconsistent with the view that individual wire centers would generally be appropriate relevant markets. That is, no witness proposing the use of wire centers as a basis for defining geographic markets has explained how, absent any further market-based analysis, and as a general economic proposition, such a definition can be reconciled with the TRO's clear guidance that "[S]tates should 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 495 (emphasis added))

Third, some witnesses have responded to the UNE Rate Zone/CEA definition by separately criticizing the relevance of CEAs and of UNE Zones. In my opinion, these criticisms are misguided, because these concepts are not used *separately* to determine a relevant market. Instead, both concepts are used together to provide an economically reasonable definition of the market. Thus, any criticisms that either CEAs or UNE Zones are, by themselves, too "large," too "vast," or too "heterogeneous" [in demand] are not relevant to my analysis.

Finally, in my opinion, there is an undercurrent in the testimony of the CLEC witnesses that favor using wire center boundaries as the basis for defining the market that, unless all issues relating to the ability of a CLEC to compete profitably in each and every wire center are definitively resolved, markets must be defined

according to the smallest possible geography. In this manner, their testimony implicitly appears to seek to turn the impairment analysis on its head. In other words, they contend that one should conduct the impairment analysis at the wire center level first, then (possibly) decide, on the basis of those results, the extent of the geographic market. This is inconsistent with sound economic analysis and clearly at odds with the direction in the TRO that "State commissions *must first define the markets in which they will evaluate impairment* by determining the relevant geographic area to include in each market." (TRO 495 (emphasis added))

II. RESPONSE TO DR. BRYANT

Q. DR. BRYANT CLAIMS THAT A CEA IS OVERLY "BROAD." (BRYANT REBUTTAL 3) DO YOU PROPOSE USING A CEA AS THE RELEVANT MARKET DEFINITION?

A. No, I do not. Dr. Byant contends that "[i]f a market as broad as a CEA is defined, differences in profitability in wire centers will be obscured, and the impairment analysis will thus fail to capture any areas where the CLECs cannot profitably provide service." (Bryant Rebuttal 3) There are two problems with this statement. First, it is irrelevant to my analysis, because I did not propose the CEA as an appropriate geographic market – rather, I proposed the intersection of CEAs and UNE Zones, which leads to a smaller area than the CEA as a whole. Second, Dr.

Bryant seems to imply that there is an additional test in the TRO that CLECs must be able to profitably provide service to all customers within the geographical area. The FCC's explicit *Errata* to the Order clarified that the TRO does *not* require that, for the purposes of the switching triggers, self-provisioning competitors must be ready and willing to serve all retail customers in the market.

Q. DR. BRYANT CONTENDS THAT THE USE OF WIRE CENTERS PROVIDES MORE ACCURACY REGARDING THE ABILITY OF CLECS TO OFFER SERVICE. (BRYANT REBUTTAL 7-8) PLEASE COMMENT.

A. In my opinion, Dr. Bryant's reasoning is faulty on this point. The economies of scale and scope available to CLECs in providing switch-based services are not, in general, consistent with using wire center boundaries as the basis for defining markets in this case. Therefore, by defining markets in this manner, the analysis would simultaneously become more complex and less accurate (as the market definition would obscure supply-side substitutability). Defining markets in this manner could also be more time consuming and costly. Disagreement would inevitably arise as at least some parties would attempt to compensate for the overly-narrow market definition by citing factors that reflected supply-side substitutability over a broader area, particularly factors associated with some of the scope and scale economies that would be available to efficient CLECs.

In any case, Dr. Bryant's contentions regarding the use of wire center boundaries as the basis for market definition appear to be based in large part on his view that location specificity is an important factor for defining markets in this case. However, while location specificity may be relevant to understanding the interface between the end user and the local loop, it is not particularly relevant to understanding the interface between the end user and switching, which is the focus of the impairment analysis. Stated more simply, Dr. Bryant's discussion of location specificity is not relevant to the end user when choosing a vendor of switching services because the location of the switch providing those services is not constrained (except by transport costs) by the location of the end user or the location of the wire center serving the end user. Thus, Dr. Bryant's discussion of location specificity seems more directed to the market for loop services than the market for switching services.

Q. DOES THE FACT THAT AT LEAST SOME CLECS MAY EVALUATE INVESTMENTS IN EACH WIRE CENTER TO DETERMINE THE POTENTIAL PROFITABILITY OF THESE INVESTMENTS IMPLY THAT EACH WIRE CENTER MUST BE A RELEVANT ECONOMIC MARKET?

A. No, it does not. Any company evaluates discrete investments to determine their expected contribution to profits. The task in defining relevant markets goes beyond such simple evaluations to discern factors and information in the firm's decision-

making process that may relate to economic substitutability. It is these factors and information (along with information about demand characteristics) that must be utilized in conjunction with economic principles and theory to enable the analyst to identify relevant economic markets. Thus, as I have emphasized in my testimony, relevant economic markets are determined based on demand- and supply-side substitutability. While substitutability can, in some instances, be informed by the nature and content of the financial analyses conducted by firms, the nature and content of these financial analyses are insufficient in and of themselves to establish the boundaries of relevant markets.

To understand this more fully, an example is useful. Consider a gasoline retailer deciding whether to develop a new site for a retail outlet. The retailer will likely evaluate the potential contribution to profits of any individual site before deciding to expand its operations. However, the area served by any particular site bears no necessary relationship to the relevant geographic market for gasoline retailing.

Q. DR. BRYANT SUGGESTS THAT BECAUSE IT MAY BE UNECONOMIC FOR CLECS TO PROVIDE SELF-PROVISIONED SWITCHING TO SOME SMALLER WIRE CENTERS, THIS IMPLIES THAT WIRE CENTERS CONSTITUTE RELEVANT MARKETS. PLEASE COMMENT.

A. A fundamental problem in Mr. Bryant's assertions in this regard is that he seeks to define markets based on the outcome of some type of impairment analysis rather than, as I have done, based on economic substitutability and the guidance provided by the FCC. As I noted above, Mr. Bryant's views are contrary to sound economic principles, which require one to define a relevant market before assessing conduct and/or structure within any markets. Also as I have noted above, neither Mr. Bryant nor others have provided a sound economic basis for using wire center boundaries as the basis for defining relevant geographic markets for the purpose of conducting the impairment analysis.

Q. DR. BRYANT CONTENDS THAT THERE ARE COSTS THAT ARE NOT CAPTURED BY THE UNE RATE ZONE/CEA CONCEPT, AND THAT THESE COSTS SHOULD AFFECT THE MARKET DEFINITION. (BRYANT REBUTTAL 3) PLEASE RESPOND.

A. Dr. Bryant lists a number of features that may vary across different areas within the same geographic market, such as the number of addressable lines, the number of lines that are accessible by DSL or that are served by DLC, the relative number of business and residential lines, and customer demographics. While I do not seek to comment on all of the technical issues here, I will state that it is normally the case that different parts of the same economic market are not, and need not be, homogeneous in all respects.

Moreover, not all of Dr. Bryant's items necessarily have to do with market definition. Some of his factors appear to have more to do with market structure. For example, an area with a large number of customer lines (or a large number of lines accessible by DSL) may allow *more firms* to economically enter than would an area with a smaller number of lines (that is, the area with more lines may allow more firms to achieve minimum efficient scale), but this variation would not necessarily be a factor in determining the geographic contours of the relevant market (or markets).

The UNE Rate Zone concept, as I understand it, is designed to capture the variation in the cost of the loops. To the extent that other costs or revenues vary systematically with UNE Rate Zone, they will also be accounted for, at least in part. More importantly, from the perspective of supply-side substitutability, BellSouth's witness Wayne Gray has stated that some of the most important wire center-related cost factors for an efficient CLEC to consider in deciding whether to offer switched-based mass-market services are (1) loop costs, (2) transport costs and (3) collocation costs.

The UNE Zone concept, of course, captures the variation in loop costs directly. Furthermore, Mr. Gray has also stated that transport costs exhibit economies of scale and collocation costs do not vary much across different wire centers. Thus,

wire centers with higher line densities and higher customer counts would tend, all other things being equal, to have lower per customer transport and collocation costs. Since line counts and densities tend to higher in UNE Zone 1 than in UNE Zone 2 and in UNE Zone 2 than UNE Zone 3, the UNE Zone concept tends to capture at least some of the variation in per customer transport and collocation cost s across the State.

Finally, certain cost factors are not noted in Dr. Bryant's list of factors. For example, he does not include the costs of marketing and advertising, which tend to support wider areas than wire centers as relevant economic markets.

My recommendation to define the market as the intersection of the UNE Rate Zone and the CEA is a reasonable "middle ground" attempt to balance both the community-of-interest aspect of, for example, marketing/advertising costs as well as some of the network-oriented cost factors that can influence substitutability in supply. Dr. Bryant's definition appears to focus on some network-oriented factors that relate more to market structure than demand- or supply-substitutability, virtually ignoring such "community-of-interest" factors as mass-market marketing and advertising costs.

III. RESPONSE TO MR. GILLAN

Q. MR. GILLAN CLAIMS THAT HE HAS "NEVER COME ACROSS ANY MENTION" OF CEAS (GILLAN REBUTTAL 9) AND THAT THEY "HAVE NOTHING TO DO WITH TELECOMMUNICATIONS." (GILLAN REBUTTAL 4, 9) PLEASE RESPOND.

A. Mr. Gillan may not be familiar with the term, but the FCC uses the CEA concept in connection with telecommunications. According to 47 CFR 101.1401, multichannel video distribution and data service (MVDDS) was set to be licensed on the basis of CEAs. That rule stated in part that "Each CEA consists of a single economic node and the surrounding counties that are economically related to the node." In July 2003 the FCC ultimately decided to adopt a proprietary geographic area called "Designated Market Areas" ("DMAs") for licensing MVDDS. (Third Report and Order, FCC ET Docket No. 98-206, FCC 03-152, Released July 7, 2003). In discussing its decision, the FCC found that, with regard to fixed (as opposed to wireless) services, "DMAs and CEAs are equally advantageous because they are both local in nature." (Third Report and Order, p. 4). Thus, the FCC recognizes the economic basis for markets defined using the CEA concept. In addition, the FCC's Wireless Bureau provides some tools for those interested in bidding for wireless spectrum to map the CEAs as well as other geographic areas, such as MSAs. (These are found online at www.fcc.gov/oet/info/maps/areas/.) Thus, contrary to Mr. Gillan's assertions, the FCC considers CEAs to be useful for defining markets in telecommunications. In any event, whether Mr. Gillan is

familiar with the CEA concept is hardly a reasonable basis for critiquing a proposed market definition. A concept should be evaluated on its own merits, and not on whether a particular party happens to be familiar with the concept. In my opinion, the relevant consideration in this instance is whether the intersections of UNE Rate Zones and CEAs reasonably represent the relevant markets for the purposes of conducting the requisite impairment analyses.

Q. MR. GILLAN CLAIMS THAT CEAS ARE NOT THE BUREAU OF ECONOMIC ANALYSIS'S "FINAL PRODUCT" AND ARE NOT SUFFICIENTLY LARGE FOR THE BEA'S ECONOMIC PROJECTIONS. (GILLAN REBUTTAL 9) PLEASE COMMENT.

A. In making this claim, Mr. Gillan confuses the different purposes of CEAs and the (generally) larger BEA "Economic Areas." As the article appended to Mr. Gillan's rebuttal testimony ("Redefinition of the BEA Economic Areas," by Kenneth P. Johnson, *Survey of Current Business*, February 1995, pp. 75-81) notes, CEAs were defined as "a single economic node and the surrounding counties that are economically related to the node." Thus, CEAs are not, in an economic sense, "middle step[s]" but rather defined areas with an economic community of interest. Most are defined with MSAs as their core. The CEAs were then combined into BEA Economic Areas so that "each economic area is economically large enough to be part of BEA's local area economic projections program." In other words, the

BEA determined that, for the purposes of its own particular economic forecasts, many of the CEAs were too small to permit the development of reliable forecasts. However, this does not in any way undermine the economic rationale for using CEAs to define relevant geographic markets in this context. In fact, if anything this usage may be supported by footnote 5 in the Johnson article, which states: "Data for CEAs can be used by government agencies for administering regulatory programs for small areas and by businesses for developing marketing programs for small areas."

Q. PLEASE COMMENT ON MR. GILLAN'S CRITIQUE OF UNE RATE ZONES. (GILLAN REBUTTAL 10-11.)

A. Mr. Gillan claims that UNE prices vary modestly between UNE-L and UNE-P and so UNE price variation has little effect on the relative ability of a CLEC to use its own switching. (Gillan Rebuttal 10.) However, this criticism ignores two important issues relevant to market definition. First, of course, I have not defined markets *solely* on the basis of UNE Rate Zones. The rationale for my use of CEAs in conjunction with UNE Rate Zones was to account for factors that affect supply-side substitutability, including, but not limited to, the differences in loop costs captured by the intersection of UNE Rate Zones and CEAs, and also to recognize that there is a broader set of costs such as marketing and advertising costs that affect the relevant geographic scope of the market.

Second, the objective of the market definition exercise in this case is to provide an appropriate economic context in which to evaluate whether CLECs are impaired in offering switch-based services to mass-market customers, not to carry out a hypothetical comparison between UNE-L and UNE-P CLECs. As I noted in my comments on Dr. Bryant's testimony, this objective is relevant to the market definition exercise. For this reason, the fact that UNE prices do not vary significantly for UNE-L as compared with UNE-P is not an important consideration in market definition in this case. What is important is that supply-side substitutability will likely be affected for CLECs offering UNE-L as a result of the differences in costs associated with offering service in different UNE Zones. Mr. Gillan's criticism appears to ignore this issue.

Q. PLEASE COMMENT ON THE USE OF LATAS IN DEFINING GEOGRAPHIC MARKETS.

A. LATAs, by themselves, are unlikely to represent relevant geographic markets because it is likely that they do not adequately reflect differences in supply substitutability. For example, there may not be reasonable substitutability in supply between UNE Zone 1 and UNE Zones 2 and 3 within a particular LATA. It is my understanding that LATAs, which were created by Judge Greene following the breakup of AT&T, correspond loosely to Standard Metropolitan Statistical Areas.

An advantage of using UNE Rate Zones divided by CEAs rather than MSAs or LATAs (without reference to UNE Rate Zones) is that the UNE Rate Zone/CEA approach accounts for *both* differences in loop and other costs *and* for economies of scale and scope related to factors such as mass-market advertising costs.

IV. RESPONSE TO MR. KLICK

Q. MR. KLICK CLAIMS THAT THE "USE OF CEAS RESULTS IN A MARKET DEFINITION THAT IS NOT RELEVANT AND POTENTIALLY TOO BROAD." (KLICK REBUTTAL 21) PLEASE RESPOND.

A. Contrary to Mr. Klick's claims, I did not recommend the use of CEAs, by themselves, as an appropriate market definition for assessing impairment in Alabama. Instead, I recommend *UNE Rate Zones, subdivided by CEAs*, as an economically sound basis for defining geographic markets. The distinction is important, and Mr. Klick's arguments regarding CEAs, by themselves, are therefore not relevant to my analysis.

I also note that Mr. Klick apparently prefers the use of LATAs over the use of CEAs in conjunction with UNE Zones at least in part because the "use of CEAs results in a market definition that is not relevant and potentially too broad." (Klick Rebuttal 21) This is a curious preference since there are only six LATAs in

Alabama, but parts of 13 CEAs in the state. Thus, simple mathematics indicates that the average CEA in Alabama must be substantially smaller in area than the average LATA. Therefore, it is clear that the average geographic market in terms of area for UNE Zones subdivided by CEAs in Alabama must be smaller than the average geographic area of a LATA in that state. As a consequence, Mr. Klick's assertion in this instance is factually incorrect and his preference for LATAs, at least on this basis, is without foundation.

Q. MR. KLICK ASSERTS THAT YOU HAVE PROVIDED NO RATIONALE FOR USING THE CEA CONCEPT AS PART OF THE METHODOLOGY YOU USE TO DEFINE RELEVANT MARKETS "OTHER THAN (1) IT RESULTS IN MARKETS THAT ARE MORE GRANULAR THAN RELYING ON UNE ZONES, ALONE, AND (2) CEAS COVER AN ENTIRE STATE." (KLICK REBUTTAL 19). PLEASE RESPOND.

A. Mr. Klick's assertion is not correct. As I stated in my testimony, I defined relevant geographic markets in this case as UNE Zones subdivided by CEAs based on demand- and supply-side substitutability, the two paramount factors recognized by economists as the basis for market definition, and on the guidance provided by the FCC. It is certainly true that CEAs, in the aggregate, cover the entire state. More importantly, CEAs provide a consistent, economic basis for subdividing the state into different areas. This is one advantage of using CEAs as one element (the other

being UNE Zones) of the methodology I used for developing the relevant geographic markets compared with using LATAs, as Mr. Klick prefers.

Moreover, and more importantly, the CEA concept has particular applicability to developing relevant geographic markets because CEAs conform much more closely to media markets than MSAs or LATAs, two other concepts that have been proposed as bases for defining relevant markets in this case. Media markets are an important determinant of geographic market definition because the costs suppliers incur to obtain customers (which are related to marketing and promotional costs) are an important factor when CLECs decide whether to offer service in a particular area.

Q. MR. KLICK HAS SUGGESTED THAT LATAS ARE A MORE APPROPRIATE BASIS FOR DEFINING GEOGRAPHIC MARKETS IN THIS CASE THAN UNE ZONES SUBDIVIDED BY CEAS BECAUSE THE BELLSOUTH POTENTIAL DEPLOYMENT MODEL ASSUMES THAT A SWITCH IS PLACED IN EACH LATA. (KLICK REBUTTAL 20-21) PLEASE COMMENT.

A. Mr. Klick's view is erroneous in several respects. First, he is implicitly basing his market definition on the elements of the impairment analysis, not on economic substitutability and the FCC's guidance, which are the proper foundations for market definition analysis in this case. Thus, Mr. Klick has implicitly turned the

impairment analysis on its head – using information from the impairment analysis to define markets rather than using the geographic market definition as an input to the impairment analysis.

Second, he has based his view on the fact that the placement and geographic area served by a switch "reflect[s] the cost of self-provisioning switches for various groups of customers." (Klick Rebuttal 20) However, the purpose of the market definition task for impairment analysis is not to define the market for switches (an upstream input to the downstream service of interest), as Mr. Klick implies, but to define the market for the provision of telecommunications services, including local exchange services, to mass-market customers by carriers using self-provisioned switches. Thus, the placement of the switches themselves may provide useful information for defining the relevant market, but is not determinative for defining the appropriate relevant geographic market in this instance. As an analogy, the placement of an oil refinery may be useful information in defining a relevant market for gasoline retailing, but the geographic area served by the refinery need not (and generally does not) correspond to the relevant geographic market(s) for gasoline retailing because other factors affect economic substitutability.

Third, to the extent that Mr. Klick implies that a geographic market must exhaust all sources of economies of scale and scope, he is incorrect as a matter of economics and, in my opinion, in relation to the guidance provided by the FCC in

paragraph 495 of the TRO. If it were true that all economies of scale and scope must be exhausted in a market, then the coverage of CLEC billing systems, some of which are national in scope, would indicate that even larger markets than LATAs were required.

Fourth, while Mr. Klick acknowledges that "use of UNE loop rate zones obviously gives some effect to variations in factors affecting a CLEC's ability to serve a group of customers and its ability to target…" (Klick Rebuttal 20), his market definition completely ignores this information. That is, his proposed use of LATAs as relevant markets does not take into account these cost differences across UNE zones.

V. RESPONSE TO MR. BRADBURY

Q. MR. BRADBURY CLAIMS THAT YOU MAKE AN "OUTLANDISH [CLAIM] THAT THE WIRE CENTER CONCEPT HAS NO MEANING AND THAT WHERE THE CUSTOMER IS LOCATED IS UNNECESSARY INFORMATION IN DETERMINING WHETHER CLECS CAN USE THEIR OWN SWITCHING FACILITIES TO ECONOMICALLY AND EFFICIENTLY SERVE MASS MARKET CUSTOMERS." (BRADBURY REBUTTAL 17.) PLEASE RESPOND.

A. Mr. Bradbury's immediately preceding discussion on CLEC network architecture is consistent with my own discussion and supports my own analysis. Furthermore, I did not claim in my direct testimony that the "wire center concept has no meaning." Indeed, as Mr. Bradbury is apparently aware based on his quotation of my direct testimony, what I actually stated was "Therefore, the wire center concept is not relevant to market definition in this context, and specifically not economically relevant in terms of how CLECs provision services to their end users." In my opinion, Mr. Bradbury's testimony on CLEC network architecture supports my views regarding the relevance of wire center boundaries to geographic market definition in this instance. I note that Mr. Bradbury leads off his discussion on network architecture by acknowledging that CLEC networks are not configured in the same manner as BellSouth's network. He specifically states that, compared to the traditional (BellSouth) network, CLECs are able to use fewer switches than does BellSouth to provide service to a particular geographic area. It is precisely this point – i.e., that AT&T has chosen a network architecture approach different from BellSouth's approach (e.g., to serve customers in a wider geographic area with a single switch) – that I make in my own direct testimony.

I conclude that this fact provides evidence that the geographic market definition in Alabama should not be based on the BellSouth wire center boundaries because the switch-based CLEC's decision to offer service in a geographic area is not limited by the area covered by the BellSouth wire center. The reason is that AT&T (or any

CLEC) is not obligated to install a separate switch to customers in the different wire centers where it offers (or could offer) switch-based services. One of the principles that I refer to frequently herein and in my previously filed testimony in this matter is that supply substitutability is an important determinant of geographic market definition. The fact that CLECs such as AT&T are capable of serving customers in multiple wire centers from a single switching location is one indicator that using the boundaries of individual wire centers as the basis for geographic market definition is inappropriate because it does not consider supply-side substitutability (e.g., because CLECs are able to take advantage of scale and scope economies, including switching, that allow them to serve much larger areas than an individual wire center).

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared JOHN A. Ruscilli, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 18 pages and 1 exhibits.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF JOHN A. RUSCILLI

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, PHASE II

MARCH 24, 2004

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

A. My name is John A. Ruscilli. I am employed by BellSouth as Senior Director – Policy Implementation and Regulatory Compliance for the nine-state BellSouth region. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?

A. Yes, I filed direct testimony and four exhibits on January 20, 2004 and rebuttal testimony on March 5, 2004.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY AND HOW HAVE YOU ORGANIZED IT?

A. My surrebuttal testimony addresses numerous comments contained in the rebuttal testimony filed by other witnesses in this proceeding on March 5, 2004.

In the first section of my testimony, I make some general observations regarding the rebuttal testimony filed in this proceeding. I then walk through each step of the investigation that the Federal Communications Commission ("FCC") asked the state commissions to undertake to determine whether Competitive Local Exchange Carriers ("CLECs") are impaired without unbundled local switching – specifically, the definition of the geographical market and the mass market/enterprise crossover and the application of the triggers and potential deployment tests. In so doing, I discuss the testimony of various CLEC witnesses and highlight areas of agreement and summarize rationales for BellSouth's positions where disagreement exists. More detailed arguments can be found in the testimonies of other BellSouth witnesses, to whom I will refer as appropriate.

GENERAL OBSERVATIONS

Q. ARE YOU FAMILIAR WITH THE REMARKS OF OTHER WITNESSES WHO HAVE FILED REBUTTAL TO BELLSOUTH'S DIRECT TESTIMONY?

A. Yes. I have reviewed the testimonies of the numerous witnesses who have filed rebuttal testimony in this proceeding, including that of Messrs. Argenbright, Bradbury, Turner, Van de Water and Wood on behalf of AT&T Communications of the South Central States, LLC ("AT&T"), Mr. Gillan on behalf of Competitive Carriers of the South, Inc. ("CompSouth"), and Dr. Bryant and Mr. Webber on behalf of MCI WorldCom Communications, Inc. and MCI Metro Access Transmission Services LLC ("MCI").

Q. WHAT IS YOUR GENERAL IMPRESSION OF THE REBUTTAL TESTIMONY?

A. I would make three general observations. First, there seems to be a general tendency toward selective obfuscation. That is, although the FCC has left some issues to the interpretation of the Commission, there are other issues – such as the application of the triggers tests or the type of CLEC to be modeled in the potential deployment test – on which the *TRO* is crystal clear. Although one would expect there to be legitimate differences of opinion where interpretation is required, there should be no need to cloud issues where clarity has been provided by the FCC. As I will discuss below, Dr. Bryant and Messrs. Gillan and Bradbury are all particularly prone to issue clouding, creating unnecessary complication where none is required, presumably because they do not like the clear direction given by the *TRO*.

Second, there seems to be substantial disagreement amongst the parties attacking BellSouth's positions: some find BellSouth's suggested market definition too small, others find it too large; some find the BACE model too sensitive to inputs, others too insensitive; some claim that BellSouth has counted the wrong trigger candidates, but then argue otherwise in other proceedings (notably the current appeal from the FCC's *TRO* order). To me, this lack of consensus supports my conviction that in areas where judgments need to be made, and where legitimate differences of opinion are therefore to be expected, BellSouth has offered reasonable proposals that the Commission can feel comfortable adopting.

Finally, there are several witnesses (e.g., Messrs. Wood and Gillan) who seek to downplay the responsibility that the Commission has to determine where impairment exists and where it does not. They imply that the *TRO*'s presumption of impairment for mass-market switching based on aggregate, nationwide data shuts the door to a finding of non-impairment based on data reflecting local market conditions. In fact, nothing could be farther from the truth. The whole point of devolving responsibility to the states was ostensibly so that the state commissions could conduct the granular decision making that the FCC believed it was not in a position to make. Indeed, as the FCC itself explained in its brief to the DC Circuit Court of Appeals: "In making certain national findings of impairment, the Commission also recognized that <u>the record before it was not sufficiently detailed to support the nuanced decisionmaking that *USTA* required</u>**.** To address those situations – involving, for example, local circuit switching, high capacity local loops, and dedicated transport – the Commission enlisted state commissions to gather and evaluate information relevant to impairment in their states. These very specific delegations were reasonably designed to ensure accurate and nuanced analyses of impairment on a market-specific basis." (Brief for Respondent at 21, *USTA v. FCC*, Case No. 00-1012 (DC Cir).) (Emphasis added).

<u>MARKET DEFINITION</u>

Q. WHAT IS BELLSOUTH'S POSITION WITH REGARD TO THE DEFINITION OF THE GEOGRAPHICAL MARKET THAT SHOULD BE USED TO

EVALUATE IMPAIRMENT?

A. BellSouth has proposed the use of UNE rate zones that the Commission has defined previously, subdivided into component economic areas ("CEAs") as defined by the Bureau of Economic Analysis, U.S. Department of Commerce. As described in the direct, rebuttal, and surrebuttal testimonies of Dr. Christopher Pleatsikas, this definition satisfies the multiple criteria laid out in the *TRO* and results in economically meaningful "markets" in which to consider impairment.

Q. WHAT HAVE OTHER WITNESSES SUGGESTED IN THEIR REBUTTAL TESTIMONY FOR THE GEOGRAPHICAL MARKET DEFINITION?

A. Mr. Gillan on behalf of CompSouth recommends a LATA should be considered a market. (Gillan Rebuttal, p. 14) Notwithstanding his client's membership in CompSouth, on whose behalf Mr. Gillan testifies, Dr. Bryant, on behalf of MCI, suggests that each individual customer represents the appropriate economic market, although he concedes that a wire-center definition would be administratively simpler. (Bryant Rebuttal, pp. 2-7) Although Mr. Bradbury is keen to defend wire centers as the geographical unit of competition (Bradbury Rebuttal, pp. 19-21), another witness for AT&T has suggested LATAs as the appropriate market definition in discovery. (AT&T – Turner's Response to BellSouth's Florida Interrogatory No. 156.)

Q. HOW WOULD YOU CHARACTERIZE THESE ALTERNATIVE POSITIONS?

A. Geographical market definition is one of those issues that support my general observation above: while Mr. Gillan and AT&T find BellSouth's market definition is too small, Dr. Bryant finds it is too large, which to me suggests BellSouth's proposal may actually be just right. Furthermore, it is interesting that the parties not only contradict each other, but also appear to be contradicting themselves: MCI is arguing for a larger market definition through CompSouth's witness Mr. Gillan and a smaller definition through its own witness, Dr. Bryant; AT&T is suggesting a LATA in discovery (AT&T Response to BellSouth's Florida Interrogatory No. 156), while its witness, Mr. Bradbury, emphasizes that the Commission "must assure itself that UNE-L competition will exist in every wirecenter." (Bradbury Rebuttal, p. 19) Both MCI and AT&T have previously argued against too small a geographical market definition because their switches can provide service to a comparable area as BellSouth's tandem switches (see Ruscilli Rebuttal, pp. 13-14), even though both are now defending individual wire centers as the unit of meaningful competition (Bradbury Rebuttal, pp. 19-21, Bryant Direct, p. 44-49).

Q. WHAT SHOULD THE COMMISSION DECIDE IN THE FACE OF THESE COMPETING ALTERNATIVES?

A. It is hardly surprising that many alternative definitions of the geographical market have been propounded as this is an issue that has been left to the Commission's judgment. While UNE Zones cut by CEAs is the most logical definition, there may be others that meet the FCC's requirements. However, as Dr. Pleatsikas explains, that is not the case with two possible market definitions, both of which

should be avoided. The first would be to define the whole State of Alabama as a market; the second would be to define every wire center within Alabama as a market. Either of these approaches would run afoul of *TRO* ¶ 495 (the former is too big, the latter is too small). As long as the Commission steers between these two "icebergs," the Commission has some latitude in defining the market.

Q. TURNING FROM THE GEOGRAPHICAL MARKET TO THE DEFINITION OF "MASS MARKET," WHAT IS THE COMMISSION'S TASK?

A. The *TRO* (¶ 497) is quite clear on this point: "Some mass market customers (i.e., very small businesses) purchase multiple DS0s at a single location…Therefore as part of the economic and operational analysis discussed below, a state must determine the appropriate cut-off for multiline DS0 customers as part of its more granular review." The Commission's task is no more and no less than to set a number of DS0s below which a customer is classified as "mass market" and above which it is classified as "enterprise" (and therefore no longer eligible for unbundled switching, per *TRO* ¶ 419).

Q. WHAT IS BELLSOUTH'S POSITION REGARDING THE APPROPRIATE CUTOFF?

A. As described in my direct testimony (p. 8), BellSouth has accepted the FCC default delineation that customers with three or fewer CLEC DS0 lines serving them should be deemed "mass market." This position has also been tentatively adopted by the Ohio PUC. (See *In the Matter of the Implementation of the*

Federal Communications Commission's Triennial Review Regarding Local Circuit Switching in the Mass Market, Case No. 03-2040-TP-COI, *Entry*, dated October 2, 2003, p.5.)

Q. WHAT HAVE OTHER WITNESSES SUGGESTED IN THEIR REBUTTAL TESTIMONY FOR THE CUTOFF?

A. Mr. Gillan proposes a 12-line cutoff for BellSouth's territory, which he bases on the testimony of AT&T's witness Mr. Argenbright. (Argenbright Rebuttal, p. 6; Gillan Rebuttal, p. 14.) The other parties are silent on this issue.

Q. WHAT SHOULD THE COMMISSION DECIDE IN THE FACE OF THESE COMPETING ALTERNATIVES?

A. Obviously, BellSouth believes its position is a reasonable one by staying within the *TRO*'s mandate to include multiline DS0 customers while establishing an explicit cutoff. On the other hand, raising the cutoff, as Mr. Gillan suggests, only improves the chances of finding mass-market non-impairment, and so it is not unappealing to BellSouth. However, the Commission should remain mindful of the requirement of the *TRO* and the FCC rule that a single, clear cutoff point be established between "mass market" and "enterprise" customer segments.

THE TRIGGERS AND POTENTIAL DEPLOYMENT TESTS

Q. WHAT DO YOU MEAN BY THE "TRIGGERS AND POTENTIAL DEPLOYMENT TESTS"?

A. Having defined the geographical markets and the "mass market" cutoff, the *TRO* lays out a clear process by which the Commission should determine whether impairment exists for local switching. All witnesses in this proceeding agree that the Commission should examine each geographical market in turn, first applying the "triggers tests," which examine whether there is actual deployment of CLEC switching on either a retail or wholesale basis. If neither of those trigger tests are satisfied, the next step is the "potential deployment test," which weighs evidence of actual deployment, operational barriers, and economic barriers to determine whether self-provisioning of facilities is potentially economic, even if it has not yet occurred to the extent required to meet either of the triggers.

Q. LET US BEGIN WITH THE TRIGGERS TESTS. WHAT IS BELLSOUTH'S INTERPRETATION OF THESE TESTS?

A. Actually, very little interpretation is required. The *TRO* is crystal clear about the nature of these tests. Furthermore, BellSouth is not claiming that the wholesale facilities trigger is met in any market at this time, which simplifies matters because it means that the Commission only has to consider the self-provisioning trigger. As it is easy to get lost in the lengthy, seemingly plausible, but in fact

mostly fictitious, "interpretations" of the trigger test presented by Dr. Bryant and Messrs. Gillan and Bradbury in their rebuttal testimonies, let me quote *in its entirety* the FCC's rule describing this test:

> Local switching self-provisioning trigger. To satisfy this trigger, a state commission must find that three or more competing providers not affiliated with each other or the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each are serving mass market customers in the particular market with the use of their own local switches. (47 C.F.R. § 51.319 (d)(2)(iii)(A)(1))

Although BellSouth would prefer the trigger to be met with the presence of one or two competing providers, the text is quite clear that three is the threshold. Similarly, although many witnesses would prefer the trigger to be met only if additional criteria – such as a *de minimis* threshold, or a requirement that every customer in the market be served, or that trigger candidates have to use ILEC loops and "mass market switches" (whatever those may be) are satisfied – such criteria are inconsistent with the FCC's rule.

Ms. Pam Tipton further elaborates on these fictional criteria in her testimony, and describes how, in contrast, BellSouth has simply applied the FCC's straightforward test to the markets that have been proposed. That is, in each market BellSouth has counted how many competing providers – through their own admission in discovery and BellSouth's internal data – are serving mass-market customers. In the markets where there are three or more competing providers, the trigger has been met, and the Commission should immediately find non-impairment. In the markets where there are fewer than three competing providers, the trigger has not been met, and therefore, the Commission should

continue their examination to see if the markets pass the potential deployment test.

Q. MR. GILLAN STATES THAT "THE SELF-PROVISIONING TRIGGER CANDIDATE'S SWITCHES MUST NOT BE 'ENTERPRISE' SWITCHES." (GILLAN REBUTTAL, P. 23) WHAT IS MEANT BY AN "ENTERPRISE SWITCH"?

A. Within the context of the FCC's *Order*, an enterprise switch is a switch providing service to enterprise customers through the use of DS1 or above loops (*TRO,* ¶441, fn 1354). It is clear from the discussion contained in the *TRO* that this definition is appropriate. Where a CLEC is already using its switch to serve customers using DS0 loops, clearly the serving switch already has the capability to serve mass market customers using DS0 loops and thus is not an "enterprise" switch, regardless of how many or few mass market lines the switch is serving.

Q. SHOULD SWITCHES THAT SERVE PRIMARILY ENTERPRISE CUSTOMERS BUT ALSO SERVE MASS MARKET CUSTOMERS BE SOMEHOW DISQUALIFIED FROM INCLUSION IN BELLSOUTH'S TRIGGER ANALYSIS?

A. No. As I explained in my rebuttal testimony (pp. 21-23), there is no distinction between a so-called "enterprise" and "mass market" switch for purposes of the trigger analysis, despite Mr. Gillan's suggestions to the contrary (Gillan Direct, pp. 39-41; Gillan Rebuttal, p. 23). The trigger analysis contains no requirement to

"qualify" switches, notwithstanding CLEC claims to the contrary. There is certainly no requirement to analyze switch capacity, as Mr. Gillan seeks to do. When a CLEC has self-deployed a switch that is serving mass market customers using DS0 loops as well as "enterprise" customers, the CLEC constitutes a qualified trigger candidate because its self-provisioning of switching "demonstrates adequately the technical and economic feasibility of an entrant serving the mass market with its own switch, and indicates that existing barriers to entry are not insurmountable." (*TRO* ¶501)

Q. HOW HAS BELLSOUTH DEFINED "COMPETING PROVIDERS"?

A. BellSouth has been rather conservative in defining "competing providers." For example, despite the evidence in the *TRO* itself that "local services are widely available through CMRS providers" (¶ 230), that CMRS providers are sufficiently competitive with the incumbent LEC that they should qualify for UNEs (¶ 140), and that CMRS is "growing as a…replacement for *primary* fixed voice wireline service" (¶ 230), BellSouth chose not to challenge the FCC's statement that "at this time we do not expect state commissions to consider CMRS providers in their application of the triggers" (fn. 1549). Similarly, BellSouth did not include internet-based telephone providers, such as Vonage, as trigger candidates, although internet-based telephone providers and CMRS providers are clearly a growing presence and a direct and ubiquitous substitute for the incumbent LEC's voice service. (See Exhibit JAR-5)

Eliminating these two categories of trigger candidates leaves only wireline

CLECs as included as "competing providers." I should mention in passing that BellSouth has of course included cable companies as trigger candidates, which is completely consistent with the *TRO*. It is surprising that Dr. Bryant (pp.11-12) and Mr. Gillan (Direct, pp. 49-52; Rebuttal, p. 22-23) argue that cable companies should not be considered trigger candidates. Besides being flatly contrary to the FCC rules, MCI's and CompSouth's position before the Commission is inconsistent with the CLEC position in their DC Circuit brief where they acknowledged that the "triggers may 'count' carriers like cable companies". (Brief of CLEC Petitioners and Intervenors, *USTA v. FCC*, Case No. 00-1012 (DC Cir), p. 37)

Q. WITH RESPECT TO THE "POTENTIAL DEPLOYMENT" TEST, HOW SHOULD THIS TEST BE APPLIED?

A. Although it is not quite as straightforward as the "bright-line" self-provisioning trigger test, the potential deployment test is also well described in the *TRO*. In markets where neither of the triggers tests has been met, the Commission needs to examine three criteria: evidence of actual switching deployment, operational barriers (such as the availability of collocation space and cross-connects), and economic barriers. (47 C.F.R. § 51.319 (d)(2)(iii)(B)(1)-(3)) If, having weighed these criteria, the Commission decides that self-provisioning of local switching could be economic, then it should make a finding of non-impairment.

Q. HOW HAS BELLSOUTH APPLIED THIS TEST?

A. BellSouth has presented details regarding each of these three criteria: evidence of actual switching deployment is described in the pre-filed testimony of Ms. Tipton; the lack of operational barriers is described in the testimony of several BellSouth witnesses; and the assessment of economic barriers as discussed in the prefiled testimony of Mr. Stegeman, Dr. Aron, and Dr. Billingsley.

Q. WHAT HAVE OTHER WITNESSES SUGGESTED IN THEIR REBUTTAL TESTIMONY REGARDING THE POTENTIAL DEPLOYMENT TEST?

A. The focus of other witness's rebuttal testimony is primarily on BellSouth's assessment of the economic barriers. This assessment was based on the BACE model, a detailed business case for a UNE-L CLEC entering the Tennessee market. In sponsoring the BACE model, BellSouth has made an effort unparalleled by any other carrier in the country to provide the Commission with a tool to assess economic impairment in a way that meets the criteria laid out in the *TRO* (see for example *TRO* ¶ 485 and the direct testimony of Mr. Stegeman, pp. 6-17). Indeed, no other party has even attempted to claim that the models they originally presented in direct testimony are better suited to the task at hand. Unfortunately, instead of engaging in a constructive debate about the BACE model, the rebuttal testimonies of Dr. Bryant and Messrs. Webber, Bradbury and Wood by and large satisfy themselves with making unfounded attacks on the input parameters or superficial complaints about the structure of the model. The former group of complaints is comprehensively dealt with in the surrebuttal testimonies of Drs. Aron and Billingsley, who show that most of the issues are the results of definitional misunderstandings or attempts to substitute the months of

documented research that the BellSouth witnesses have performed regarding variables such as churn, cost of capital, and selling, general and administrative ("SG&A") costs, with offhand assumptions. The latter group of complaints is handled in the surrebuttal testimonies of Messrs. Stegeman, Milner and Gray, who demonstrate that none of the witnesses appear to have made a good faith attempt to understand the model, with the result that many of their alleged critiques are inaccurate and mutually contradictory.

The Commission should make use of the powerful tool that is the BACE model. Contrary to the assertion of Mr. Wood that the potential deployment test is essentially irrelevant because the absence of self-deployment "should eliminate any question regarding the ability of CLECs to enter a market and successfully compete for mass market customers without access to UNE local circuit switching" (Wood Rebuttal, pp.8-9), the *TRO* lays out a detailed and thoughtful test for state commissions to apply where the triggers are not met. So long as UNE-P promotes artificial competition by distorting market prices and subsidizing arbitrage players with no interest in making real investments in the state of Tennessee, this test may be some consumers' only hope of benefiting from real, facilities-based competition and therefore deserves to be taken seriously.

Q. ON PAGES 13-14, MR. KLICK DISCUSSES THE RATES USED IN THE BACE MODEL. SPECIFICALLY, MR. KLICK ARGUES THAT THE RATES INCLUDED IN THE MODEL ARE "FLAWED, BECAUSE BELLSOUTH REDUCED RETAIL PRICES IN LATE 2003." PLEASE COMMENT.

A. The retail rates referred to by Mr. Klick, by his own admission, are Florida rates and therefore, have no relevance to this proceeding. Notwithstanding his inappropriate reference to Florida retail rates, Mr. Klick's statement that BellSouth reduced retail rates in late 2003 is wrong. As Mr. Stegman and Dr. Aron discuss in greater detail, the retail pricing data used as inputs to the BACE model accurately reflect current retail prices in both Florida and Alabama.

BELLSOUTH'S BATCH HOT CUT PROCESS

Q. ON PAGES 4-5 OF HIS TESTIMONY, MR. VAN DE WATER CLAIMS THAT THIS COMMISSION CAN NOT RELY ON ITS 271 FINDINGS WITH RESPECT TO THE HOT CUT PROCESS. HOW DO YOU RESPOND?

A. The FCC's decision not to rely on the objective hot cut performance data on which it relied in at least forty-nine 271 cases to find that ILECs provide nondiscriminatory access to loops is erroneous. This Commission should not make the same error. It would make no sense for this Commission to ignore its previous finding that BellSouth has a 251/271-compliant hot cut process, and then today, find that the process is unacceptable.

Moreover, even if this Commission does not rely solely on its 271 holding, BellSouth's objective performance data should inform this Commission's decision far more than the CLEC's uncorroborated and anecdotal evidence that BellSouth's process "might not work." BellSouth's witnesses have presented a

seamless and efficient batch hot cut process, and have presented performance data and a third party test that demonstrates its effectiveness. When weighed against the CLEC's speculative musings, BellSouth's case is far more compelling. There is no doubt that the Commission's findings in the 271 case should inform its decision, but the Commission can, and should, adopt BellSouth's batch hot cut process based on the evidentiary record in this case.

Q. MR. VAN DE WATER (REBUTTAL, P. 25) CRITICIZES BELLSOUTH FOR NOT FILING THE COST STUDY YOU MENTION IN YOUR TESTIMONY (RUSCILLI DIRECT, P. 18). IS A COST STUDY RELEVANT TO THIS PROCEEDING?

A. No. The cost study BellSouth conducted of the batch hot cut process was based on the same methodology as approved by the Commission for individual hot cut rates. As explained in my direct testimony, BellSouth's Proposed Batch Hot Cut rates are the lower of (a) the current SL1, SL2 and UCL-ND nonrecurring rates reduced by 10% of the total Commission approved nonrecurring UNE rates applicable for individual hot cuts or (b) the results of the recent cost study. The only instance in which the cost study resulted in a lower rate is for Order Coordination. (See Exhibit JAR-4 to my Direct Testimony.) The rate is driven, therefore, not by BellSouth's cost study so much as by the Commission's UNE Cost Order.

Q. MR. VAN DE WATER CONTINUES TO TRY TO COMPARE A RETAIL TO UNE-P MIGRATION TO A RETAIL TO UNE-L MIGRATION. IS SUCH A COMPARISON APPROPRIATE?

A. Absolutely not. As I explained in detail in my rebuttal testimony, the work required to migrate a CLEC's service from UNE-P to UNE-L is much more involved than converting retail service to UNE-P. The Commission has recognized this fact in at least two ways. First, it established higher rates for hot cuts than for conversions to UNE-P, recognizing the different work effort in each. Second, it established different benchmarks and retail analogues for UNE-L performance measures than for UNE-P performance measures. The fact that UNE-L and UNE-P are different is no surprise to this Commission. Congress also recognized the difference between UNE-L and UNE-P – it is simply the difference between true facilities-based competition with the UNE-L and synthetic competition with the UNE-P. The question for the Commission is not whether UNE-P is the same as UNE-L, but rather whether an efficient CLEC can economically enter the market without access to unbundled switching. Because the answer to the second question, the correct question, is unequivocally "yes", the CLECs are trying to change the question.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

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[The Atlanta Journal-Constitution, 12/6/03]

Internet remolds phone service

By DAVID HO
The Atlanta Journal-Constitution

BellSouth® Internet Services
Here are 2 great ways to get there.

NEW YORK -- When friends and family dial Tom Tribolet's Phoenix number, the phone rings at his home in Argentina.

It's not simple call forwarding but a rapidly emerging technology that allows this retired veterinarian to make or receive calls with his local phone number anywhere he has high-speed Internet access.

"When I pick up the phone here in Buenos Aires, I have a live phone in the United States," said Tribolet, 64, who now trains racehorses. "This is a wonderful way to be able to keep in touch with my two sons and their families and my other friends."

Analysts say the technology, called VoIP or Voice over Internet Protocol, will upset the dominance of traditional phone companies and could revolutionize communications, signaling an end to calls over the copper wires people have used for more than a century.

The service is bought from a company that provides customers with a phone adapter that links ordinary phones and fax machines to the cords from a cable or DSL Internet connection.

With this future looming, regulators and telephone and cable companies are scrambling to be part of it.

"Voice over IP is going to be as important and have as much impact as the telephone itself," said Jeff Kagan, an independent telecommunications analyst based in Atlanta. "It's one of those disruptive technologies that's going to change everything in the business."

The incursion of Internet calling into the telecommunication industry has so far been small, with about 130,000 home phone subscribers. In comparison, there are about 166 million residential phone numbers in the United States and an additional 150 million cellphone numbers.

However, the number of Internet phone users is expected to jump next year as more companies offer the service.

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The technology converts speech into packets of digital information that speed over the Internet and are reassembled into a voice on the other end. Many companies offering the service promise an experience no different from making a traditional phone call.

A leader in this nascent industry is Vonage Holdings Corp., a private company based in Edison, N.J. Vonage began offering its Internet phone service a year ago and has grown this year from 7,500 customers to more than 76,000.

One of those thousands is Tribolet, who pays $34.99 for unlimited calling in the United States and Canada and a host of features ranging from traditional call waiting to voice-mail messages delivered to his e-mail.

How it works

Vonage and similar Internet services can call traditional residential phones, using part of the existing phone networks. Calls between people using the Internet on both sides might skip the traditional phone system entirely.

Vonage customers can transfer their existing phone numbers or have their choice of local area codes for a new number.

About a quarter of subscribers choose local numbers that don't match their geographic area, said John Rego, Vonage's chief financial officer. He said this uprooting of local numbers is going global, with the company expanding its operations into the United Kingdom and Switzerland.

"If you're living in Manhattan, you could have a U.K. phone number," he said. "Phone numbers don't mean the same to us in our world."

The technology, which enjoys cheaper rates and freedom from the regulations that apply to phone companies, is yet another challenge for the regional Bells -- BellSouth Corp., SBC Communications, Verizon Communications and Qwest Communications. The industry giants already duel with cable companies over broadband subscribers and struggle to adapt to more people "cutting the cord" and leaving land-line phones for cellular service.

Enter the Bells

Sensing that the best way to beat the coming threat is to join in, the Bells are rolling out their own Internet calling services. Most of them, as well as AT&T Corp., already provide some type of Internet phone service for business customers.

Qwest and Verizon say they want to have widely available Internet calling services for consumers next year.

Kagan, the analyst, said that while companies like Vonage are growing rapidly, they don't threaten phone companies in the long term.

"I don't think they are going to be the leaders," he said. "They're the ones who are forcing the change."

Instead, he said, cable companies are the greatest challengers to the communications industry, and "if we go out a few years the cable companies and the phone companies start to look a lot alike to the customer ... because of voice over IP."

That convergence has already begun.

Cablevision, serving more than 3 million subscribers in and around New York City, began marketing an online calling service last month to its more than 1 million high-speed Internet customers.

Time Warner Cable, with about 11 million customers in 27 states, launched an Internet phone service in Portland, Maine, in May and now has more than 8,000 customers there, said spokesman Keith Cocozza. Four out of five of those customers transferred their traditional residential phone numbers to the new service.

The company has also begun offering the service in Raleigh and plans to expand to all the states where it has cable service.

Other cable companies have similar plans.

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ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF HAMILTON
STATE OF OHIO

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared JAMES W STEGEMAN, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 59 pages and 3 exhibits.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19 DAY OF MARCH, 2004

Notary Public

STEPHEN M. VOVAK
NOTARY PUBLIC, STATE OF OHIO
MY COMMISSION EXPIRES 09-22-07

SURREBUTTAL TESTIMONY OF JAMES W. STEGEMAN

ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NUMBER 29054, PHASE II

MARCH 24, 2004

Section 1. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS AFFILIATION.

A. My name is James W. Stegeman. I am the President of CostQuest Associates, Inc. I am testifying on behalf of BellSouth Telecommunications ("BellSouth", "BST" or the "Company").

Q. ARE YOU THE SAME JAMES W. STEGEMAN THAT FILED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I respond to the rebuttal testimony of Dr. Mark Bryant and Mr. James Webber (MCI), and Mr. Don Wood and Mr. John Klick (AT&T). Each of these witnesses addresses the BACE model in their rebuttal testimony. My surrebuttal is confined to issues related to the operations and methods of the BACE model itself, Drs.

Aron and Billingsley will primarily respond to issues relating to BACE model inputs and interpretation of the results.

Q. HOW IS YOUR SURREBUTTAL TESTIMONY ORGANIZED?

A. I have divided my surrebuttal testimony into six sections:

1) Introduction.
2) The BACE model is open to review, structurally sound, and is a valid TRO potential deployment tool.
3) The rebuttal by CLECs concerning BACE is inconsistent and contradictory.
4) Clarification of BACE features and misinterpretations of BACE.
5) Additional Rebuttal of Mr. Wood.
6) BACE is clearly superior to AT&T's model in meeting the requirements of the TRO and criteria discussed by Mr. Wood.

Section 2. <u>THE BACE MODEL IS OPEN TO REVIEW, STRUCTURALLY SOUND, AND IS A VALID TRO POTENTIAL DEPLOYMENT TOOL</u>

Q. HAVE ANY WITNESSES CLAIMED THAT BACE IS NOT OPEN TO REVIEW?

A. Yes, Mr. Wood (page 24, lines 12-14), Dr. Bryant (page 28, lines 5-9,), and Mr. Klick (table of contents, section heading II, BellSouth's BACE model is not open, is not adequately documented, and can not be relied upon by the Authority [sic])

claim that BACE is not sufficiently open to allow a full review and analysis of the model.

Q. DO YOU AGREE WITH THESE PARTIES' ASSESSMENT OF THE OPENNESS OF BACE?

A. No. BACE and the supporting material provided with BACE will allow even a casual user to review the model. Indeed, BACE and the supporting material provided with BACE will allow any seasoned, telecommunications modeler the ability to review the inputs, review the logic, review the calculations, and verify the output.

Q. PLEASE DESCRIBE HOW PARTIES CAN REVIEW THE BACE MODEL.

A. My direct testimony included several capabilities to aid the user in evaluating BACE, including:

1. A detailed Users Guide (Exhibit JWS-2);
2. A detailed Methods Manual (Exhibit JWS-3);
3. A data dictionary and table layout (contained within the Methods Manual); and ,
4. Printable, BACE calculation logic source code for BACE version 2.2 (Exhibit JWS-4).

Q. WHAT OTHER MEANS TO EVALUATE BACE HAVE BEEN PROVIDED TO PARTIES?

A. There are several.

1) BellSouth offers, at no charge, BACE model support, by telephone and email.
2) I was a key presenter at public workshops on the model at the November 2003 NARUC meetings.
3) I presented information on the model at the Kentucky Commission on December 3rd, the Florida Commission on December 4, 2003, and at other venues in the BellSouth territory. Many of the CLECs that are actively participating in this docket attended some of these workshops.
4) Through counsel, parties were provided with access to BACE before my direct testimony was filed and without the need for a formal discovery request. Specifically, the link to the CostQuest website was forwarded electronically to AT&T on November 27, 2003 and to MCI on December 2, 2003. This version of BACE was substantively the same as the version of BACE filed with my direct testimony.
5) The majority of inputs (all non-proprietary inputs) are user adjustable so that changes can be made to test impacts and sensitivities; and various scenarios can be run either through the wizard or by modifying inputs and creating scenarios directly.

Q. HAVE YOU TAKEN ANY OTHER STEPS TO PROVIDE FULL ACCESS TO BACE?

A. Yes, I have. With my direct testimony I filed a version of the BACE model in which there is a linked database file (the file name is "Scenario"_Intermediate.MDB which resides in the "Scenario" folder) that allows the user to view non-sensitive intermediate processing tables for scenarios based upon the proprietary BellSouth customer data.

The BACE source code (for BACE version 2.0) was first provided to the parties in the Florida proceeding on December 23, 2003.

In Florida discovery, on January 22, 2004 BellSouth filed supplemental responses to Staff's Third Set of Interrogatories, which responses included PDF versions of the proprietary BACE tables for all nine BellSouth states, including Alabama. MCI, and AT&T received copies of these responses, which contain information that applies regionally in the context of the state TRO proceedings.

In Florida discovery Florida, on January 23, 2004, BellSouth filed supplemental responses to Sprint's First Request for Production of Documents, which included a BACE Demonstration scenario ("Demo") that is fully open for review by any party and which MCI and AT&T received copies of. The processed Demo scenario (including all input and processed BACE tables) is also fully accessible. It is intended to allow a user to see how the model processes from input data to intermediate processing tables to final values. (The price and customer demand "data" in the BACE Demo is for illustrative purposes only and should not be interpreted or construed to reflect values for any particular geographic area.

However, the user controlled input data in the BACE Demo is representative of the inputs filed by BellSouth).

With the above mentioned material, the user can review the structure of the system, all tables (input and processed), and follow the processing of the model much in the same way as I (and my team) have in developing, testing and refining BACE. And, all of these resources were available at least four weeks prior (and some were available three months prior) to the filing date of rebuttal testimony in Alabama. Yet, Mr. Klick, Dr. Bryant and Mr. Wood still claim that their access to the model has been impeded in some way.

Finally, at the request of a party to the proceedings in Florida (the party is not involved in the Alabama proceedings), BellSouth has made the complete editable source code of the BACE model available for review by all parties at its offices upon request. To date, none of the parties in this proceeding has availed itself to the access provided by BellSouth. In short, claims that the BACE model is not sufficiently "open" are simply not credible.

Q. ARE THERE ANY OTHER AVENUES FOR A USER TO RECEIVE SUPPORT REGARDING BACE?

A. Yes. I am available to answer questions. In fact, parties in the Florida and South Carolina proceedings have called me and my team repeatedly as they worked through the code and the tables. This is not the case for parties to this proceeding

here in Alabama. In my opinion, it is easier and more productive to address an issue or question in an open manner rather than making accusations in testimony.

Q. YOU HAVE FILED THE DEMONSTRATION SCENARIO. CAN THIS BE USED TO VERIFY THE SYSTEM?

A. Yes. In creating systems, developers recognize that a test dataset (designed to test various conditions within the model) is an invaluable and well known approach in testing complex models and the formulas / algorithms within. As such, we released the Demonstration scenario to allow others to test BACE in the same manner as it has been tested by me and my team. That is, the user can run the system, follow the processing, verify each formula / algorithm, and be reassured that the full "production" model will produce reliable results.

Q. THE DEMONSTRATION SCENARIO PROVIDED TO THE CLECS IN DISCOVERY IN FLORIDA DOES NOT HAVE ACTUAL PRICE AND CUSTOMER DEMAND DATA (NO ACTUAL DATA SPECIFIC TO ANY STATE). WHY ARE CERTAIN TABLES AND INTERMEDIATE RESULTS STILL LOCKED FROM THE USERS' VIEW IN THE FULL BACE MODEL WITH ACTUAL DATA?

A. BACE, unlike the AT&T Model (which contains <u>no</u> revenue information and no Alabama-specific product demand and customer counts), uses a proprietary database containing commercially sensitive and valuable information. Naturally, this data has to be protected. My objective in developing BACE was to make the

model as open and easy to use, review, and evaluate, while still protecting this granular, sensitive and powerful data. Certainly, with the additional filed material (filed in my direct and rebuttal testimony and in responses to discovery), BACE users have more than adequate opportunities to use, review and evaluate the model.

Q. WITHIN THE FILED BELLSOUTH SCENARIO, ARE THERE INPUTS THAT <u>CANNOT</u> BE MODIFIED BY THE USER IN BACE?

A. The user cannot modify the initial input values for market prices and quantities. These "locked" quantities include both the total number of customers and the number of each product category sold. However, the user has the ability to control modeled CLEC prices via the CLEC price discount and the bundle price inputs. These additional tables were created specifically to allow the user to control a la carte and bundle prices. The user also can control the CLEC quantities via the CLEC market penetration inputs.

Q. WHY CAN'T THE USER DIRECTLY VIEW (AS MR. KLICK WOULD PREFER) AND MODIFY THE UNDERLYING MARKET PRICE AND QUANTITY INPUTS?

A. The underlying market price and quantity information is proprietary and commercially sensitive. It is not possible to protect this proprietary information and still allow the user to change it. As a result, I designed BACE to provide the

user the ability to create CLEC prices and quantities without adjusting the underlying data. The TRO requirement for granularity implies the need to examine a modeling trade-off between allowing the user to change every possible input and having a model that uses this granular, proprietary data. The clearly superior choice is to use proprietary data and provide other methods for the user to obtain modeled CLEC prices and quantities.

Q. DO YOU HAVE ANY ADDITIONAL RESPONSE TO MR. WOOD'S AND MR. KLICK'S SUGGESTIONS THAT EDITABLE SOURCE CODE IS REQUIRED FOR A REVIEW OF A MODEL?

A. Yes. Mr. Wood's claim (rebuttal page 4, lines 10-12) and Mr. Klick's claim (rebuttal section II) that editable source code is required to review BACE is misleading for several reasons. First, as the primary designer, debugger, and developer of the code, I do not have the editable version of the source code (and have never had it). I have a word processor document (similar to a PDF) that I use to analyze the code in conjunction with the ability to review the intermediate tables.

Second, in contrast to what Mr. Klick implies, editable source code for all key components of telecommunications models typically have not been provided to parties in a format allowing the user to make code changes or even to review. For example, the FCC's HCPM, and AT&T's sponsored HAI and original Hatfield models, which rely on customer data developed by PNR/TNS Telecom, have never provided editable source code for the development of the key customer data

to parties. Parties were permitted to visit a PNR/TNS site and use the PNR/TNS computers to review the intermediate outputs of their processes. However, parties were not allowed to review the code. In addition, any parties making such a visit were precluded from copying anything, leaving with any material, and were charged a fee by PNR/TNS for the use of computers.

Similarly, consider the telecommunications model BCPM. This was a joint project of BellSouth, Sprint and USWest. It was written in Excel, VBA and C++. While the Excel and VBA programming were available to users, only a Word® document of the C++ code (which created the clustered customer data) was provided to parties.

Third, the non-Excel source code for the BSTLM, a model that was used by the Commission in recent BellSouth UNE proceedings, was released in PDF form, i.e., in the same format that BACE source code was provided to the other parties in this proceeding.

Fourth, contrary to Mr. Klick's statements and as noted previously in this surrebuttal testimony, the BACE calculation source code is available, printable and readable, and all BACE files have been opened so that any party can review the BACE model. To my knowledge, neither Mr. Klick, nor Mr. Wood, nor Dr. Bryant has ever asked for additional access to the BACE source code nor have they availed themselves to all that has been made available.

Q. IN REGARD TO BSTLM, MR. KLICK (REBUTTAL PAGE 16) CITES YOUR TESTIMONY IN GEORGIA REGARDING THE USE OF MICROSOFT EXCEL IN THE MODEL. WHY DID YOU NOT USE MICROSOFT EXCEL IN DEVELOPING BACE?

A. I did use Excel in BACE. (Microsoft Excel is used in BACE for the development of the retirement rates through the use of CapCost.XLS Excel workbook that resides in the BACE root directory.) However, the use of Excel in BACE development was limited. As a developer, I have to look at deploying an application for each unique situation that meets multiple, sometimes conflicting, criteria. These criteria can include: handling of complex calculations and data interactions, processing of large datasets, use of proprietary data, quick run times, deployable to parties in a proceeding, open and reviewable code, etc. While Microsoft Excel is a useful tool, it is not the best tool for every application (otherwise there would be no need for applications to be built in Visual Basic, Microsoft Access, C++, SAS, Delphi, Oracle, etc…). In developing BSTLM, it was my opinion that the mixed use of Excel, VB, C++, Access and other tools would best meet the requirements of the application. For BACE, it was my opinion that VB and Access would be the best tools to meet the majority of the requirements (including openness and reviewability). There was no plot to hide anything, as envisioned by Mr. Klick. Rather, it was the result of a rational review of the requirements.

Further, it is interesting that Mr. Klick compares the openness of BACE to BSTLM. BSTLM included significant code development in Visual Basic and

Access. And, the review of that code by outside parties was facilitated using PDF code files that referenced Access table and field names (similar to BACE). In fact, parties from Mr. Klick's firm were involved in many of the state proceedings that reviewed BSTLM and apparently were able to review the PDF version of the source code, understand field names, and make recommendations for modifications.

Q. EVEN THOUGH THE COMPILABLE SOURCE CODE IS NOT REQUIRED TO REVIEW BACE, HAS BELLSOUTH MADE AN EDITABLE, COMPILABLE VERSION OF ALL SOURCE CODE AVAILABLE FOR PARTIES TO INVESTIGATE?

A. Yes. As mentioned above, in connection with the Florida proceeding, BellSouth has made available the editable BACE source code on a machine at BellSouth's offices. AT&T and MCI were parties to the Florida proceeding and were aware of the fact that BellSouth had made the editable BACE source code available. Not only does this computer contain the editable source code for the calculation engine, it contains all the input and processing tables in an open format (i.e., passwords are either removed or provided) and the source code for the User Interface executable file and Table Utility executable file. The last two source code files have no calculation functions, but are provided for completeness.

While parties are only able to use the code on site, they have full access to all BACE processing logic in an editable form that they can modify, compile, run and analyze the results. In addition, all tables within BACE, including proprietary

data, have been left unprotected. BellSouth will make this computer available at other BellSouth offices for additional review, if requested (as it has by making it available at its Washington D.C. office for a party to the South Carolina proceeding). To date, none of the witnesses in this proceeding has requested such access.

With the provision of this source code machine, the source code files, and all the BACE input and processing tables, the parties have at their disposal full and open access to BACE (even more than has been requested by the parties in this proceeding) which makes the issue of BACE openness moot in this proceeding.

I should note that even though full and open access to BACE has been made available by BellSouth, Mr. Klick, to the best of my knowledge, has not availed himself of this access to the BACE source code machine, which he claims to be so critical to validate its results. This is in spite of the fact that the BACE source code machine, which includes open access to all data, has been available at BellSouth's Washington D.C. office which is near Mr. Klick's business offices in Washington D.C.

Q. MR. KLICK CLAIMS (REBUTTAL FOOTNOTE 3, PAGE 11) THAT "IF THE CODE IS PRODUCED AS SPRINT REQUESTED [IN FLORIDA], WE INTEND TO USE IT…" PLEASE RESPOND TO THIS CLAIM.

A. First, it bears repeating that, to my knowledge, neither AT&T, nor Mr. Klick nor Dr. Bryant (or any party to this proceeding in Alabama) has requested access to

the editable version of the source code. If access to the source code in an editable version is so vital to AT&T's and MCI's review, I would expect that AT&T, MCI, and their consultants would have availed themselves of any avenue to the source code at any point in time from the time they first gained access to BACE in November of 2003 and the source code in December of 2003. It appears that it is better for AT&T and MCI to complain about access to the source code than to actually gain access to it.

In regard to Mr. Klick's reference to the Sprint request in Florida, I think it is useful to put the Florida source code request in perspective.

In late December 2003, I placed the PDF version of the BACE source code on the CostQuest website. I provided the proprietary password to access that website to BellSouth. My understanding was that both AT&T and Sprint had informally requested the BACE source code and that website access would be provided so that the parties could review the source code. Additionally, with my direct testimony, I provided a printable, PDF copy of the source code for the version of BACE that was filed in this proceeding (Exhibit JWS-4).

In mid-January 2004, I received data requests from Sprint. These data requests included a request for the editable version of the BACE source code. To my knowledge, there was no comparable request from AT&T. Thereafter, on January 30, 2004, I understand that BellSouth offered to make an editable version of the BACE model available at a BellSouth location. I have learned that this offer was emphatically rejected by Sprint witnesses during a conference call between

BellSouth, the Florida Commission staff, and Sprint. While I did not personally participate in the conference call, I was available in case my participation in the call was needed.

BellSouth reiterated its offer to make the editable version of the BACE source code available in early February 2004. I personally arranged for a computer with editable source code to be sent to BellSouth's Tallahassee office. The computer was delivered to Tallahassee and available on February 13, 2004.

It appears that it is better for Mr. Klick (and Mr. Wood and Dr. Bryant) to complain that they do not have access to an editable version of BACE than to request the access that has been available for sometime. Their complaints are analogous to customers sitting in a restaurant, with a full country breakfast placed before them on the table (sufficient to satisfy even the heartiest rational hunger), complaining that they never received the Eggs Benedict when (after more careful scrutiny) the Eggs Benedict was on the menu all along and they simply never bothered to order it.

Q. MR. KLICK CLAIMS (REBUTTAL PAGE 12) THAT THE BACE SOURCE CODE PDF IS INCOMPLETE. IS HE CORRECT?

A. No. At page 12 Mr. Klick lists functions and subroutines that are referenced or called by the BACE source code but which have not been provided by BellSouth. These are housekeeping/interface functions or utility functions that do not affect the underlying calculations in BACE. To ask for these is a bit like asking Mr.

Turner (AT&T) for the underlying source code for Excel to review how Excel works.

However, to ensure that that all parties have access to material that may be relevant (even though these functions are not relevant to the calculations in BACE), I have provided as exhibit JWS-7 and JWS-8 the source code for these functions. In addition, these routines are available on the BACE source code machine that BellSouth has made available.

Q. MR. KLICK CLAIMS (REBUTTAL PAGE 9, LINES 7-11) THAT "WITHOUT ACCESS TO THE SOURCE CODE IN A FORMAT THAT WOULD PERMIT IT TO BE MODIFIED AND RE-COMPILED IT IS IMPOSSIBLE FOR A PROGRAMMER TO FOLLOW THE FIELD NAMES THAT ARE USED IN THE CALCULATIONS SHOWN IN THE ADOBE ACROBAT FILE, …" IS THIS TRUE?

A. Certainly not. While Mr. Klick may not be able to follow the field names or understand the BACE source code, this does not mean that a programmer could not perform these tasks (as he claims). First, as I stated earlier, I don't use (and didn't use) the editable version of the source code to develop and refine BACE. Second, in order to modify the code a programmer first has to understand the code, the tables it uses, and the field names it references. Mr. Klick seems to argue the opposite. He needs to modify the code to understand it and the field names it references. This is counter-intuitive. Having an editable re-compilable version of any program does nothing to help the user follow the code or the field

names. This is a bit like claiming that one requires chalk and an eraser to follow a series of mathematical equations on a blackboard.

While it is theoretically possible that one might make a meaningful change to the BACE code without "following the field names" and understanding the code, it is only possible in the same way that it is theoretically possible to write sound testimony blindfolded at the keyboard.

Third, as I mentioned previously, the user has other tools to help evaluate the model in addition to the Adobe Acrobat file of the source code: the BACE demonstration scenario; the ability to change inputs via the wizard or user-determined scenarios; BACE telephone and email support, and access to an editable version of BACE is available to parties that requested it.

If manipulation of the source code was genuinely what Mr. Klick needed to understand BACE, one would have expected him to use all avenues available.

Q. IN ADDITION TO AT&T'S FAILURE TO AVAIL ITSELF OF THE EDITABLE BACE SOURCE CODE, DOES ANYTHING ELSE APPEAR DISINGENUOUS ABOUT AT&T'S DISCUSSION OF LIMITATIONS TO THE ANALYSIS OF BACE?

A. Yes. First, Mr. Wood does not cite a single Alabama BACE result.

Second, it appears that Mr. Klick formulated his opinions regarding BACE before he ever attempted to run the model. It is noteworthy that his rebuttal testimony filed in Alabama is substantially similar (in the first 30 pages) to that first filed in North Carolina on February 16, 2003. In his Alabama rebuttal he added (Alabama rebuttal page 47, lines 4-6): "understanding sensitivity studies is an important initial step in seeking to understand how a model works …" However, when Mr. Klick filed his substantially similar North Carolina rebuttal testimony, on February 16, 2003, he did not file a single BACE result, and he had apparently not run the BACE model, or certainly he had not performed the "important initial step in seeking to understand how [BACE] works." Therefore, even without running BACE or taking this important initial step, Mr. Klick's opinions were apparently already formed.

Q. DR. BRYANT CLAIMS (REBUTTAL PAGE 40, LINE 5) HE HAS "ONLY A LIMITED AMOUNT OF TIME TO WORK WITH THE MODEL …" HAVE AT&T AND MCI HAD AMPLE OPPORTUNITIES TO REVIEW AND RUN BACE?

A. Yes. Representatives of AT&T and MCI attended a number of workshop presentations on the BACE model, mentioned above. Additionally as I noted earlier, the link to the CostQuest website was forwarded electronically to AT&T on November 27, 2003 and to MCI on December 2, 2003. AT&T and MCI were both parties to the Florida proceeding where they received a copy of the BACE model with Florida data on December 4, 2003. And finally, the BACE source code is available in PDF format, a demonstration scenario (including all with all

input and processed BACE tables) is available, and the editable version of the model is available.

As I noted earlier, neither AT&T nor MCI requested an editable version of the BACE model, and neither has apparently availed itself of the opportunity to use the editable version of the BACE model.

Q. IS IT NECESSARY TO HAVE ALABAMA-SPECIFIC INPUT DATA TO EVALUATE BACE AS A MODEL?

A. Certainly not. As I indicated earlier, any party could evaluate BACE as a model with the demonstration data, or data from another state (recall that BACE was formally filed in Florida originally on December 4, 2003). While the evaluation of impairment in Alabama obviously must rely upon a granular analysis of Alabama data, the model itself can be reviewed with the data from another state (or the sample data in the BACE demo).

Q. MR. KLICK SUGGESTS (REBUTTAL PAGES 8-9) THAT MANY OF THE BACE TABLES ARE INACCESSIBLE TO THE USER. DO YOU AGREE?

A. No, quite the contrary. First, BACE contains a dynamic reporting engine that allows the user to obtain information from the processed scenarios from a summary level down to a granular analysis. The data available from the reporting engine includes all key results contained in the PMaster, QMaster, RMaster and

CMaster BACE files. Second, as originally filed, 45 of 48 input Access Tables in BACE were open to any user. Of the three tables that are protected, PDF versions of the data have been made available to the parties through discovery in Florida. In addition to the PDF versions of the three tables, the user can control how these three protected tables are used via the use of the other 45 tables. Third, with the use of the Demonstration scenario or the source code machine at BellSouth's site, all tables are open for review.

Q. MR. KLICK (REBUTTAL PAGE 14) CITES TWO (OF TEN) OF THE FCC'S UNIVERSAL SERVICE COST MODEL REQUIREMENTS. DOES BACE SATISFY THESE TWO REQUIREMENTS?

A. Yes it does, even though BACE is not a universal service cost model and these criteria, to the best of my knowledge, have not been noted as a requirement of impairment models by the FCC. As I described above, BACE is open to review and evaluation. In addition, during my deposition in Florida (which Mr. Klick cites in his rebuttal testimony on page 53) I explained how BACE met the FCC's universal service criteria number eight (deposition transcript, page 102-3).

In addition, BACE satisfies the FCC's requirement number nine. The user has the ability to modify the critical assumptions and engineering principles such as the cost of capital, depreciation rates, fill factors, input costs, overhead adjustments, retail costs, etc.

Q. MR. KLICK CLAIMS (REBUTTAL PAGE 4, LINES 20-21) THAT HE HAS FOUND ERRORS IN BACE AND PRODUCED COUNTER-INTUITIVE RESULTS FROM BACE, WHILE MR. WOOD (REBUTTAL PAGE 4, LINE 10 AND PAGE 7, LINES 8-10) SUGGESTS THAT BACE IS STRUCTURALLY LIMITED AND PRODUCES INCONSISTENT RESULTS. WHAT IS YOUR RESPONSE?

A. While some of the parties have identified what they may believe are unusual results (which I will describe later in my testimony), there is nothing in the testimony of Mr. Klick, Mr. Webber, Mr. Wood, or Dr. Bryant that indicates anyone has identified any significant errors, in the model output, model platform or model operations. Outside of misunderstandings of the operations of BACE and misunderstandings of the allocations of indirect costs and corporate taxes across geographic areas within BACE, the majority of the issues that have been raised in regard to BACE and its output are related to input values not BACE algorithms. In fact, Dr. Bryant, in Florida, Georgia, North Carolina and Tennessee states (for example, Tennessee rebuttal, page 28 lines 3-4, February 27, 2004)): "I cannot fault the general approach outlined in Mr. Stegeman's testimony and in the model documentation."

In addition, BellSouth posed the interrogatory question to AT&T in Florida: "Do you contend that there are any errors or flaws in the BACE model? AT&T responded: "AT&T has made no such contention." (AT&T's Response to BellSouth's Sixth Set of Interrogatories, Interrogatory 240, dated January 16, 2004).

Q. MR. WOOD CLAIMS (PAGE 7, LINES 7-10 OF HIS REBUTTAL) THE MODEL IS NOT STABLE AND DOES NOT PRODUCE CONSISTENT RESULTS? IS THIS CLAIM TRUE?

A. Not at all. I will focus specifically upon Mr. Wood in more detail later in this testimony. However, Mr. Wood's accusation is unsupported and unjustified.

Q. DID YOU MAKE ANY MODIFICATIONS TO BACE WITH YOUR REBUTTAL FILING TO ENSURE IT PROVIDES THE MOST ACCURATE INFORMATION?

A. Yes I did. However, it was not a change to the BACE model but rather it was a change to the BellSouth filed scenario (Exhibit JWS-6). As an initial matter, I remain committed to submitting the best possible model to the Commission. This means that any substantive modifications will be made, if necessary, to present the most accurate version of BACE.

Q. DESPITE CRITICISMS, HAVE OTHER WITNESSES USED BACE TO SUPPORT THEIR POSITIONS?

A. Yes. While some of the reviewers claim that BACE is flawed, the reviewers do not seem to have a problem in using the model, with inputs of their choice, to support their own positions. For example, Mr. Wood claims (rebuttal page 4, line 13) albeit without providing any information (e.g., BACE results) by which to

assess either type of claim: "it is impossible in many cases to populate the model with meaningful input values" and (rebuttal page 24, lines 12-16): "I have not been able to determine whether the model calculations are accurate…renders the results unreliable." Yet on page 21, lines 20 and 21 he states: "When inputs and assumptions are used that do reflect such reasonable judgment, the results of the BACE indicate that a rational CLEC …." and at page 10, line 8: "As BellSouth's BACE model can be used to demonstrate . . . ." (emphasis added).

It appears that Mr. Wood populated the model with (what he considers to be) meaningful inputs and the results were reliable (unless he is indicating that his inputs and results are not meaningful or reliable). Alternatively, he has concluded, albeit in a circular fashion, that the only reliable and meaningful inputs are those that show impairment in every wire center in Alabama. In either case, his approach appears self-serving.

Q. MR. KLICK STATES (REBUTTAL PAGE 17, LINES 15-16) "THIS ASYMMETRY OF INFORMATION ABOUT THE BACE MODEL CREATES AN ENVIRONMENT IN WHICH ERROR CORRECTION COULD TEND TO GO ONLY IN THE DIRECTION OF THE MODEL PROPONENT." DO YOU HAVE ANY COMMENT?

A. Yes. First, there is not a significant asymmetry of information. AT&T has access to virtually the same information that I do in developing and evaluating BACE.

Second, the errors discovered and corrected in BACE and its input data have not gone in the direction that would support BellSouth's claim of non-impairment. For example, the most recent update to data used in this proceeding in Alabama, the Florida proceeding, the Georgia proceeding, the North Carolina proceeding, and the Tennessee proceeding increased the transport costs that are reported and thereby reduced the NPV values in all markets.

Third, as the model developer I have a responsibility to produce an economic evaluation tool that is sound and satisfies the TRO. As I stated earlier, I remain committed to submitting the best possible model to the Commission. In contrast, Mr. Klick did not develop a model and does not have the same scope of responsibilities that I have. It appears, based on the implication of his testimony at page 17, that if Mr. Klick were to discover an error in BACE that worked in favor of BellSouth, perhaps he would not bring it to the attention of the Commission or BellSouth. Indeed, in Mr. Klick's discussion of the input dimension of the BACE model there is already some evidence to this effect. Mr. Klick describes telecommunications cost reductions as part of the reason why he expects price reductions. However, in Mr. Klick's sensitivity analysis, he applies a 1% annual and a 15% initial price reduction but asymmetrically he does not include the corresponding cost reductions he himself has stated would accompany these very same price declines.

Q. MR. KLICK CITES THE TESTIMONY OF KENT DICKERSON IN FLORIDA. DO YOU HAVE ANY COMMENT?

A. While I am not an attorney and I am not offering a legal opinion in this regard I do have a comment. While Mr. Klick may feel compelled to rely upon the testimony of others in other jurisdictions, Sprint is not a party in this proceeding and Mr. Dickerson (unlike myself) will not be available for cross examination here in Alabama.

Should the Commission decide to consider the testimony of Mr. Dickerson, I would expect that the Commission would also consider the surrebuttal testimony I filed in Florida as well as the surrebuttal testimony of Drs. Aron and Billingsley filed in Florida.

Q. ARE THERE ANY OTHER AREAS OF BACE MISUNDERSTANDING EXHIBITED BY MR. KLICK?

A. Yes. At times, it appears that Mr. Klick confuses the BACE model with issues regarding the choice of BACE inputs. For example, Mr. Klick cites (rebuttal page 48, line 6) "Mr. Stegeman's results", however I do not sponsor results in my direct testimony, I only sponsored the BACE model, its documentation, and materials useful for evaluation of the model. Mr. Klick claims "BellSouth's BACE model assumes that the CLECs will not serve geographic areas that are not profitable" (rebuttal page 43, lines 2-3). This is incorrect. Here he has confused user adjustable optimization inputs with the BACE model itself.

Section 3. THE REBUTTAL BY CLECS CONCERNING BACE IS INCONSISTENT AND CONTRADICTORY

Q. EARLIER YOU STATED THAT THE REBUTTAL TESTIMONY BY THE CLEC WITNESSES IS INCONSISTENT AND CONTRADICTORY REGARDING BACE. PLEASE EXPLAIN THIS STATEMENT.

A. There are four major areas of inconsistency and contradiction: 1) whether the fundamental BACE approach is reasonable; 2) whether BACE is sensitive or insensitive to changes in inputs; 3) whether BACE optimization should be utilized; and, 4) which inputs are appropriate. I address the first three items in my testimony. With respect to inputs, these will be addressed in the testimony of other BellSouth witnesses such as Drs. Aron and Billingsley.

Q. WHAT INCONSISTENCIES EXIST IN THE CLEC WITNESSES' TESTIMONY REGARDING THE FUNDAMENTAL APPROACH UTILIZED BY BACE?

A. Mr. Wood makes vague and unsubstantiated claims about the appropriateness of BACE. For example, he states: "the structural limitations of the model cannot be corrected …" (Wood rebuttal, page 4, line 10) and "I have been able to determine that the model does not consider all barriers to entry, …" (Wood rebuttal page 24, lines 14-15).

In contrast, Dr. Bryant states in Florida, Georgia, North Carolina, and Tennessee: "… with one or two exceptions that I discuss below, I cannot fault the general approach outlined in Mr. Stegeman's testimony and in the model documentation,

…" (e.g., Tennessee Bryant rebuttal, page 28, lines 2-4, February 27, 2004) And, "… I do not disagree with the general approach to estimating CLEC profitability outlined in Dr. Aron's and Mr. Stegeman's testimony." (e.g., Tennessee Bryant rebuttal, page 31, lines 17-19, February 27, 2004).

Q. WHAT INCONSISTENCIES EXIST IN DISCUSSIONS OF WHETHER BACE IS SENSITIVE OR INSENSITIVE TO CHANGES IN INPUTS?

A. Mr. Wood claims that even slight changes to key inputs yield drastically different results (Wood rebuttal, page 20, lines 15-18). And, Mr. Klick (rebuttal, page 41, lines 11-16) claims that a 5 percent market share and a 1% per year decline in prices reduces NPV from $91.6 million to less than $1 million. In contrast, Dr. Bryant appears to find the model's outputs to be insensitive to model inputs. (Bryant rebuttal, pages 28-29).

Q. IS IT POSSIBLE TO ASSESS MR. WOOD'S CLAIM THAT SLIGHT CHANGES TO INPUTS YIELD DRASTICALLY DIFFERENT RESULTS?

A. No. Like much of Mr. Wood's testimony regarding BACE, this is an unsubstantiated assertion. Unlike Dr. Bryant reviewing BACE, Mr. Wood does not cite or provide even a single numerical result from BACE. Moreover, as I noted earlier, Mr. Wood only suggests one input change with any specificity. That change is the suggested 5.1% annual price change (based on a review of long distance prices 1984-1993). Even in this case, he does not specify whether he

would apply this change to the default input values (which already reflect price reductions below existing prices).

Q. DR. BRYANT APPEARS TO BELIEVE THAT BACE IS RELATIVELY INSENSITIVE TO INPUT CHANGES (REBUTTAL PAGES 28-30). IS THIS INCONSISTENT WITH HIS FINDINGS?

A. Dr. Bryant's suggestion that BACE is insensitive to input changes is inconsistent with his own reported findings and other portions of his testimony. First, it is noteworthy that much of his discussion at page 29 line 7 through page 30 line 8 is based on the number of wire centers that change from positive to negative NPV, rather than focusing on the size of the change in NPV. Any binary measure (such as whether a wire center changes from positive to negative NPV) can hide a great deal of information as compared to a continuous variable (such as the total dollar amount of NPV). Indeed, I find it noteworthy that he does not provide any measure of actual NPV in Exhibit MTB-9.

Second, in exhibit MTB-10 his very first column (a) with six input changes shows 138 of 145 wire centers with negative NPV values. As a simple matter of logic, either BACE does respond to input changes, or the values Dr. Bryant has chosen for his sensitivity runs are unreasonably pessimistic by any measure of judgment. (Of course, it may be possible that both are true.)

Q. WHAT INCONSISTENCIES EXIST ACROSS THE PARTIES IN DISCUSSIONS OF WHETHER THE BACE OPTIMIZATION ROUTINES SHOULD BE UTILIZED?

A. Mr. Wood appears to believe that segmentation, optimization and cream skimming are to be abhorred and no amount of data could convince him that they do, or even could, exist (Wood rebuttal, pages 34-39). Mr. Wood claims that firms investing in switches "… will have the incentive to serve as many customers as possible as quickly as possible … will hardly be in the position to be selective about its customer base." (Wood rebuttal, page 37, line 21 to page 38, line 3)

Dr. Bryant runs BACE with the optimization filters off (Bryant rebuttal page 32, line 7 and page 38, line18), then later complains that he finds "pockets of unprofitability" (Bryant rebuttal page 32, lines 13-14)

On the other hand, Mr. Klick in his sensitivity analyses does not change the optimization inputs from the BellSouth recommended inputs apparently agreeing that these are reasonable.

It appears the solution to Dr. Bryant's complaints is the continued use (rather than the abandonment) of a number of the optimization filters. More importantly, the power and (ease of use) of the BACE model allows Dr. Bryant, to consider (and describe in his rebuttal testimony) results at such a granular level of detail (e.g., NPV by customer type by wire center).

Section 4. <u>CLARIFICATION OF BACE FEATURES AND MISINTERPRETATIONS OF BACE</u>

Q. DR. BRYANT (REBUTTAL PAGE 31, LINES 15-17) CLAIMS THAT "A SECOND ASPECT OF THE PROBLEM LIES IN THE MARKET DEFINITION PROPOSED BY BELLSOUTH AND IN THE WAY THE MODEL AGGREGATES RESULTS TO CONFORM TO THIS MARKET DEFINITION." PLEASE COMMENT.

A. There is no fundamental market constraint in BACE. First, note that BACE allows the user to choose different definitions of markets; the user is not tied to any particular market definition. Second, despite Dr. Bryant's claims, he provides in his own rebuttal testimony BACE values that are not aggregated at the level he claims to be a problem.

Third, Dr. Bryant's entire discussion of "pockets of unprofitability" (rebuttal page 32, line 14) conflicts with the FCC's TRO Errata. Errata item number 23 states: "in paragraph 519, we delete the fifth sentence and delete footnote 1586." The deleted sentence at paragraph 519 states: "State commissions must ensure that a facilities-based competitor could economically serve all customers in the market before finding no impairment." The fact that the FCC deleted this sentence in the Errata item number 23 indicates that the FCC clearly rejected the notion of having to serve all customers or customer groups in a market.

Q. MR. WOOD CLAIMS THAT BACE PRICE INPUTS DON'T REFLECT VARIATIONS IN RETAIL PRICES ACROSS THE STATE. IS HE CORRECT?

A. No. While the spend band (quintile in the case of retail customer's) average price/average revenue per user (ARPU) is determined at the state level, the number and the percentage of customers falling into each spend band (quintile for residence for example) varies by wire center based on both the retail prices that actually exist in the wire center and the propensity of customers in the wire center to purchase services in each of the major service categories. Using this wire center specific customer count and the ARPU, an unbiased estimate of the revenue for a wire center is determined.

For example, if wire center A is in a low-priced rate center (i.e., customers facing low tariffed rates), it will tend (other things being equal) to have customers with actual spend characteristics that are below the state wide average and will therefore have a higher proportion of mass-market customers in the lower spend quintiles. If wire center B is in a high-priced rate center, its customer's actual spend levels are likely to be relatively high and they will tend to have a higher proportion of mass-market customers in the higher spend quintiles.

Q. DOES BACE ALLOCATE CUSTOMERS TO WIRE CENTERS?

A. No. Mr. Wood's claim (rebuttal page 39, line 20-24) that customers are "allocated" from the state level down to wire centers is incorrect. In North

Carolina, Mr. Klick made a claim similar to Mr. Wood's (Klick North Carolina rebuttal page 14), that BACE uses "a mechanism that forces an equal number of customers of each class into each spend category in each wire center." While the actual spend information by individual customers is not retained from the original data source, actual customer spend information by wire center is used to determine the number of customers in each wire center that fall into each of the customer spend categories. Customers with similar spend characteristics are treated similarly.

In Alabama, Mr. Klick has now dropped the reference to wire centers in his rebuttal testimony (presumably because he knew it is wrong) but he retains some misleading and nonsensical language (rebuttal page 10, lines 3-5), claiming that: "… using a mechanism that, statewide, forces an equal number of customers of each class into each spend category …" This is also incorrect. At the state level, customers are not "forced" into any category. Actual spend information is used to determine the range of each residential customer spend quintile (terciles for business categories).

I would like to note that from the starting point of actual expenditures by wire center by customer group, the user can establish starting CLEC price discounts, changes in the discounts over time, starting bundle prices, and changes in bundle prices over time, penetration rates and the speed by which penetration is achieved.

Q. MR. WEBBER STATES (REBUTTAL PAGES 5-6) AS SECTION HEADING IV: "BELLSOUTH FAILS TO DEMONSTRATE THAT

CLECS CAN USE EELS TO SUPPORT MASS MARKET UNE-L." CAN YOU CLARIFY HOW EELS WORKS WITHIN BACE AND COMMENT ON MR. WEBBER'S ASSERTION?

A. Yes. In regard to EELs, if the user specifies, the model will determine whether collocation or EELs will be used on a wire center by wire center basis. This determination considers the difference in NPV between a full collocation approach and a full EELs approach at each wire center. Regardless of one's perspective regarding the use of EELs, Mr. Webber is incorrect since the user of the model is free to turn EELs completely off so that only collocation is used. It should be noted that in the BellSouth filed Alabama BACE run, collocation (rather than EELs) is used in the great majority of locations.

Q. MR. KLICK SUGGESTS (REBUTTAL PAGE 44) THAT ALLOCATING SOME OF THE FIXED COSTS WITHIN THE LATA TO BOTH BELLSOUTH AND TO OTHER ILECS WITHIN THE LATA UNDERSTATES CLEC IMPAIRMENT. PLEASE COMMENT.

A. This BACE assumption is actually relatively conservative. BACE only allocates these costs to non-rural ILECs (BACE implicitly assumes that there is no CLEC service to customers in rural ILEC areas). And for these other non-rural ILECs, this approach has the effect of assuming that the adjacent areas have a zero NPV; i.e., there is no opportunity for the adjacent areas to generate a positive NPV in addition to the BellSouth area. Finally, the impact of this allocation on the total NPV in BellSouth's sponsored BACE Alabama run is only a reduction of less

than 0.4% (i.e., less than 4/10ths of 1 percent). Thus, whether one agrees or disagrees with the approach, the impact in Alabama is insignificant.

Q. MR. KLICK SUGGESTS (REBUTTAL PAGE 3, LINES 8-9) THAT HE HAS IDENTIFIED "A SERIES OF ANOMALOUS RESULTS" AND DR. BRYANT CLAIMS HE HAS IDENTIFIED "OCCASIONAL ANOMALOUS RESULTS" (REBUTTAL PAGE 39, LINES 18-19). PLEASE COMMENT.

A. There are two categories of reasons why BACE results from two runs can have the appearance of being anomalous: 1) allocations of indirect costs; and 2) income tax liability allocations. For these categories, I provide below a clear explanation of how the results can be produced and why these results are intuitive or the result of anomalous user inputs.

Q. PLEASE DESCRIBE HOW ATTRIBUTION AND ALLOCATION OF COSTS CAN LEAD TO THE APPEARANCE OF COUNTER INTUITIVE RESULTS.

A. If the user changes input values that only affect mass market customers (e.g., an input related to DSL service, which is not offered to large business customers) the NPV values for enterprise operations can still change due to cost attribution and cost allocation. If input changes lead to lower NPV values for mass market customers and losses of these customers for some areas or markets, the enterprise customers in some areas may then have lower NPV as they must now bear a

greater proportion of the higher level costs in some areas where mass market customers are no longer served. This is not a counter-intuitive or anomalous result, but rather a reflection of the allocation of indirect costs that the CLEC incurs.

Q HOW CAN TAX ALLOCATION LEAD TO THE APPEARANCE OF COUNTER INTUITIVE RESULTS?

A. BACE was designed to model an efficient CLEC, a firm that attempts to serve customers profitability and avoids serving unprofitable customers and areas. However, if the user turns off many of the optimizations or provides inputs that lead to a negative NPV in total for the CLEC, the allocation of corporate taxes can produce results below the state level that appear to be counter intuitive.

It is important to note that in any situation where total post-tax NPV becomes negative, the allocation of taxes essentially becomes moot. This occurs either in situations of negative total pre-tax NPV, or where pre-tax total NPV is positive, but smaller than the tax liability.

Q. PLEASE EXPLAIN HOW CORPORATE INCOME TAXES ARE TREATED IN THE BACE MODEL.

A. First, it is important to note that the BACE after-tax and pre-tax NPV calculations reflect the cost of equity. Unlike the cost of debt (or other cost items), the cost of equity is not a tax-deductible expense. Therefore, if a BACE run (a hypothetical

run) were to reflect a zero NPV for a state, this would imply a significant accounting profit for the modeled CLEC and a significant corporate income tax liability, in order to generate after-tax profits sufficient to compensate shareholders for the cost of equity. There will also be a range of results in which a negative total after-tax NPV will correspond to an accounting profit and a corporate tax liability. Indeed, even with some range of negative total pre-tax NPV, the CLEC would still generate an accounting profit and a corporate tax liability (since the pre-tax NPV already includes the cost of equity, i.e., it already reflects the required accounting profit to satisfy shareholders).

BACE was designed to identify and quantify the likely costs and revenues that a CLEC would incur and obtain in a UNE-L environment. BACE calculates corporate income taxes and provides a reasonable method of allocating taxes to products and smaller geographic areas when the modeled CLEC has a total NPV that is positive. However, BACE's allocation of taxes below the state level is not foolproof for modeling an NPV negative CLEC.

Q. HOW ARE INCOME TAXES ALLOCATED TO PRODUCTS AND GEOGRAPHIC AREAS IN BACE?

A. BACE uses pre-tax NPV to allocate corporate income taxes. A ratio of total tax liability to total pre-tax NPV is used to allocate taxes to those products and geographic areas that generate a positive pre-tax NPV.

Q. WHAT HAPPENS WHEN A USER MODELS A CLEC THAT HAS AN OVERALL NEGATIVE NPV?

A. When a user models a CLEC in which the tax liability is greater than the pre-tax NPV, the post-tax results can appear counter intuitive. This is because more than a dollar of taxes is allocated to each dollar of pre-tax NPV (and more than a dollar of tax credit is allocated to each dollar of negative pre-tax NPV) causing NPV values to flip-flop from positive to negative (for positive pre-tax NPV) and negative to positive (for negative pre-tax NPV), when comparing pre and post-tax NPVs. (Counter intuitive results can also obviously occur if the pre-tax NPV in total is negative.) While the allocation of taxes in BACE can be adjusted in situations where the post-tax NPV is negative, I am not sure what benefit it provides since the CLEC in total has a negative NPV.

Q. MR. KLICK CITES (REBUTTAL PAGE 53) YOUR DEPOSITION IN FLORIDA REGARDING TAXES. DOES MR. KLICK CITE THE EXHIBIT REQUESTED BY THE FLORIDA STAFF EXPLAINING THE TAX ISSUE?

A. No, Mr. Klick does not mention the exhibit which was the culmination of the entire deposition discussion on tax allocation. Therefore, I have attached the exhibit requested by the Florida staff on BACE tax allocation, as Exhibit JWS-9 in this proceeding. This exhibit provides a description and numerical examples explaining the tax allocation issue.

Q. DO YOU HAVE ANY ADVICE FOR THE BACE USER SEEKING TO MODEL A CLEC THAT HAS A TOTAL NPV THAT IS NEGATIVE?

A. Yes. First, I am not sure I see the value in analyzing market results for a CLEC that in total has a negative NPV. (Of course, other parties may see value in creating peculiar scenarios in which BACE has the appearance of counter intuitive results). However, should a user wish to carefully consider instances in which total after tax NPV is negative, the user should focus on the pre-tax NPV values. As I noted earlier, the tax allocation mechanism in BACE was designed for scenarios where the CLEC had a positive NPV.

Q. MR. KLICK CLAIMS (REBUTTAL PAGES 52-53) THAT THERE IS A TAX CALCULATION ERROR IN BACE THAT YOU CHOSE NOT TO FIX. IS THERE A TAX CALCULATION ERROR IN BACE?

A. No, there is not a tax calculation error in BACE. As I describe above, the issue is a design issue of choosing a method by which to allocate total corporate income taxes (which are already calculated) to products and geographic areas within Alabama. As with any cost allocation issue, at times, the results can appear anomalous. As a design issue, I chose a corporate tax allocation method that provides reasonable results when there is positive total NPV. When there is negative total NPV, the issue of the allocation of the corporate tax liability to products or geographic entities within Alabama is moot.

Q. MR. STEGEMAN, I THOUGHT THAT BACE ELIMINATED NEGATIVE MARGIN MARKETS IF OPTIMIZATION IS USED. IF THIS IS THE CASE, HOW CAN A USER END UP WITH NEGATIVE AFTER-TAX NPV RESULTS BELOW THE STATE LEVEL?

A. First, the optimizations within BACE are performed based on direct NPV. What I mean by this is that BACE compares the present value of the revenues to the present value of the direct costs for the optimization step at hand. What a positive margin (direct NPV) then indicates is that the item is producing a contribution to a higher level cost, that is, a cost that is not direct to the items we are looking at and will not go away should we eliminate the item we are considering. For example, the getting started investment of the switch is driven by the fact that the CLEC has customers within a LATA. Should a wire center within the LATA be eliminated, the getting started investment will not go away but would rather be re-apportioned to other wire centers that have positive margin (direct NPVs).

Therefore, what BACE retains are optimization areas that cover their direct costs, but not necessarily all of their apportionment of higher level costs that would only be re-apportioned (not eliminated if the area were dropped). Therefore, if a market has a direct NPV greater than zero, but a negative total NPV after the allocation of indirect costs, BACE still serves the market since it has an overall positive contribution to the CLEC. It is my understanding that Dr. Aron eliminates these negative NPV markets, thereby using a more conservative test for whether a market is impaired than the construct in BACE optimization.

Q. MR. KLICK CLAIMS THAT HIS "RESULTS INDICATE A POTENTIAL FLAW IN THE BACE MODEL" (REBUTTAL PAGE 52, LINE 5), SUGGESTING THAT NPV VALUES HAVE NOT RESPONDED AS HE EXPECTED AS HE HAS CHANGED CHURN. PLEASE RESPOND.

A. First, note that Mr. Klick has an error in the "Percent Change" columns in exhibits JCK-9 and JCK-10. For example, on page 1 of exhibit JCK-9 for Montgomery Zone 3 he shows an increase in after-tax mass market NPV from a negative $13,021 to positive $34,682 as a <u>decline</u> in mass market after-tax NPV of 366.3% (i.e., -366.3%); obviously this is <u>an increase, not a decrease</u>, in after-tax NPV.

Indeed, this same error exists in exhibits JCK-10, JCK-7, JCK-5, JCK-3 and JCK-2. Moreover, this is an error that exists in the testimony filed by Mr. Klick in other states. This is an obvious error in Mr. Klick's exhibits that could have been solved with any one of a number of methods in Excel. This is not the kind of repeated error that one would expect from someone implying that they would "evaluate, test and modify the complex calculation, 'optimization,' and 'filtering' portions of the BACE model" by changing the BACE code and recompiling the model (Klick rebuttal, page 3, lines 1-3).

Q. IF YOU CORRECT THE ERROR IN MR. KLICK'S EXHIBIT JCK-9 AND JCK-10, CAN YOU ADDRESS HIS CONCERN?

A. Yes. Mr. Klick states that the NPV for two wire centers decline as he reduces churn by 20%. However, Mr. Klick fails to note that for both of these wire

centers, the NPV for mass market customers increased and that BACE added service to enterprise customers, when previously there was no service provided to enterprise customers. Obviously, one can't compare the total NPV value in one scenario in which there is no service to enterprise customers to one in which service is provided. In this instance, for these two wire centers, the reduction in churn for enterprise customers caused the revenues to exceed the direct costs of serving the enterprise customers (albeit, the enterprise customers were not covering the allocated portion of higher level costs). Clearly, the total state wide NPV increased for both mass market customers and enterprise customers.

One would think that with only two wire centers cited (out of the approximately 190 rows in JCK-9 and JCK-10) that Mr. Klick would have examined these two wire centers somewhat more carefully. This is, in fact, the same type of mistake he made in the testimony in other state proceedings.

Therefore there is nothing in Mr. Klick's exhibits JCK-9 or JCK-10 that suggests that there is a flaw in BACE. Rather, these exhibits simply demonstrate Mr. Klick's error in using Microsoft Excel in manipulating the results, and his incomplete examination of his results.

Q. PLEASE EXPLAIN WHY DR. BRYANT'S EXHIBIT MTB-11 APPEARS TO CONTAIN ANOMALOUS RESULTS.

A. I have been unable to replicate the values for any of the columns in Dr. Bryant's exhibit MTB-11. I expect that rather than an error in BACE, these results more

likely reflect an inconsistency in Dr. Bryant's use of the model (e.g., he may have made additional changes not listed in his table, or he failed to make some of the changes listed in his table) or the fact that the firm he has modeled has negative NPV in total which can lead to tax allocation issues as I mentioned above. However, if the firm has a total negative NPV (in part caused by the user turning off all forms of optimization) there is no sense in analyzing the results at any level below the state.

Q. MR. KLICK DESCRIBES (REBUTTAL PAGES 50-51) A RUN IN WHICH ALL PRODUCTS (INCLUDING LOCAL SERVICE) IN A BUNDLE RECEIVE A DISCOUNT (EXHIBIT JCK-8). IS THERE AN ERROR IN BACE RELATED TO BUNDLE PRICE DISCOUNTS?

A. No. However, Mr. Klick chose a bundle discount configuration that I did not expect a user to choose. Indeed, Mr. Klick discusses elsewhere in his testimony his finding that basic local exchange service has low or negative NPV values for some customers, yet here he chooses to discount this service. Within BACE when all products included within a bundle are tagged as being discounted, all bundle prices drop out of the model due to a SQL join condition. As a result, all bundle products show a price of 0. This is why all the mass market customers are removed in Mr. Klick's run (since Mr. Klick uses the same optimization filters that BellSouth recommends).

As a design and documentation issue, it may be better if the BACE model and/or the BACE documentation warned the user that at least one service of a bundle

must be excluded from the discount (and perhaps suggesting that local service be excluded). Alternatively, BACE code changes could be applied to allow for the scenario Mr. Klick chose.

Q. MR. KLICK SEEMS TO SUGGEST (REBUTTAL PAGES 48-49) THAT RELATIVELY HIGH MARGINS FOR LONG DISTANCE SERVICE SOMEHOW REFLECTS AN ERROR IN BACE. PLEASE COMMENT.

A. This is one of the instances in which Mr. Klick has confused (or intentionally misrepresented) his disagreement with BACE inputs with the model itself. Product margins represent the difference between revenues and costs which are the result of <u>inputs</u> to BACE. If he truly doesn't understand the distinction between the model and its inputs, he is unlikely to be able to meaningfully modify and recompile the code to the model in order to **"**evaluate, test and modify the complex calculation, 'optimization,' and 'filtering' portions of the BACE model" (Klick rebuttal, page 3, lines 1-3).

Q. MR. KLICK IMPLIES (REBUTTAL PAGE 49-50) THAT BACE MODEL LOGIC CONSTRAINS THE A LA CARTE PRICE DISCOUNT TO ONLY LINE SUBSCRIPTIONS, INSTALLATIONS AND REGULATORY CHANGES. HE IMPLIES THAT THIS REPRESENTS AN ERROR OR A SHORTCOMING IN BACE. IS HE CORRECT?

A. No, Mr. Klick is incorrect. The user controls how the a la carte discounts are applied. The model simply processes the user's inputs. As clearly described in

the BACE documentation, bundles are priced and treated separately from a la carte services in BACE. The user can establish bundle prices and a la carte discounts. The a la carte discount is only applied to user specified a la carte prices, not to bundle prices (which are determined separately by the user).

Section 5. <u>ADDITIONAL REBUTTAL OF MR. WOOD</u>

Q. DOES MR. WOOD MAKE UNDOCUMENTED ASSERTIONS REGARDING BACE?

A. Yes. Mr. Wood makes a variety of claims and assertions regarding BACE. However, unlike other witnesses in this proceeding, he fails to provide a single numerical result from BACE, nor does he provide an exhibit with any BACE results. Such undocumented assertions provide no available information by which his assertions can be evaluated, and should be viewed with skepticism given the lack of foundation.

Q. DOES MR. WOOD CONFUSE SHORTCOMINGS OF A MODEL (BACE IN THIS CASE) WITH DISAGREEMENT REGARDING INPUT CHOICES?

A. Yes. At several points in his rebuttal testimony, Mr. Wood makes assertions regarding BACE, but only provides associated rhetoric related to the choice of the input values. For example, at page 40, lines 2-3, he states: "The BACE goes on to assign a different CLEC market share for the different customer spending

segments …". The user of course determines CLEC market shares (BACE doesn't assign them) by segment (and the user can vary them over time if they choose). However, as I note elsewhere in my surrebuttal testimony, when Mr. Wood populates the model with unspecified inputs of his choosing it provides results he finds comport with his view of the world. This has nothing to do with a model shortcoming; Mr. Wood appears to be attempting to disguise some issue regarding inputs under his claims of model shortcomings.

Q. DOES MR. WOOD MAKE UNDOCUMENTED AND MISLEADING ASSERTIONS REGARDING CRASHES OF THE BACE MODEL?

A. Yes. At page 7, lines 7-8 of his rebuttal he asserts that he has not been able to complete his analysis of BACE, apparently in part since "[o]ur efforts continue to be encumbered by the frequent crashes of the model and the limitations of the model wizard." I have several responses.

First, Mr. Wood's comment is surprising in light of the fact that in operating BACE, I (and my team) and the LECG team have had no problems with crashes. I have determined that the model is stable, consistent, and operates as stated in the documentation.

Second, I am unaware of similar complaints from other parties. Given the number of runs documented by LECG, Sprint (in Georgia and Florida) and MCI in their testimony, the natural conclusion would be that problems with crashes in BACE would have been raised through these parties, had they occurred.

Third, emails and phone calls to the BACE model support team are illustrative. When an employee of Wood and Wood Consulting contacted BellSouth's BACE support manager in early December 2003, raising concerns with initial slow run times and log-in problems in running BACE, these concerns appeared to be caused because an attempt to run BACE in a shared-server environment. BACE was not designed to run in, nor was it tested for, a shared-server environment. These concerns appeared to be resolved by December 11, 2003 through the use of BACE on a stand-alone computer platform. Thereafter, BellSouth responded to additional questions from Wood and Wood consulting about how to perform runs on the model from December 11-15, 2003. However, no concerns relating to frequent "crashes" were raised between December 11, 2003 (once the appropriate computer platform was used) and the filing of Mr. Wood's rebuttal testimony in Florida (which is virtually identical to the rebuttal testimony he filed in Georgia, North Carolina, and Tennessee and to that he filed here in Alabama). I would expect that if Mr. Wood continued to be encumbered by frequent crashes, he would have contacted the BACE support team (there is no charge for the support).

Since Mr. Wood's identical rebuttal testimony was filed with the Florida Commission on January 7, 2004, more than eight weeks later, the statement that AT&T's "efforts <u>continue</u> to be encumbered by frequent crashes …" (emphasis added) is misleading. On January 15, 2004, <u>after</u> Mr. Wood's rebuttal testimony was filed in Florida, a concern relating to crashes was communicated to BellSouth. The timing of this "concern", in light of Mr. Wood's other unsubstantiated claims, seems somewhat questionable.

Q. MR. WOOD ALSO COMPLAINS THAT LIMITATIONS OF THE BACE MODEL WIZARD HAVE ENCUMBERED HIS EVALUATION OF BACE (WOOD REBUTTAL PAGE 7). IS THIS A VALID COMPLAINT?

A. Certainly not, for at least three reasons. First, the user has the option to either use the BACE wizard, or create and run scenarios outside the wizard. Second, other models (e.g. HCPM, BCPM) either do not have a wizard, or do not have an extensive wizard. Third, the BACE model wizard is designed for ease of use, especially for those without the skill or time to examine the all of the model's inputs in great detail. Anyone genuinely seeking to evaluate a model, and having the skills to even initially evaluate a model, should not need to rely only on a model wizard alone. For example, any party suggesting that they need the source code to a model should not need to rely upon the model wizard for evaluation. Claiming that the limitations of a model wizard creates an encumbrance to review is akin to an auto mechanic claiming that a car needs more gauges and lights by the steering wheel in order to readily evaluate the engine; popping the hood is still an option if you are actually a mechanic.

Q. MR. WOOD STATES (REBUTTAL, PAGE 23, LINES 18-19) THAT "…BACE HAS NO PLACE TO ENTER A PROJECT BETA…" IS IT NECESSARY TO INPUT A PROJECT BETA IN ORDER TO CALCULATE ECONOMIC IMPAIRMENT?

A. No. From a modeling perspective, BACE provides input values for the pre-tax cost of capital, the cost of equity, federal and state tax rates and the proportion of equity. Nothing more is required to determine the cost of capital used in BACE. As Dr. Billingsley has described, beta is fully reflected in these values, so there is no further role for beta to play. To the best of my knowledge, no other telecommunications cost model (e.g., BCPM, HCPM, HAI, BSTLM) allows for the specific input of a project beta. Indeed, it appears that AT&T's cost disadvantage model does not allow the input of a beta.

Q. MR. WOOD ASSERTS (REBUTTAL PAGE 28, LINES 13-14) THAT IT IS IMPOSSIBLE TO ACCURATELY DETERMINE THE REVENUES THAT A CLEC IS LIKELY TO RECEIVE WITHOUT THE ABILITY TO INPUT FUTURE PRICE CHANGES BY WIRE CENTER. DO YOU AGREE?

A. No, for several reasons. First, as I discussed above, BACE already leverages a powerful database that reflects actual prices and actual spend levels by wire center. Therefore, the starting market prices and customer expenditures are specific to the wire center and customer segment.

Second, BACE allows the user to determine CLEC price discounts by customer segment, by market, over time (if the user wishes). BACE also allows the user to establish bundle prices by customer segment by market and changes in bundle prices over time. Further, BACE allows the user to determine CLEC penetration by customer segment over time. In designing BACE, there seemed to be no need to forecast prices changes on a wire center basis.

Third, it is unreasonable to expect a user would be willing to perform the task of inputting even initial prices by wire center, let alone forecast future prices by wire center. BellSouth has a large number of wire centers in its service area in Alabama each with 17 customer-spend categories in BACE. Each of these would have approximately 15 services, each requiring data (under Mr. Wood's approach) for 10 years; this leads to well over 350,000 price data entries.

Fourth, Mr. Wood's claim that wire-center level price forecasts are necessary is at odds with AT&T's model which provides no price information, nor ability to input price forecasts of any kind.

Fifth, Mr. Wood's claim that wire-center level price forecasts are necessary is at odds with his prior claim (rebuttal page 7) that he and his team are encumbered by the limitations of the BACE wizard. Recall that Mr. Wood is also the only party to complain about the limitations of the wizard. Logic suggests that Mr. Wood should be the last party to attempt the daunting and unnecessary task of forecasting prices by wire center

Q. MR. WOOD CLAIMS "THE [BACE] USER HAS NO ABILITY TO CONSIDER A SHORTER INVESTMENT HORIZON [THAN 10 YEARS] THAT A RATIONAL INVESTOR WOULD CONSIDER BEFORE MAKING AN INVESTMENT IN A LARGE, FIXED ASSET SUCH AS A LOCAL CIRCUIT SWITCH." WHAT IS YOUR REACTION?

A. First, Mr. Wood's statement is at odds with the time horizon of AT&T's cost disadvantage model. Mr. Turner indicates (direct, page 26, footnote 23) that AT&T's analysis uses a 10-year study period.

Second, my team has examined the inputs to the model, both the Input Portfolio attached to Turner's testimony and the software itself, and there does not appear to be any mechanism to change the study period. We can only assume that the overall study period of AT&T's model is fixed at ten years.

Third, other models use a 10-year period or a longer period for the evaluation of economic impairment. The NRRI model (the pre-cursor of Dr. Bryant's model) used asset lives to determine impairment analysis through a TELRIC type costing approach. As such, the time horizon for the costs of assets ranges from 6-30 years. The switch life was ten years. In looking at other industry models, the SPR model submitted in other states actually uses a 25-year time horizon for cash flows.

Fourth, in is my understanding that AT&T and MCI have consistently advocated the use of FCC depreciation lives in cost proceedings. My understanding is that the prescribed FCC depreciation lives applicable to BellSouth range from 8 to 30 years, depending on the type of equipment and the low and high ranges. Moreover, Mr. Turner employed a 13-year switch life input in the AT&T model filed in Florida. However, in his rebuttal testimony, Mr. Wood implies that a switch needs to be recovered in some period less than ten years. Certainly, a 10-year study period is conservative for assets with lives longer than ten years.

Section 6. <u>BACE IS CLEARLY SUPERIOR TO AT&T'S MODEL IN MEETING THE REQUIREMENTS OF THE TRO AND CRITERIA DISCUSSED BY MR. WOOD</u>.

Q. ISN'T AT&T THE SAME PARTY THAT SPONSORED A MODEL THAT MR. WOOD CLAIMED IS RELEVANT FOR THIS PROCEEDING?

A. Yes, and Mr. Wood mentions Mr. Turner's results (Wood rebuttal page 16).

Q. GIVEN THE MODEL REQUIREMENTS IMPLIED BY THE TRO, AND THE MODEL CRITERIA DISCUSSED BY MR. WOOD, HOW DOES BACE COMPARE WITH THE AT&T MODEL?

A. BACE is clearly superior.

Q. MR. WOOD (REBUTTAL PAGE 31, LINES 14-15) CLAIMS THAT BACE FAILS TO MEET THE BASIC REQUIREMENTS FOR AN IMPAIRMENT MODEL THAT YOU SPECIFY IN YOUR DIRECT TESTIMONY. PLEASE COMPARE AND CONTRAST BELLSOUTH'S BACE MODEL WITH AT&T'S MODEL.

A. In my direct testimony I discussed at length (pages 8-18) the characteristics that must exist for a model to be consistent with the TRO. Below I provide a table

with the four major categories of characteristics, comparing how BACE and AT&T's model meet the four required characteristics.

Characteristic	**BACE**	**AT&T model**
1) Capable of granular analysis	yes	yes as to cost, no as to revenue
2) Consistent with efficient CLEC business model & architecture	yes	no
3) Incorporate all likely CLEC revenues and costs	yes	no
4) Perform a business case analysis using NPV	yes	no

Q. PLEASE EXPLAIN THE ENTRIES IN THE TABLE ABOVE.

A. In my direct testimony I described in detail how the BACE model meets these four major characteristics. Thus, I will briefly describe the entries for the AT&T model only. First, in regard to "Capable of granular analysis," while the AT&T model considers some cost information at the wire center level, its level of granularity is not sufficient for this proceeding since it is does not consider key information on all CLEC cost components. In addition, the AT&T model has no information at a gross or granular level regarding revenues. Having a model that is capable of granular analysis for only a subset of the information needed to assess economic impairment is simply not useful. This is analogous to needing detailed loop costs but only having the granularity in the feeder portion of the

loop; it simply doesn't provide sufficient information to meet the needs of the Commission in this proceeding.

Second, concerning "Consistent with efficient CLEC business model & architecture," the AT&T model does not provide for optimization in CLEC service offerings and engineering, does not consider all potential CLEC product offerings, and does not consider all potential customers (e.g., across multiple ILECs in a wire center). If a model does not consider the opportunities for a CLEC to optimize its business, it will tend to overstate CLEC costs and/or understate CLEC revenues; this could lead to an erroneous finding of impairment.

Third, regarding "Incorporate all likely CLEC revenues and costs," the AT&T model does not consider revenues at all, and it ignores certain CLEC costs. Thus, the AT&T model fails to provide any meaningful result; it only provides a cost /output picture that is, incomplete, and insufficient to satisfy the requirements of the TRO.

And fourth, concerning "Perform a business case analysis using NPV," while the AT&T model does appear to use some present value calculations, it does not perform a business case analysis. A net present value calculation reflects the present value of revenues net of the present value of costs; yet the AT&T model does not consider revenues nor does it consider all relevant costs. Because the AT&T model has no revenue information at all, it cannot provide an NPV calculation and cannot be utilized to measure economic impairment as established within the TRO.

Q. CAN YOU ELABORATE ON THE SECOND (OF THE FOUR MAJOR MODEL CHARACTERISTICS YOU LIST ABOVE), WHICH REFERS TO AN EFFICIENT CLEC BUSINESS MODEL AND DESCRIBE WHETHER BACE AND THE AT&T MODEL SATISFY THIS CHARACTERISTIC?

A. Yes. In order to satisfy the TROs requirements to reflect an efficient CLEC's activities, BACE allows the user to incorporate CLEC optimizing activities that could lead to either lower CLEC costs or greater opportunities for CLEC revenues. In the table below, I have identified some of the key dimensions over which a CLEC might optimize its network or its service offerings in order to be efficient, and whether each of the models allows optimization for that dimension of activity.

Dimension Over Which to Optimize	**BACE**	**AT&T model**
1) EELs or collocation	yes	no
2) DSL within the wire center	yes	no
3) Provide (or not provide) service in total for a wire center	yes	no
4) Provide (or not provide) service for Mass Market customers for a market	yes	no
5) Provide (or not provide) service for Enterprise customers for a market	yes	no
6) Provide (or not provide) CLEC service in total for a market	yes	no
7) Provide (or not provide) CLEC service in total for a LATA	yes	no
8) Place (or not place) a switch in each LATA	no	no

9) Place (or not place) a fiber ring	no	no

Q. WHAT IS THE IMPLICATION OF BOTH BACE AND THE AT&T MODEL NOT OPTIMIZING ON ITEMS 8 AND 9 IN THE TABLE ABOVE?

A. Any model that does not incorporate an opportunity for the CLEC to reduce costs or gain revenues, by not providing optimization in a dimension of CLEC activities, has the potential to overstate the CLEC's costs, or understate revenues. Such omissions therefore have the potential to overstate impairment, i.e. to indicate economic impairment when it does not actually exist. BACE is therefore conservative in these two dimensions and it may overstate CLEC costs. As a result, BACE may overstate economic impairment. The AT&T model is very conservative (it may overstate CLEC costs) since it does not optimize in any of the dimensions listed in the table above and further the AT&T model does not model any CLEC revenues.

Q. MR. WOOD CLAIMS (REBUTTAL PAGE 24, LINES 14-16) THAT BACE DOES NOT REFLECT ALL CLEC BARRIERS TO ENTRY. HOW DOES BACE COMPARE TO THE AT&T MODEL WITH RESPECT TO CAPTURING ALL CLEC COSTS?

A. Beginning at page 51 of my direct testimony, I list 15 cost items that are discussed in the TRO and I describe how these cost items are included in BACE. While

AT&T's model incorporates many of the 15 cost items, it does not incorporate the following (numbered in the same fashion as my original list of 15):

1) "Costs of purchasing and installing a switch" (TRO, ¶ 520);

2) "[T]he recurring and non-recurring charges paid to the incumbent LEC for loops" (e.g., TRO, ¶ 520, and n. 1588) (The AT&T model only considers the non-recurring costs);

5) "[T]he recurring and non-recurring charges paid to the incumbent LEC for … signaling" (TRO, paragraph 520); 9) "taking into consideration … the scale economies inherent to serving a wire center and the line density of the wire center," the AT&T model deploys various levels of equipment capacity and collocation space dependent upon the number of lines they expect to serve in each wire center. However, the model serves all wire centers regardless of the economics of serving all wire centers and therefore it fails to reflect an efficient CLEC (see the rebuttal testimony of Dr. Aron).

13) "taking into consideration … the cost of maintenance, operations" (TRO, ¶ 520); and 14); "taking into consideration … the cost of … other administrative activities" (TRO, ¶ 520). (Underlining in my original direct testimony.)

Q. MR. WOOD COMPLAINS (PAGES 25-29) ABOUT BACE'S TREATMENT OF REVENUES AND PRICES. PLEASE COMPARE AND CONTRAST BACE AND THE AT&T MODEL IN THESE DIMENSIONS.

A. In the table below I compare BACE & the AT&T model with respect to their treatment of prices and revenues in relation to the TRO requirements and the complaints by Mr. Wood.

Item	**BACE**	**AT&T**
Incorporates initial prices via a detailed database on revenues	yes	no
Incorporates geographic differences in the initial prices by wire center via variations in revenues by customer spend categories by wire center	yes	no
Number of major product categories	6	model has no revenue
Allows CLEC to introduce services over time	yes	no
Allows the use of initial CLEC price discount for a la carte services	yes	no
Considers the size of the total market in determining revenues	yes	no
Considers the effects of bundles of services	yes	no
Allows user to input price changes for a la carte prices	yes	no
Considers CLEC penetration in determining CLEC revenue	yes	no
Allows user to input price changes for bundle prices	yes	no
Allows changes in CLEC penetration over time and its affect on revenue	yes	no

Allows the user to vary price changes by service category (e.g., long distance)	yes	no
Provides a user with hundreds or thousands of pages of inputs to allow the user to establish prices by wire center	no	no
Allows the user to input different CLEC penetration rates by customer spend group	yes	no

Q. ARE THERE OTHER COMPARISONS BETWEEN THE MODELS THAT ARE RELEVANT BASED ON THE TRO AND MR. WOOD'S REBUTTAL TESTIMONY?

A. Yes. In the table below I list other comparisons that are relevant for the Commission in evaluating a model to assess economic impairment.

Item	**BACE**	**AT&T**
Number of years considered	10	10
Allows user to consider a terminal value of the business	yes	yes
Provides a model wizard	yes	no
Considers income taxes	yes	no
Considers calculations of net income	yes	no
Allows the user to enter a project beta	no, not necessary	no, not necessary
Allows for revenue and penetration trends	yes	no for revenue, allows demand

		trend for cost
Allows costs to change over time	yes	no
Sizes equipment to correspond to demand	yes	yes
Allows the user to size equipment for specific number of years	yes	no
Allows the user to consider the economies gained from serving two or more ILEC territories in a LATA	yes	no
Provides a bright line test for impairment	yes	no

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does.

BACE Interface Functions

Confidential and Proprietary Information

BACE Utility Functions

Confidential and Proprietary Information

BellSouth Telecommunications, Inc.
Florida Public Service Commission
Docket No. 030851
Late Filed Deposition Exhibit 3
Explanation of Tax Treatment
Page 1 of 3

REQUEST: Please respond to the surrebuttal testimony of Sprint witness Dickerson at page 8, line 11 to page 11, line 6.

RESPONSE: At page 8, line 11, of Mr. Dickerson's surrebuttal testimony, he purports to attach Exhibits KWD-12, which he claims shows that BACE is illogical. His assertion is without merit.

Mr. Dickerson's exhibit KWD-12 shows the results of four different BACE runs, each with a negative total after-tax NPV (row 38) ranging from approximately -$33.4 million to -$120.4 million. Two of these scenarios even have a negative total pre-tax NPV (columns E and F). It appears is that in each of the runs, all but one of the user adjustable optimization toggles (all but the colo or EELs optimization) was turned off (see the rebuttal testimony of Dr. Staihr, page 17). Essentially, all of these runs represent Mr. Dickerson forcing the modeled CLEC to serve all areas (including those that are not economically profitable to serve). Therefore, he has modeled a total entity in Florida that is certainly not efficient and which is not economically profitable (i.e., it does not cover all of its costs including income taxes and the cost of equity).

Before discussing the BACE allocation of corporate income taxes, it is instructive to consider the full scope of the costs BACE considers. Unlike a standard P&L (profit and loss) statement, the BACE NPV metric of impairment includes not only the cost of the network, operations, taxes and debt interest, but also the cost of equity. Unlike the cost of debt (or other cost items), the cost of equity is not a tax-deductible expense. Therefore, if a BACE run (a hypothetical run) were to reflect a zero after-tax NPV for the state of Florida, this would imply a significant taxable income for the modeled CLEC and a significant corporate income tax liability, in order to generate after-tax profits just sufficient to compensate shareholders for the cost of equity.

There will also be a range of results in which a negative total after-tax NPV will correspond to a positive taxable income and a corporate tax liability. Indeed, even with some range of negative total pre-tax NPV, the CLEC would still generate a positive taxable income and a corporate tax liability (since the pre-tax NPV already includes the cost of equity).

Now consider how taxes are allocated within BACE. Corporate taxes represent a cost associated with the total operations of the CLEC. Corporate income tax

forms are, of course, not filed for each product offered or for each geographic area served. Since corporate income taxes are caused by taxable income (i.e., taxable measures of revenue less tax deductible measures of cost), one form of tax allocation would track some approximation of taxable income. However, taxable income excludes the cost of equity (which is not a tax deductible expense). Therefore, allocating taxes on the basis of taxable income would require that BACE carry this alternate information on taxable income at each and every dimension of the data; a daunting task to say the least. However, the NPV value of every data dimension is available. Since NPV provides an approximation of the "profitability" of a dimension over time, it was selected as a reasonable approach to allocate the corporate taxes.

BACE was designed to allow a user to model an efficient CLEC, a firm that attempts to serve customers profitability and avoids serving unprofitable customers and areas. As such, BACE's allocation of corporate income taxes on the basis of pre-tax NPV as a ratio of (total PV tax)/(total pre-tax NPV) should produce a reasonable assignment of the tax costs for an efficient CLEC. This allocation works as follows.

Consider a hypothetical example in modeling an efficient firm. Total pretax NPV is $10,000,000 and the estimated present value of the taxes is -$7,000, 000 (and total after-tax NPV is $3,000,000). (Note that since taxes are a cost, they have a negative present value, i.e., higher taxes have a greater negative effect on NPV). The tax allocation formula in BACE is (total PV taxes)/(total pre-tax NPV). In this case the tax allocator is -0.7 and each positive pre-tax NPV dollar is reduced by $0.70 to reflect its tax liability. Similarly, each negative pre-tax NPV dollar is assigned a reduction in tax liability of $0.70 (i.e., the -0.7 is multiplied times a negative pre-tax NPV to produce a positive gain to that product or area's NPV or a reduction in its negative NPV by $0.70 on the dollar). In this case, both positive and negative pretax NPV values become smaller (closer to zero) as taxes are applied.

However, in any situation where total post-tax NPV becomes negative, the allocation of taxes essentially becomes moot. That is, if a firm in total has a negative NPV, there is little to be gained by investigating the tax implications on the markets it operates within since it is unlikely the firm would be operating at all. This occurs either in the situations of negative total pre-tax NPV (columns E & F in Mr. Dickerson's KWD-12), or where pre-tax total NPV is positive but smaller than the PV of the tax liability (columns D and G of KWD-12).

Turning to the case of negative total pre-tax NPV identified in column E of KWD-12, Mr. Dickerson has turned off optimizations such that the resulting CLEC (which he forces to serve all areas) has a pre-tax NPV of approximately -$93.2 million. However, the CLEC still earns taxable income in total for some period of its existence sufficient to generate a PV of taxes of approximately -$27.1 million. In this case the resulting tax allocation ratio is approximately 0.29 (= -93.2/-27.1). Note that because of the negative NPV, the allocator has a positive sign, opposite of what one should expect, leading to counter intuitive results in the after-tax NPV calculations.

Now consider the case of a positive total pre-tax NPV in column D of KWD-12 of approximately $31.2 million. Again, since Mr. Dickerson has turned off optimization, the resulting CLEC (which he forces to serve all areas) has a PV of taxes of approximately -$64.7 million, which is greater in absolute value than the total pre-tax NPV. Here the tax allocator is -2.07. Here the sign is correct (negative) but the value is greater than one (in absolute value). Each dollar of positive pre-tax NPV is now assigned -2.07 PV in taxes, and each dollar of negative pre-tax NPV is allocated +2.07 PV in taxes (i.e., a reduction in tax liability). In this circumstance, the signs of after-tax segments or areas will tend to flip when after-tax NPV is calculated.

Certainly, these results do not "demonstrate the BACE Model NPV results to be fatally flawed and unsuitable for the conclusions asserted by BellSouth" as Mr. Dickerson claims at page 11 of his surrebuttal. BellSouth did not advance a model of inefficient CLEC behavior forcing the CLEC to serve economically unprofitable areas, leading to total negative after-tax NPV.

Nor do these results suggest that Mr. Dickerson cannot model (for whatever reason) the inefficient activities of CLEC serving all geographic areas. However, the BACE tax allocator and calculations of after-tax NPV were designed as a convenience for the user. If the user wishes to model inefficient CLEC behavior, then the user could focus on pre-tax values and ignore after-tax NPVs. While the allocation of taxes could be modified in the situation where the NPV of the CLEC is negative, such a modification would be nonsensical because it would negate the purpose of the model, which is to consider the activities of an efficient CLEC.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Pamela A. Tipton, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 19 pages and 6 exhibits.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 9TH DAY OF MARCH, 2004

Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF PAMELA A. TIPTON

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, PHASE II

MARCH 24, 2004

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

A. My name is Pamela A. Tipton. I am employed by BellSouth Telecommunications, Inc., as a Director in the Interconnection Services Department. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. ARE YOU THE SAME PAMELA A. TIPTON WHO FILED DIRECT TESTIMONY IN THIS DOCKET ON JANUARY 20, 2004?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I respond to rebuttal testimony filed by AT&T witness Jay Bradbury, CompSouth witness Joe Gillan, and MCI witness Dr. Mark Bryant. All of these witnesses try

to place conditions and limitations on the FCC's self-provisioning trigger rule that simply do not exist.

Section 1: Discussion of Trigger Candidate Criteria

Q. WITNESSES GILLAN, BRADBURY, AND BRYANT SUGGEST THE COMMISSION MUST CONSIDER A HOST OF CRITERIA TO "QUALIFY" CLECS AS TRIGGER CANDIDATES BEFORE THEY CAN BE COUNTED. WHAT DO THE FCC RULES STATE?

A. The criteria for a CLEC to be counted with regard to the self-provisioning switching trigger are clearly set forth in the FCC's Rules. 47 C.F.R. § 51.319(d)(2)(iii)(A)(1), Local switching self-provisioning trigger, states:

> "To satisfy this trigger, a state Commission must find that three or more competing providers not affiliated with each other or the incumbent LEC, including intermodal providers of service comparable in quality to that of the incumbent LEC, each are serving mass market customers in the particular market with the use of their own local switches."

The other parties' attempt to include a number of other unique criteria that a trigger "candidate" allegedly must meet is simply wrong. Had the FCC intended for state Commissions to check off a laundry list of criteria before considering a CLEC as a "trigger candidate," the rules would have said so. They do not. The rule contains the only criteria that address the self-provisioning trigger; it is straightforward, and it contains two, and only two, requirements. Competing providers must: 1) not be affiliated with each other or the incumbent LEC, and

may include intermodal providers of service comparable in quality to that of the incumbent LEC, and 2) be serving mass market customers in the particular market with the use of their own switch. Unlike what the other parties' witnesses would have this Commission believe, the FCC's discussion regarding the actual self provisioning test, in Section VI.D.6.a.(ii)(b)(ii) of the Order, entitled "Triggers", supports the straight forward and narrowly defined criteria set forth in the FCC's rule. Exhibit PAT-8 is a decision flow chart that accurately represents the trigger analysis as reflected in 47 C.F.R. § 51.319(d)(2)(iii)(A)(1). This is the only decision-making analysis that needs to be conducted in this proceeding in determining where the trigger is met, despite CLEC claims suggesting otherwise.

Q. HAVE THE CLECS MISSED THE FOCUS OF THE SWITCHING TRIGGER?

A. Yes. As the FCC explained in its brief filed in the D.C. Circuit in connection with review of the Triennial Review Order, the switching trigger has to do "with determining when market conditions are such that new entrants are not *impaired* in *entering* the market." (Respondent's Brief filed January 16, 2004, p. 46, n. 22). By seeking to impose unnecessary criteria to the trigger analysis, the CLEC witnesses are advocating conditions that focus more on protecting their access to unbundled switching than focusing on conditions that relate to market entry. For example, on page 19 of his rebuttal testimony, Mr. Bradbury goes so far as to insist that "the Commission must assure itself that UNE-L competition will exist in every wire center." Of course, no such assurance is required either in the FCC's Order or its rules.

Q. MCI WITNESS BRYANT ATTACHES A FLOW CHART TO HIS TESTIMONY SHOWING A "TRIGGER ANALYSIS" HE HAS DEVISED. SIMILARLY, MR. GILLAN HAS PROVIDED A TABLE SUMMARIZING HIS IMAGINED TRIGGERS CRITERIA. IS EITHER THE FLOW CHART OR TABLE SUPPORTED BY THE FCC RULE?

A. No, both Dr. Bryant's and Mr. Gillan's proposed trigger criteria go well beyond the straightforward criteria set forth in the FCC's rule.

Q. DOES THE FCC'S RULE CONTAIN LANGUAGE THAT PRECLUDES CONSIDERATION OF SO-CALLED "ENTERPRISE" SWITCHES AS SEVERAL WITNESSES, INCLUDING MR. GILLAN (CRITERIA #1), SUGGEST?

A. No.

Q. DOES THE FCC'S RULE REQUIRE ANY SPECIFIC CRITERIA ABOUT SWITCHES IN THE CONTEXT OF ITS SELF-PROVISIONING TRIGGER ANALYSIS?

A. No, it does not. In fact, in its Errata, the FCC deliberately removed the only qualifier relating to the switches used in providing mass market service for the trigger analysis when it struck the word "circuit" from its trigger rules. There are no other switch qualifications, no count of switches required, and no restriction on the type of switch used to provide service to mass market customers. The rule

simply requires that three or more CLECS are providing service using their own switch.

Q. WOULD IT MAKE ANY SENSE TO EXCLUDE ANY SWITCH THAT SERVES BOTH "ENTERPRISE" AND MASS-MARKET CUSTOMERS FROM THE TRIGGER ANALYSIS, AS MR. GILLAN ADVOCATES?

A. No. As BellSouth witness John Ruscilli testifies, within the context of the FCC's Order, an enterprise switch is a switch providing service to enterprise customers through the use of DS1 or above loops (TRO ¶ 441, FN 1354). Where a CLEC is already using its switch to serve customers using DS0 loops, clearly the serving switch already has the capability to serve mass-market customers using DS0 loops and thus is not an "enterprise" switch, regardless of how many or few mass-market customers the switch is serving. Such evidence demonstrates that the CLEC has already invested the additional resources needed to provide service to mass market customers. When a CLEC has self-deployed a switch that is serving mass-market customers using DS0 loops as well as "enterprise" customers, the CLEC constitutes a qualified trigger candidate.

Q. IS THERE ANY REQUIREMENT IN THE APPLICABLE RULE THAT THE SELF-PROVISIONING TRIGGER CANDIDATE MUST BE PROVIDING VOICE SERVICE TO "<u>RESIDENTIAL CUSTOMERS</u>" AS MR. GILLAN (CRITERIA #2), MR. BRADBURY AND OTHERS SUGGEST?

A. No.

Q. DOES THE RULE REQUIRE THAT THE SELF-PROVISIONING TRIGGER COMPANY RELY ON ILEC ANALOG LOOPS TO CONNECT THE CUSTOMER TO ITS SWITCH AS WITNESS MR. GILLAN (CRITERIA #4), MR. BRADBURY, AND OTHERS CONTEND?

A. No. The rule explicitly says that intermodal providers of service constitute trigger candidates. In 47 C.F.R. § 51.5, the FCC defined intermodal as follows:

> "Intermodal. The term intermodal refers to facilities or technologies other than those found in traditional telephone networks, but that are utilized to provide competing services. Intermodal facilities or technologies include, but are not limited to, traditional or new cable plant, wireless technologies, and power line technologies."

Q. ARE THERE SPECIFIC REQUIREMENTS THAT APPLY FOR AN INTERMODAL PROVIDER OF SERVICE TO QUALIFY FOR THE SWITCHING TRIGGER (MR. BRADBURY, DR. BRYANT, AND MR. GILLAN, CRITERIA #4)?

Q. Only one, which is that the service provided by the intermodal provider must be comparable in quality to the service provided by the ILEC. While Mr. Bradbury and Mr. Gillan do concede that there could be an alternative to ILEC loops, they overstate the specific criteria to be applied to intermodal carriers. Dr. Bryant goes so far as to say cable telephony providers are disqualified as trigger companies because they do not reach all of the ILEC's mass market locations. I strongly disagree with Dr. Bryant's assertion. There is absolutely no indication

that the FCC contemplated that the trigger company's actual deployment have exact ubiquity to the ILEC network, whether considering intermodal or traditional providers.

Q. DOES THE FCC'S SELF-PROVISIONING TRIGGER RULE REQUIRE THAT THE EXISTENCE OF THE CANDIDATE SHOULD BE EVIDENCE OF SUSTAINABLE AND BROAD-SCALE MASS MARKET COMPETITIVE ALTERNATIVES IN THE DESIGNATED MARKET" AS MR. GILLAN (CRITERIA #6), MR. BRADBURY AND DR. BRYANT CLAIM?

A. No. It bears repeating that the FCC's rule for implementing the self-provisioning trigger contains only two criteria, neither of which is that broad-scale mass market alternatives presently exist. Remarkably, these witnesses appear to have missed that the FCC issued an errata, in which it corrected paragraph 499, and removed the requirement that the self-provisioning switching trigger candidates must be ready and willing to serve *all* retail customers in the market – a deliberate action by the FCC indicating that, contrary to the other witness's assertion, such a requirement is not to be considered in the trigger analysis. To the extent these witnesses are advocating for additional requirements, this Commission should reject such arguments.

Q. IS THERE ANY REQUIREMENT IN THE FCC'S TRIGGER TEST THAT UNE-L MUST HAVE THE SAME UBIQUITY AS UNE-P BEFORE THE TRIGGER IS MET, AS MESSRS. BRADBURY AND GILLAN CLAIM?

A. Absolutely not.

Q. ON PAGE 9 OF HIS REBUTTAL TESTIMONY, DR. BRYANT IDENTIFIES FOUR TRIGGER CRITERIA, WHICH HE CHARACTERIZES AS “FCC RULES”. DO YOU AGREE?

A. No. The FCC rule regarding the self-provisioning trigger is set forth in 47 C.F.R. § 51.319(d)(2)(iii)(A)(1). A plain reading of this rule shows that Dr. Bryant’s “criteria” are not part of the FCC’s rule. As I stated in my direct testimony and above, the FCC rule, supported by the Order’s discussion on the trigger analysis, contains two and only two criteria, both of which are met by the trigger candidates identified by BellSouth in this proceeding (¶462, ¶ 501). Any attempt to impose additional criteria in order to disqualify these trigger CLECS under the guise of the FCC rules is misguided and should not be endorsed by this Commission.

Section 2: Discussion of Trigger Analysis

Q. MR. BRADBURY CLAIMS (REBUTTAL P. 7) THAT AT&T PROVIDES SERVICE TO A RELATIVELY FEW NUMBER OF VERY SMALL BUSINESS CUSTOMERS THAT ARE AN ARTIFACT OF AN “OLD” BUSINESS PLAN. HOW DO YOU RESPOND?

A. According to Mr. Bradbury, the “embedded base” of very small business customers totals approximately BEGIN PROPRIETARY ***[redacted]*** END

PROPRIETARY. The FCC's criteria requires a determination as to whether CLECs are serving mass market customers in a particular market with their own switches. Clearly, the fact that AT&T is serving very small business customers in Alabama, albeit in a very targeted area, means this criteria has been met. Furthermore, AT&T's "old business plan" is more appropriately classified as a change in business plan upon the implementation of the FCC's UNE Remand Order and the widely available UNE-platform. It is not coincidence that the decline in AT&T's purchase of UNE loops began during 2002; UNE-P became available as a result of the FCC's UNE Remand Order. AT&T had only to revise its interconnection agreement to avail itself of this artificial means of competition. In June of 2002, AT&T executed a standalone agreement that provided rates, terms and conditions for UNE combinations, including UNE-P. AT&T did so, apparently as part of a shift in a business strategy to take advantage of the artificially low, practically all-inclusive cost to serve customers via UNE-P, despite AT&T's sunk capital investment in its switches.

Mr. Bradbury also claims that "active provisioning of service to very small business using DS0 UNE-L loops ended in late 2001." (Rebuttal, p. 7). Although Mr. Bradbury suggests that AT&T is only using unbundled loops to serve an embedded base of customers, AT&T continues to request and BellSouth continues to provision unbundled loops for AT&T's use in serving its customers in Alabama. Contrary to Mr. Bradbury's claim, the DS0 lines counted in BellSouth's trigger analysis are not "off lines", since BellSouth excluded from its analysis any locations served by greater than 4 lines, or served by a DS1 or higher capacity loop. Furthermore, in AT&T's view, if it is not "actively" advertising that it is

providing service using its own switches, or adding new customers every day, it somehow fails to qualify as a trigger company. That is nonsensical. The FCC made it clear that the purpose of the triggers is to demonstrate that CLECS are not impaired without unbundled switching by a showing that they <u>are providing</u> service to mass market customers. As I discussed above, the FCC emphasizes that the goal of self provisioning trigger test is to show that three or more competing providers 1) who are not affiliated with each other or the incumbent LEC, are each 2) serving mass market customers in the particular market with the use of their own local switch(es). Failing to advertise or failing to add new customers using its own switching, particularly when UNE-P is available, proves nothing. The point is, each day, every day, AT&T provides service to hundreds of customers in Alabama, using its own switches. That is what the FCC requires of a trigger company.

Finally, on a statewide basis, Mr. Bradbury's testimony includes a statement that " AT&T's local switches in Alabama serve a business customer universe that is at least 95% to 96% enterprise." Logic dictates that the remaining 4% to 5% of customers served by AT&T's switches constitute mass market customers, which means that AT&T is a switching trigger company in at least one market. No other explanation, notwithstanding AT&T's protests, is plausible.

Q. MR. BRADBURY ARGUES THAT EXHIBIT PAT-1 IS IRRELEVANT TO THIS DOCKET. DO YOU AGREE?

A. No. Mr. Bradbury does not understand this exhibit. Exhibit PAT-1 was created simply to demonstrate that a significant number of CLEC switches are providing service in Alabama, and those same switches serve a number of markets.

Q. MR. BRADBURY CLAIMS BELLSOUTH COUNTED, IN ITS TRIGGER ANALYSIS, ALL OF AT&T'S SWITCHES. IS THIS CORRECT?

A. No. BellSouth did not "count switches" as a part of its trigger analysis, because that is not what the FCC requires, or even allows. BellSouth counted the number of CLECS providing mass market service to customers in each geographic market. What Mr. Bradbury is referring to is the list of CLEC switches derived from the LERG. In no way does my testimony report or allude to Exhibit PAT-1 as a list of mass market switches. Instead, my testimony explicitly describes the list as switches "which provide service in Alabama." Further, BellSouth did not consider AT&T's toll switches or AT&T's ADL switches, nor the services provided from these switches in its trigger analysis, as Mr. Bradbury claims on pages 12 - 14 of his rebuttal testimony. It is particularly ironic that while Mr. Bradbury takes issue with BellSouth's counting, another AT&T witness, Mr. Wood, can't count at all. His testimony (p.9) contains the heading "The reality is that CLECs are not self-provisioning switches," leading the reader to conclude that no CLECS, not even AT&T, whom Mr. Wood represents, have deployed their own switches.

Q. DID BELLSOUTH ASK THE CLECS TO IDENTIFY THEIR SWITCHES IN ITS DISCOVERY REQUESTS?

A. Yes. BellSouth asked the CLECs to identify the switches they use to provide qualifying service in Alabama. Most, if not all, of the CLECs who use a non-ILEC switch to provide qualifying service in Alabama provided this information to BellSouth. My proprietary Exhibit PAT-9 lists CLEC names and CLLIs for the switches they identified as those that they use to provide qualifying service in Alabama. This exhibit includes both switches the CLECs own and those they have acquired the right to use.

Q. SEVERAL WITNESSES, SUCH AS MESSRS. BRADBURY, GILLAN AND OTHERS, ARGUE THAT "ENTERPRISE SWITCHES" SHOULD BE EXCLUDED FROM THE SELF-PROVISIONING TRIGGER ANALYSIS. PLEASE COMMENT.

A. As discussed above, these witnesses misinterpret the trigger analysis. First, there is no switch qualifier in the FCC's rule or in the Order's discussion in the Triggers section (Section VI.D.6.a.(ii)(b)(ii)). The FCC rule requires no count of switches, other than presumably that each trigger candidate must have its own switch; the rule has no discussion regarding how switches are used to provide mass market service. The only mention of excluding "enterprise switches" is in the "potential deployment" section of the TRO, and not in the portion of the order addressing the triggers. If the FCC had intended any "qualification" of switches to be included as part of the trigger analysis, it would have set forth the requirement in its rule. It did not. The relevant inquiry is whether the competing

providers counted towards the trigger are providing mass market service using their own switch(es).

Q. SHOULD EVIDENCE OF SELF-DEPLOYED SWITCHES SERVING ENTERPRISE CUSTOMERS BE CONSIDERED IN EVALUATING MASS MARKET SWITCHING IMPAIRMENT?

A. Absolutely. In the "potential deployment" phase of any case looking at impairment, the FCC recognized the significance of such evidence. In its discussion of the "potential deployment" analysis at paragraph 508 of its TRO, the FCC states:

> "We find the existence of switching serving customers in the *enterprise* market to be a significant indicator of the possibility of serving the mass market because of the demonstrated scale and scope economies of serving numerous customers in a wire center using a single switch…The evidence in the record shows that the cost of providing mass market service is significantly reduced if the necessary facilities are already in place and used to provide other higher revenue services…"

Q. IN HOW MANY MARKETS IN BELLSOUTH'S SERVING AREAS ARE THERE THREE OR MORE SELF-PROVIDERS OF ENTERPRISE SWITCHING USING DS1 LOOPS?

A. Based on BellSouth's internal data and CLEC discovery responses, there are 3 geographic markets where 3 or more CLECS are serving the enterprise market

with their own switches using DS1 loops, which are shown on the attached Exhibit PAT-10. Admittedly, these are the same markets where the self-provisioning trigger is met.

Q. PLEASE COMMENT ON MR. GILLAN'S CONCLUSIONS CONCERNING BELLSOUTH'S TRIGGER ANALYSIS.

A. Apparently, Mr. Gillan is drawing conclusions based upon his fabricated trigger analysis criteria and upon certain data he claims relates to a CLEC's presence in the marketplace that does not relate directly to the FCC's test. As I explained in my direct testimony and above, BellSouth's trigger analysis considered CLEC provided data regarding its actual deployment, loop data for business class customers from its loop inventory database, and numbers ported to CLECS (which thus includes lines CLECS serve using their own facilities). This contrasts with the narrow approach Mr. Gillan has apparently taken, which is to disregard completely certain information BellSouth has supplied in its responses to discovery, as well as CLEC's responses to BellSouth discovery – which BellSouth produced under protective agreement. BellSouth has diligently attempted to obtain data directly from CLECS to present this Commission with the most accurate information. BellSouth has sought, as much as possible, to rely upon data provided by the CLECS concerning the types of customers served and where such customers are located in analyzing the switching trigger.

Section 3: Discussion of Trigger Candidates

Q. SEVERAL WITNESSES, INCLUDING DR. BRYANT AND MR. GILLAN, ATTEMPT TO DISQUALIFY CLECS AS TRIGGER CANDIDATES ON THE BASIS THAT THEY ARE PROVIDING SERVICE TO BUSINESS CUSTOMERS ONLY. WHAT IS YOUR REACTION?

A. The FCC's rule does not require a competitive LEC to provide service to residential customers in order to qualify as a trigger candidate. The Commission must determine if three or more competing providers are serving mass market customers in a particular geographic market. The FCC defines mass market customers as consisting of "residential customers and very small business customers. Mass market customers typically purchase ordinary switched voice service and a few vertical features. Some customers also purchase additional lines and/or high speed data services." (¶127, TRO) (emphasis added). Any suggestion that a particular trigger candidate must serve both residential and small business customers goes beyond the FCC's clearly defined test.

Q. SEVERAL WITNESSES, INCLUDING BRYANT, GILLAN, AND BRADBURY, ATTEMPT TO "DISQUALIFY" PARTICULAR (AND IN SOME CASES ALL) CLECS FROM BELLSOUTH'S TRIGGER ANALYSIS COMPLETELY. HOW DO YOU RESPOND?

A. I disagree with their assertions. Despite the claims of those witnesses, BellSouth screened out locations served by DS1 loops so that it did not inadvertently include an enterprise location in its mass market analysis. CLECS self-reported their provision of one to three line service to end users in their discovery

responses. For CLECS who refused to respond to discovery, or who otherwise did not provide adequate responses, BellSouth used its own data. BellSouth's internal data was based on DS0 loops and residential ported numbers. I will address specific assertions below.

Q. ON WHAT DOES DR. BRYANT BASE HIS ARGUMENTS THAT THE TRIGGER COMPANIES IDENTIFIED BY BELLSOUTH SHOULD BE DISQUALIFIED?

A. Dr. Bryant attempts to disqualify the trigger companies based solely on pages he printed from these CLECs' web sites. Relying on information contained on these web pages, Dr. Bryant concludes that BEGIN PROPRIETARY ***
**********END PROPRIETARY should be excluded from BellSouth's trigger analysis. Despite Dr. Bryant's claims, however, BellSouth's analysis, which included BellSouth's internal data and CLEC discovery responses, indicates that each of these CLECs <u>are serving</u> customers with DS0 analog loops. Because these CLECs are serving mass market customers with their own switches in the identified markets, they certainly qualify as trigger companies.

Dr. Bryant goes on to argue that BEGIN PROPRIETARY ***[redacted]***END PROPRIETARY should be disqualified as a trigger company. As I mentioned earlier in my testimony, Messrs. Bradbury, Gillan and Bryant overstate the criteria that are to be applied to intermodal providers. The FCC's rule requires only that the intermodal provider provide service that is comparable in quality to the service provided by the ILEC. Exhibit PAT – 11 is information obtained from

BEGIN PROPRIETARY***[redacted]***END PROPRIETARY website, which clearly demonstrates that BEGIN PROPRIETARY ***[redacted]***END PROPRIETARY meets the "comparable in quality" requirement and is providing service to mass market customers.

Q. REGARDING MR. GILLAN'S TESTIMONY ON BEHALF OF COMPSOUTH, SHOULD ANY WEIGHT BE GIVEN TO HIS TESTIMONY CONCERING QUALIFYING TRIGGER CANDIDATES?

A. Absolutely not. Beginning on page 26 of his rebuttal testimony, Mr. Gillan makes certain assertions about specific CLEC trigger candidates and their alleged failure to serve the mass market segment. To support some of his arguments, Mr. Gillan attaches to his testimony affidavits not previously filed in this docket from BEGIN PROPRIETARY***[redacted]***END PROPRIETARY. In the affidavits, these CLECs state they should not be considered trigger companies because they are either not "actively marketing" to these customers or because they consider any DS0 lines served as incidental lines. The FCC criteria requires a determination as to whether CLECs <u>are serving</u> mass market customers. Nowhere, in its trigger test, does the FCC require CLECs to be "actively marketing" to these customers.

Ironically, the discovery responses from BEGIN PROPRIETARY*** [redacted]***END PROPRIETARY indicate that they <u>are serving</u> mass market customers. For example, BEGIN PROPRIETARY ***[redacted]***END PROPRIETARY discovery responses state that

they are serving 1 to 3 line customers. These companies qualify as trigger companies. Furthermore, BEGIN PROPRIETARY ***
[redacted]*** END PROPRIETARY all acknowledge in their affidavits that they <u>are serving</u> DS0 customers. The fact that these CLECs are not actively marketing to DS0 customers is irrelevant. The supplied affidavits are in direct conflict with the actual data from the CLECs' own discovery responses and actual deployment data and are not germane to the trigger analysis. If these CLECs are serving DS0 customers with their own switches in the identified markets, then they certainly qualify as trigger companies.

With regard to BEGIN PROPRIETARY***[redacted]***END PROPRIETARY, whom Mr. Gillan attempts to disqualify as trigger company, BellSouth's internal data shows that they are serving mass market customers. They are not affiliated with any of the CLECS that BellSouth has identified as trigger companies, nor are they affiliated with BellSouth. This complies with the FCC's requirements.

Clearly, all of these CLECS qualify as trigger companies pursuant to the FCC's straight-forward, bright line self-provisioning trigger.

<u>Section 4: Discussion of Market Definition</u>

Q. ON PAGE 13, COMPSOUTH WITNESS JOE GILLAN RECOMMENDS USING LOCAL ACCESS TRANSPORT AREA ("LATA") AS THE APPROPRIATE MARKET DEFINITION. WHAT IS THE OUTCOME OF BELLSOUTH'S SELF-

PROVISIONING TRIGGER ANALYSIS IF LATA WAS THE MARKET DEFINITION?

A. Using this definition would also result in 3 markets satisfying the triggers test. BellSouth's trigger analysis using LATA as the market definition is attached as Exhibit PAT-12.

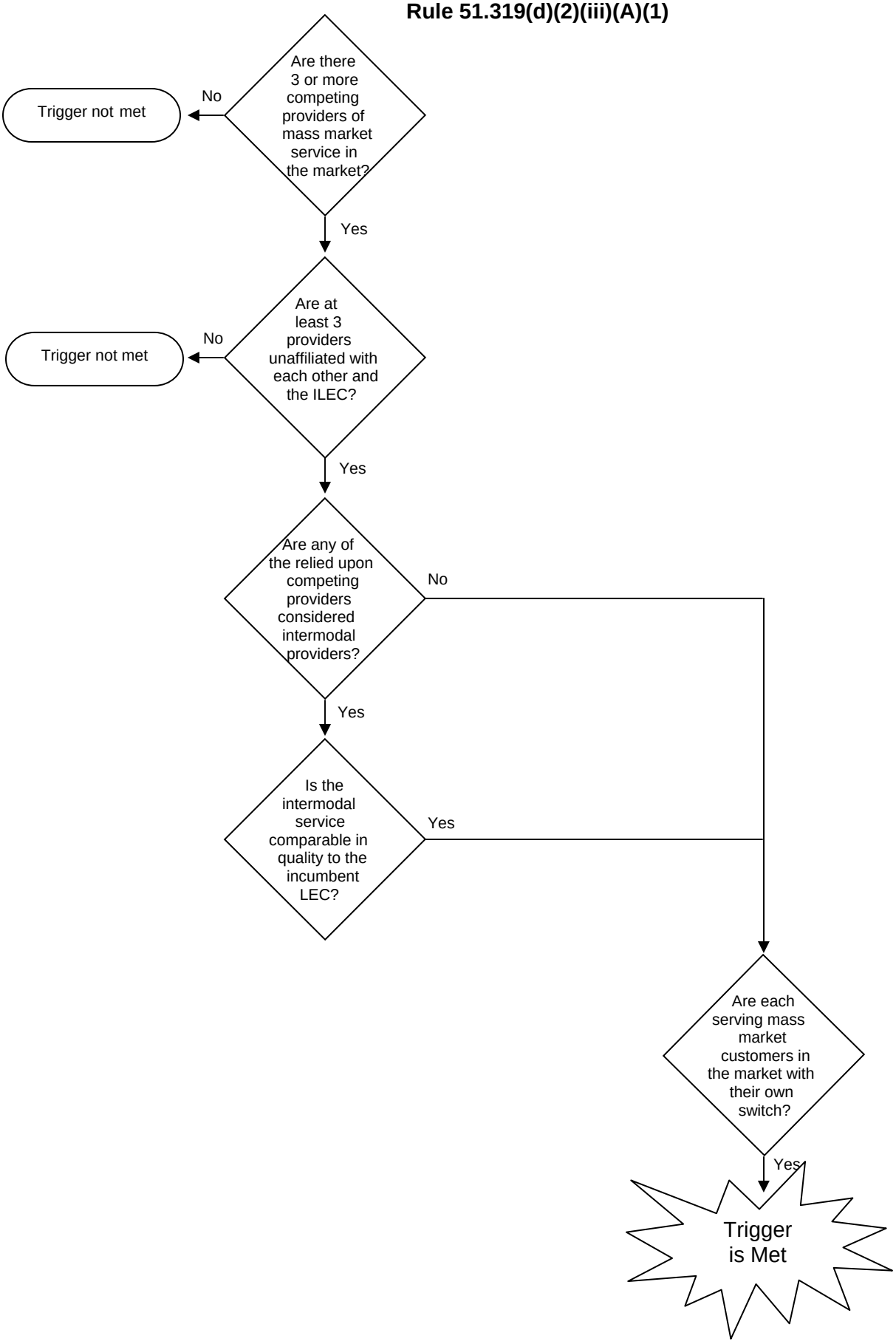
Q. IN THE OTHER STATE IMPAIRMENT PROCEEDINGS, CLECS HAVE RECOMMENDED USING METROPOLITAN SERVING AREAS ("MSAs") AS THE APPROPRIATE MARKET DEFINITION. WHAT IS THE OUTCOME OF BELLSOUTH'S TRIGGER ANALYSIS IF MSA WAS THE MARKET DEFINITION?

A. Using this definition would result in 3 markets satisfying the triggers test. BellSouth's trigger analysis using MSA as the market definition is attached as Exhibit PAT-13.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Decision Flow Chart to Determine if FCC Self-Provisioning Trigger is Met
Rule 51.319(d)(2)(iii)(A)(1)



PUBLIC VERSION

Exhibit PAT-9

CLECS SELF PROVIDING SWITCHING IN ALABAMA	
CLEC	Switch CLLI

Markets with 3 or More CLECs Self-Providing DS1 level Switching

MARKETS

Birmingham, AL Zone 1
Huntsville AL-TN Zone 1
Montgomery AL Zone 1

Services

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Press Releases

Feb 17, 2004

Knology Wins Better Business Bureau Torch Award; Company Recognized for Marketplace Integrity

WEST POINT GA - The West Georgia/East Alabama/Southwest Georgia Better Business Bureau awarded Knology a 2004 Torch Award on February 9, recognizing their long commitment to marketplace integrity and superior business ethics. The award was presented at the BBB Annual Meeting and Torch Award Presentation held at the Columbus Convention and Trade Center.

"Knology's demonstration of character, honesty and integrity in the marketplace exemplifies what the Better Business Bureau is all about," stated Leonard Crain, President and CEO of the regional BBB which presented the award. BBBs in Canada and the United States conduct local competitions; Knology was awarded divisional top honors in the category for companies of 1,000 or more employees. Winning entries on the local levels are forwarded to the Council of Better Business Bureaus for consideration for the International Torch Awards, which will be awarded in New Orleans on September 20, 2004.

Tony Palermo, Vice President of Operations for Knology, accepted the award at the Columbus awards luncheon. "Winning this award is truly an honor for all our employees," said Palermo. "Long before the Sarbanes-Oxley Act, Knology demonstrated a commitment to a simple but basic value system, reaching all the way back to 1896 to our predecessor, the Interstate and Valley Telephone Company. We have always felt a strong responsibility to maintain a high standard of marketplace ethics."

Presented annually since 1996, the BBB International Torch Award for Marketplace Ethics honors businesses that demonstrate exceedingly high standards of behavior towards customers, employees, suppliers, shareholders and communities; adherence to truthful and honorable advertising and sales practices; and an earned reputation for noteworthy contributions to their industries and the communities in which they do business. The award is open to for-profit businesses that provide goods or services to retail and wholesale markets located in the United States, Canada or communities in Mexico served by BBBs.

About Knology

Knology Inc. (NASDAQ: KNOL), headquartered in West Point, Georgia, is a leading provider of interactive communications and entertainment services in the Southeast. Knology serves both residential and business customers with one of the most technologically advanced broadband networks in the country. Innovative offerings include over 200 channels of digital cable TV, local and long distance digital telephone service with the latest enhanced voice messaging features, and high-speed Internet access, which enables consumers to quickly download video, audio and graphic files using a cable modem. For more information, please visit www.knology.com.

# # #

Press contacts Taylor Nipper 678.870.1202 Lizbeth Dison 678.870.1218

Services

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Frequently Asked Questions

What equipment is required for Knology's phone service at my home? TOP

A network interface device is required and will be installed on the side of your home where your other utility devices are located. Knology does not need to do any wiring or installation inside your home, as long as your home has been pre-wired when it was constructed.

Do I receive a discount on telephone service if I'm a cable customer? TOP

Yes! You will receive at least a 5% discount off of Knology's local phone service rates. This means that you can have Knology's phone service for about 10% less than BellSouth!

Can I keep my number if I switch to Knology's phone service? TOP

Yes. You have the option of keeping your existing number or requesting a new number from Knology. Knology may be able to offer you a better or easier number to remember, or we may even be able to provide you with "vanity" numbers such as XXX-CATS or XXX-HOME. Call your Knology customer service representative for more information.

Can I keep my current long distance carrier? TOP

Knology supports several of the major long distance carriers. These Companies include AT&T, BTI, Cable and Wireless, Excel, Frontier, LCI, Qwest, MCI Worldcom, and Sprint. However, you can also request Knology as your long distance provider to receive $0.07 per minute anywhere in the domestic US, anytime of the day or week, for a low monthly fee of $4.95.

Will my telephone and cable services be combined on the same invoice? TOP

Your telephone charges will appear on a separate invoice, making it easier for you to manage your monthly communication costs.

What will it cost to sign up for Knology's phone service? TOP

It only costs $9.95 per telephone line to activate you service.

Will I still be listed in the white pages of the telephone book? TOP

Yes, by changing to Knology's phone service, you are entitled to retain your white pages listing in your local telephone book, whether you keep your BellSouth number or take a new Knology phone number.

Does Knology offer a calling card service? TOP

Yes, Knology currently offers domestic calling card access at 27 cents/minute with no surcharges or minimums. You can also have international termination access with your Knology calling card. International rates vary based on the country called.

What billing methods does Knology use? TOP

Knology currently uses Flat Rate billing method, the Volume Discount billing method, and incremental billing.

What is included in the Custom Calling Features? TOP

Anonymous Call Rejection, Automatic Callback, Automatic Recall, Call Block, Call Forwarding, Distinctive Ringing, Selective Call Acceptance, Selective Call Forwarding, Selective Call Rejection, Speed Calling, Three-Way Calling.

What is included in the Advanced Calling Features? TOP

Intelli-Ring, Call Waiting with Cancel Call Waiting, Caller ID (number only), Caller ID Deluxe (name and number), Call Waiting Display, Voicemail.

What is the difference between Intelli-Ring and Distinctive Ring? TOP

Intelli-Ring allows two different telephone numbers to ring on the same line with distinctive ringing tones.
Distinctive Ringing allows you to assign a distinctive ring and call-waiting tone to incoming calls from designated telephone numbers.

How will my telephone charges be billed? TOP

Bills are separated into two categories: One for telephone and one for cable TV and Internet.

Can I purchase long distance and local service separately? TOP

You can purchase Knology local phone service with your choice of long distance carriers, however, in order to have Knology's long distance service, you must subscribe to Knology's local phone service.

Does Knology sell phone service in the Valley area? TOP

Phone service in the Valley area is provided by Knology's subsidiary company, Interstate Valley Telephone.

What does the Smart Choice Package include? TOP

Smart Choice package includes the Custom Calling and Advanced Calling features.

What is digital telephone service? TOP

Digital telephone service allows clearer and cleaner transmission of the voice signal delivering a much higher quality service than the standard copper wire networks.

Is there any discount associated with the Knology Telephone service? TOP

Yes, Knology will provide your local telephone service at a lower rate than your current carrier, and if you subscribe to at least one of Knology's other services, we will give you an additional 5% discount off of your local service rates.

SERVICES 4 BUSINESS

LATAs Where the Self-Provisioning Trigger is Met

LATA	Market
476	Birmingham, AL
477	Huntsville, AL
478	Montgomery, AL

3 or more CLECs
Serving locations with 3 or less lines
Based on currently available data

MSAs Where the Self-Provisioning Trigger is Met

MSAs

Birmingham

Huntsville

Montgomery

3 or more CLECs
Serving locations with 3 or less lines
Based on currently available data

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Alphonso J. Varner, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase II – Local Switching for Mass Market Customers), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Surrebuttal testimony consisting of 35 pages and 0 exhibits.

AJ Varner

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Micheale F Bixler Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

SURREBUTTAL TESTIMONY OF ALPHONSO J. VARNER

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

FILED MARCH 24, 2004

DOCKET NO. 29054, PHASE II

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

A. My name is Alphonso J. Varner. I am employed by BellSouth as Assistant Vice President in Interconnection Services. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. ARE YOU THE SAME ALPHONSO J. VARNER WHO FILED DIRECT AND REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. Yes I am.

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My Surrebuttal Testimony is filed in response to several issues raised by competitive local exchange carriers ("CLEC") witnesses Sherry Lichtenberg of MCI, and Cheryl Bursh and Mark Van De Water of AT&T.

Q. HOW WOULD YOU CHARACTERIZE THE GENERAL NATURE OF THE ARGUMENTS MADE BY THESE PARTIES?

A. There are four (4) themes repeatedly asserted by the CLECs in an attempt to frustrate a finding by this Commission that CLECs are <u>not</u> operationally impaired without access to local circuit switching offered as a UNE. The first assertion, and the most blatantly erroneous, is that the performance data provided in my Direct Testimony are not relevant to the issues to be addressed in this proceeding. In order to support this faulty conclusion, CLECs engage in a narrow and impractical interpretation of parts of the FCC's Triennial Review Order ("TRO") and ignore other parts of the order that directly contradict their conclusion.

Second, while claiming that the performance results are not relevant on the one hand, on the other hand, CLECs use these same data to argue that because one measure of the performance standards for UNE-Platform ("UNE-P") and UNE Loops ("UNE-L") are different, CLECs are automatically impaired without unbundled local switching. First, their conclusion does not comport with either the TRO or a practical assessment of whether impairment exists. Further, the CLECs did not fulfill the fundamental need to offer tangible evidence that the differences about which they comment constitute operational impairment.

Next, some of these CLEC witnesses replay the contention that disaster looms in the future. Once again, they argue that unless BellSouth's systems and processes used in ordering, provisioning and maintaining UNE-Loops are substantially more mechanized, the potential for errors in manual operations and the increased

demand for UNE-L would cause BellSouth's performance to plummet. As a result, they claim that CLECs would be unable to compete if UNE-P is not required. In the past, CLECs claimed that this scenario was inevitable if BellSouth was allowed into the long distance market. Now, they imply that the sky will fall once again if UNE-P is eliminated and CLECs must rely on UNE-L.

Finally, the CLECs falsely contend that unless the performance standards for UNE-P and UNE-L are virtually the same, CLECs will face operational barriers that would prohibit CLECs from competing effectively in the local mass market. In this instance, the CLECs rely on an illogical interpretation of the FCC statement in the TRO that it "is necessary to ensure that customer loops can be transferred from the [ILEC]…to a [CLEC] …as promptly and efficiently as [ILECs] can transfer customers using local circuit switching." [fn. 1574] The CLECs raising this issue use an impractical inference from this portion of the footnote as the basis to assert that any variation between UNE-P and UNE-L performance is enough to establish impairment.

I. BELLSOUTH'S CURRENT PERFORMANCE RESULTS ARE NOT ONLY RELEVANT TO THIS PROCEEDING, BUT WITHOUT SUCH DATA THERE IS NO OBJECTIVE BASIS TO DETERMINE IF THE CLECS FACE OPERATIONAL IMPAIRMENT.

Q. DO YOU HAVE ANY RESPONSE TO THE COMMENTS ON PAGES 3 AND 4 OF MS. BURSH'S, PAGE 6 OF MR VAN DE WATER'S, AND PAGE 2 OF MS. LICHTENBERG'S REBUTTAL TESTIMONY, WHERE EACH CITE

PARAGRAPH 469 FROM THE FCC'S TRO AS A REASON TO CONCLUDE THAT BELLSOUTH'S CURRENT PERFORMANCE RESULTS ARE NOT RELEVANT IN THIS PROCEEDING?

A. Yes. These witnesses cite the FCC's statement in paragraph 469 of the TRO that "the number of hot cuts performed by BOCs in connection with the 271 process is not comparable to the number that incumbent LECs would need to perform if unbundled switching were not available for all customer locations served with voice-grade loops." This is construed as the basis to declare that the current performance data are irrelevant. This conclusion is not required by the TRO, nor is it a reasonable way for the Commission to proceed, nor is it a reasonable interpretation of the Order.

Paragraph 469 merely indicates that incumbent local exchange carriers ("ILECs"), like BellSouth, cannot rely <u>only</u> on the findings in the 271 proceedings to conclude that there is no impairment for CLECs if unbundled switching is not available. The point that the FCC was making is that the question the state commissions must answer is how the ILEC will handle increased volumes. They did not dismiss current performance data as relevant evidence to be considered by state commissions in that regard. Moreover, in paragraph 512 of its TRO, the FCC encouraged the use of such data in these proceedings with respect to loop provisioning in general when it explains:

> Evidence relevant to this inquiry might include, for example, commercial performance data demonstrating the timeliness and accuracy with which the incumbent LEC performs loop provisioning tasks and the existence of a penalty plan with respect to the applicable metrics. For the incumbent LECs that are BOCs subject to the requirements of section 271 of the Act, states may

> choose to rely on any performance data reports and penalty plans that might have been developed in the context of the past, pending, or planned application for long-distance authority.

Clearly, the FCC intended for states to use the facts of current performance instead of proceeding solely on the basis of unsupported assumptions as these witnesses propose. In essence, these witnesses are proposing to unnecessarily restrict this Commission in its deliberations by ignoring factual data.

The intent of the FCC's statement in paragraph 469 is more reasonably interpreted as the rationale for why it could not find on a national basis that CLECs are not impaired without access to unbundled local switching, or hold unequivocally that they are impaired. If the FCC had made such a clear finding, there would be no need for the state proceedings. Clearly, the FCC was unwilling to make a definitive finding. For example, in footnote 1435 of the same paragraph 469 that these witnesses cite, the FCC states: "our decision does not overlook the possibility that if in some markets the incumbents' ability to perform batch hot cuts does not pose impairment, the states may simply make the findings to this effect." BellSouth's performance data provide evidence of BellSouth's ability to perform loop provisioning in a timely and reliable manner. Hot cuts are simply a specific type of loop provisioning activity. Thus, BellSouth's current exemplary performance data are relevant and important.

The performance data should be used in conjunction with the testimony of BellSouth witnesses such as Mr. McElroy, Mr. Ainsworth, and Mr. Heartley to determine whether operational impairment exists. The performance data calculated as prescribed by this Commission is an important part of this inquiry because it demonstrates the extent of BellSouth's commitment and action on that

commitment to provide nondiscriminatory loop provisioning. BellSouth has shown a commitment to provisioning loops, including hot cuts, in a timely and accurate manner for CLECs in Alabama. These measurement results clearly show that performance does not pose an operational barrier to market entry for the CLECs. The performance data provided in my Direct Testimony offers a factual basis for the Commission's decisions instead of the unsupported assumptions offered by these witnesses.

Q. MS. BURSH, ON PAGES 3 AND 4 OF HER REBUTTAL TESTIMONY ALLEGES THAT BELLSOUTH HAS TWISTED CURRENT PERFORMANCE DATA TO SUPPORT THE CLAIM THAT BELLSOUTH'S EXISTING PROCESSES WILL ADEQUATELY SUPPORT ANTICIPATED LOOP MIGRATION. DO YOU AGREE?

A. No, I disagree. As demonstrated in Exhibit AJV-1 to my Direct Testimony, BellSouth has shown a commitment to performing hot cuts in a timely and accurate manner for CLECs in Alabama. If the hot cut volumes are low, they simply reflect the CLECs' choices, which according to Ms Bursh is rationale to penalize BellSouth. That aside, hot cuts are not a new process to BellSouth. The fact is BellSouth has been doing what we now call "hot cuts" for many years. BellSouth has extensive experience in performing large numbers of hot cuts by completing the work steps required to transfer a geographic area from one wire center to another. These transfers are called "Area Transfers." Another example of BellSouth's experience with "hot cuts" is the T&F process, wherein a customer moves from one location to another within the same wire center. Yet one more

example of hot cuts in very large volumes is switch replacement. This occurs when BellSouth replaces the switching equipment in a central office with newer technology, such as the replacement of an analog switch with a digital switch. Switch replacement involves the hot cut of thousands of customer lines, in a very short period of time. These examples have been subject to Commission oversight for many years, even predating the Telecom Act of 1996. They have also been included in such retail measurements as Customer Trouble Report Rate.

Further, when the Commission set performance standards for CLEC hot cuts, these standards did not have any volume limitations or constraints. BellSouth was required to meet these standards regardless of the volume offered. The data show that BellSouth has met the performance standards established by the Commission, which of course required dedication of the resources necessary to do so. Having met this challenge in the past certainly lends credence to the proposition that BellSouth will do so in the future. These are the facts and these facts cannot be disputed.

Looking specifically at the activity to disconnect and reconnect the loop, for the twelve-month period from November 2002 to October 2003, BellSouth performed this function within 15 minutes for 94% of the 64 coordinated loop conversions in Alabama during that period. For all states in BellSouth's region for the three-month period of August 2003 through October 2003, BellSouth performed this function within 15 minutes for 99.60% of the 4,213 coordinated loop conversions. The average time to cutover a loop was 2 minutes 16 seconds during the twelve-month period from November 2002 to October 2003 for Alabama, excluding 4

lines in January 2003 as described in my direct testimony. Similarly, for all states in BellSouth's region, the average time to cutover a loop was less than 3 minutes during the three-month period of August 2003 through October 2003.

Rather than try to refute the facts, Ms. Bursh resorts to the supposition that the facts will change. The allegation that the existing processes will be inadequate to support anticipated loop migration is merely an unsupported guess that BellSouth will not continue to meet the standards that it has met in the past. The facts represented by both current and historical data contradict her conjecture. Also, in the unlikely event that BellSouth does not meet the standards, there are indicators, such as measurements, and consequences such as SEEM payments, complaints and other remedies that this Commission and the FCC established that can be used to address her concerns.

If Ms. Bursh, like Ms. Lichtenberg, is implying that the processes are not scalable with increased volumes, the FCC has at least partially addressed this issue where the agency has found in 49 decisions under section 271 that incumbents could scale their hot-cut processes as necessary (*e.g., New York Order* ¶ 308). While I agree that this finding was made in an environment where UNE-P was required, nonetheless, it is a recognition that a significant degree of scalability exists. Mr. McElroy in his Direct Testimony explains how a test of BellSouth's batch migration process for converting UNE-P to UNE-L service demonstrated that it will sufficiently support the batch conversion of a CLEC's embedded UNE-P customer base to UNE-L services. Furthermore, Mr. Ainsworth and Mr. Heartley describe how BellSouth's processes are also scalable and will be able to meet the

standards in the future. BellSouth's performance record shows that it has, and is, meeting the challenge of providing nondiscriminatory loop provisioning, including hot cuts. Consequently, the CLEC witnesses attempt to trivialize the data because they can't refute the meaning of the facts. These facts, coupled with the implementation of proven provisioning plans as attested to by other BellSouth witnesses, provide a clear path to determine that anticipated performance will be commendable.

Q. ON PAGE 3 OF HER REBUTTAL TESTIMONY, MS. LICHTENBERG CLAIMS THAT YOUR DIRECT TESTIMONY: (1) AT BEST, "ADDRESSES BELLSOUTH'S PERFORMANCE WITH RESPECT TO THE CURRENT LOW LEVEL OF UNE-L ORDERS;" AND (2) "DOES NOT GIVE A CLEAR PICTURE OF BELLSOUTH'S ACTUAL PERFORMANCE ON UNE-L ORDERS." PLEASE COMMENT.

A. With respect to her first comment, that my Direct Testimony only addresses performance with respect to the "current low level of UNE-L orders," Ms. Lichtenberg misses the obvious purpose of performance data. The only options for performance reporting are past or present results, based on whatever level of activity the CLECs generate. Certainly, the only meaningful way to assess BellSouth's ability to effectively process potential increases in future demand is to consider current performance results, the commonality and capacity of systems used in processes that handle significant volumes for similar activities today, the practical options available to BellSouth (or any business for that matter) of shifting resources to meet demand, and planned improvements in processes to

accommodate anticipated requirements. Thus, the intent of my Direct Testimony, which provided BellSouth's performance with respect to loop provisioning in general and hot cuts in particular, was not for the data to be considered in isolation. Rather, as previously stated, the performance results provided in my Direct Testimony should be considered in conjunction with the testimony of other BellSouth witnesses addressing other relevant aspects of the impairment issue.

The current volumes reflect what the CLECs are ordering and BellSouth can only report what is being ordered. Ms. Lichtenberg provides no reasonable basis as to why the Commission should believe that BellSouth would not be able to handle an increase in UNE-L volumes. In contrast, BellSouth has provided factual data and a concrete rationale to support its claim that performance will indeed be adequate. It should be remembered that when the CLECs opposed BellSouth's long distance applications, they erroneously predicted a similar inability regarding BellSouth's capacity to meet future volume demands for UNE-P and ordering in general. This erroneous prediction was contradicted by the data available at the time. Notably, the facts proved the CLECs' prediction wrong then, and they are wrong now. Rather than rely upon the facts, Ms. Lichtenberg feebly postulates the vaporous notion that if it has not happened in the past, it can't happen in the future, while completely ignoring the fact that both current and historical data contradict her prediction.

In addition, Ms Lichtenberg goes on to reiterate the point that some processes are manual. The thrust of her whole argument in this case is the faulty assumption that the presence of a manual procedure anywhere in the stream of ordering and

provisioning processes somehow results in impairment. Indeed, there is an obvious and significant gap between quoting the percentage of UNE-L orders that were Fully Mechanized during a specific period and concluding that these percentages establish CLEC impairment. The flow-through of LSRs is only one aspect of providing UNE-Loops to CLECs and, as the FCC has clearly explained, a secondary one at that.

As a practical matter, BellSouth will obviously assign its resources to the areas that generate the most volume. Certainly, as CLECs begin to submit more UNE-L orders, and less of other order types, BellSouth would make adjustments to address the change in CLEC ordering patterns. I should also point out that the priority with which BellSouth makes changes to such systems is largely controlled by CLECs through the Change Control Process (CCP). If the flow-through of UNE-L orders becomes a high priority with CLECs, it should be reflected in their CCP prioritization.

Significantly, BellSouth's current and past performance record, in conjunction with the process and procedure plans provided by other BellSouth witnesses, is a reasonable basis to infer that its future performance will be similar. Surely, the performance results provided in my Direct Testimony provide a more rational basis for this Commission's determinations than the conjecture offered by CLEC witnesses such as Ms. Lichtenberg. If the Commission ignores the data completely, as Ms. Lichtenberg suggests, the door is open for a wide variety of such suppositions about potential problems for which there is no factual basis.

In contending that my Direct Testimony does not "give a clear picture of BellSouth's actual performance," Ms. Lichtenberg focuses on two aspects of performance - flow through and order completion interval. Notably, this approach ignores the substantial amount of data that I provided demonstrating that BellSouth's UNE loop provisioning performance has been and continues at a high level. I will address her flow through testimony now and her order completion interval testimony later because it has some common elements with other witnesses.

Any discussion of flow-through must first be placed into context with respect to its usefulness, which Ms Lichtenberg did not address. In addition, she ignored the value of the measurement results as prescribed by this Commission. First, the performance results provided in my Direct Testimony are based on the performance measures and standards established for the Flow-Through metric by this Commission and accepted by the FCC. Moreover, the FCC has repeatedly stated that Flow-Through is a secondary measure and that other measures are more important indicators of performance. In particular, the FCC stated in its Texas Order:

> We have not considered flow-though rates as the sole indicia of parity, however, and thus have not limited our analysis of a BOC's ordering processes to a review of its flow-through performance data. Instead, we have held that factors such as a BOC's overall ability to return timely order confirmation and rejection notices, accurately process manually handled orders, and scale its systems are relevant and probative for analyzing a BOC's ability to provide access to its ordering functions in a nondiscriminatory manner. *See* Texas Order, ¶ 179.

While the FCC has repeatedly expressed the secondary nature and importance of the flow-through metric, the CLECs have repeatedly ignored this point in

assessing the impact of flow-through. The FCC's statement does not mean that flow through is irrelevant; it simply means that its significance is dictated by performance on other measures. In this proceeding, Ms. Lichtenberg attempts to overstate the importance of flow-through apparently because overall performance is being reviewed in connection with batch hot cuts. Oddly, she seems to be aware of its secondary role, because she refers to service order accuracy as an important consequence of flow-through. Service Order Accuracy is one of the measures that bears upon the significance of flow-through, and is a measure that BellSouth currently reports and will continue to report in its monthly data.

Q. MS. LICHTENBERG, ON PAGE 4 OF HER TESTIMONY, STATES THAT "LOW FLOW THROUGH MEANS THAT A SIGNIFICANT NUMBER OF UNE-L ORDERS WILL FALL OUT OF THE SYSTEMS AND MUST BE PROCESSED MANUALLY…INCREASING STILL MORE THE CHANCES FOR HUMAN ERROR AND CUSTOMER SERVICE OUTAGES AND OTHER PROBLEMS." PLEASE COMMENT.

A. Ms. Lichtenberg, again, makes predictions about BellSouth's ability to process orders accurately by referring to "chances" for human error and customer service outages without indicating any factual or other rationale or basis for her predictions. Rather than using performance data to support her analysis, she simply opines that the prospect of excessive human errors by BellSouth or customer service outages and the "potential" for problems is enough for this Commission to find that CLECs are impaired without access UNE-P at TELRIC rates.

If BellSouth's performance results are reviewed, however, it is reasonable to infer that Ms. Lichtenberg's repeated contention that, unless BellSouth's ordering and provisioning processes are significantly more mechanized, CLECs will become impaired without UNE-P, is without merit. For example, with respect to Ms. Lichtenberg's concern about the possibility of human errors in the ordering process, BellSouth reports its monthly performance relative to errors in the ordering process via measure P-11, Service Order Accuracy. While the Service Order Accuracy measure in Alabama does not split the UNE category into UNE-P and UNE-L, the three states that have adopted the mechanized approach requested by the CLECs (i.e., Florida, Georgia, and Tennessee) show UNE-P and UNE-L separately. In these states, for both UNE-P and UNE-L, performance exceeds the 95% benchmark. The following chart reflects BellSouth's combined performance for Florida, Georgia, and Tennessee for the Service Order Accuracy measure for UNE-P and UNE-L for the most recent three months, October, November and December 2003 (the results show the percent of orders that are accurate).

MONTH	**UNE-P**	**UNE-L**
October 2003	95.84%	97.41%
November 2003	96.41	97.94
December 2003	96.80	98.53

As can be seem, performance for both products exceeded the 95% benchmark ordered by these state commissions, which is the same benchmark adopted by this Commission. Based on the performance data above, the Service Order Accuracy

rate was quite high. Even if the argument is made that the current UNE-L levels are much less than anticipated volumes, for December 2003, the volume for UNE-L orders was approximately 11,000 orders regionally, which is clearly sufficient to demonstrate the level of BellSouth's performance. Moreover, the anticipated future increase in UNE-L orders would be accompanied by an anticipated significant decrease in UNE-P as well, which must be considered when predicting future performance levels.

Similarly, with respect to Ms. Lichtenberg's issue concerning potential customer service outages with UNE-L, on page 6 of my Rebuttal Testimony, I provided data for two Maintenance and Repair measures, Customer Trouble Report Rate and Maintenance Average Duration, showing UNE-P results and UNE-L results. Although I do not agree that comparing UNE-L and UNE-P performance is a reasonable approach for reasons discussed in my rebuttal as well as later in this testimony, even those comparisons do not support Ms. Lichtenberg's claim. The data show that for maintenance and repair, BellSouth performed comparably for UNE-P and UNE-L. In fact, the UNE-L results were as good, if not better, than UNE-P results. Moreover, the data show that if the proper comparisons are made, i.e., if UNE-L results are compared to the established retail analogues, BellSouth performs at a very high level in maintaining UNE loops. Again, simply recognizing that these are smaller UNE-L volumes than anticipated in the future, does not establish that performance levels will deteriorate to a point that CLECs are operationally impaired without UNE-P.

II. THE CLAIM THAT UNLESS THE PERFORMANCE STANDARDS FOR UNE-L ARE EQUIVALENT TO UNE-P, CLECS ARE IMPAIRED DUE TO OPERATIONAL BARRIERS WITHOUT ACCESS TO LOCAL SWITCHING IS CONTRARY TO BOTH LOGIC AND THE TRO.

Q. ON PAGES 5 THROUGH 7 OF HER REBUTTAL TESTIMONY, MS. BURSH STATES THAT "BELLSOUTH USES THE WRONG STANDARD IN ATTEMPTING TO DEMONSTRATE THAT CLECS DO NOT FACE OPERATIONAL BARRIERS TO MARKET ENTRY ABSENT UNBUNDLED LOCAL SWITCHING." DOES MS. BURSH PROPOSE AN APPROPRIATE STANDARD TO COMPARE DELIVERY METHODS?

A. No, her proposal is inappropriate. First, I would like to note a bit of inconsistency in Ms Bursh's position. After claiming that BellSouth's data is irrelevant and instructing this Commission to discard this evidence, Ms. Bursh appears to contradict her own testimony. She concedes that the FCC suggested a review of performance data could be appropriate as part of the inquiry into the ILEC's "ability to transfer loops in a timely and reliable manner." (TRO at ¶ 512.) Having now agreed that the data are relevant, she disagrees with the manner in which this Commission chose to develop the data.

The discussion of performance measurements data for hot cuts and UNE local loops in Exhibit AJV-1 provides the relevant information that the FCC suggested for use by this Commission. BellSouth has been producing performance measurements using Alabama data based on the Georgia 4-6-2001 measurement

plan for many months. Instead of assessing BellSouth's performance relative to standards set by that SQM, as I did in my direct testimony, Ms. Bursh claims that my "discussion provides little insight into the issue of whether BellSouth's loop provisioning is as prompt and efficient as UNE-P." Instead, Ms. Bursh along with Ms. Lichtenberg and Mr. Van de Water, create their own standard. None of these witnesses, however, explains how they derived their standard. As to Ms Bursh's self-proclaimed "FCC-prescribed standard of UNE-P performance," there is neither a directive that establishes this standard, nor would it be a reasonable standard by which to measure performance.

The key point is that it is not appropriate to compare performance for UNE-P and UNE-L processes in the instances where they are not analogous. They are not the same products and do not offer the same functionality to the CLEC. Consequently, neither the FCC, nor this Commission required them to be the same. The question before the Commission is NOT whether UNE-L can be made the same as UNE-P. The question before the Commission, rather, is whether an efficient CLEC can compete in a particular market using UNE-L. Because the answer to this question is unequivocally "yes," the CLECs are attempting to change the question.

Q. ON PAGES 4 – 5 OF HER REBUTTAL TESTIMONY, FOLLOWING THE SAME GENERAL APPROACH AS MS. BURSH, MS. LICHTENBURG COMPARES UNE-L INSTALLATION INTERVALS TO UNE-P INSTALLATION INTERVALS AND CONCLUDES THAT UNE-L MIGRATIONS TAKE SUBSTANTIALLY LONGER THAN UNE-P

MIGRATIONS. IS THIS A FAIR COMPARISON?

A. No. This is a comparison that identifies the obvious fact that the products are different, but fails to identify the relevance or usefulness of that fact for determining operational impairment by comparison. As I stated in my Rebuttal Testimony, responding to the same issue raised by AT&T witness Mark David Van De Water, there is an inherent flaw in attempting to equate two different products and processes and expecting the results to be the same. Where UNE-P orders require little more than a billing change of the existing end-user, UNE-L will always require some type of physical work, whether at the central office or the customer's premises. What Ms. Lichtenberg and other CLEC witnesses raising this issue fail to do is demonstrate how they are impaired because of the difference. Furthermore, the CLEC witnesses do not provide any rationale why this Commission should suddenly change the Commission-ordered performance standards for UNE-P and UNE-L, which are generally retail analogs, to now be a simple comparison of UNE-P to UNE-L.

As already mentioned, BellSouth, the CLECs, and the Commission have all spent an enormous amount of time establishing performance measurements, disaggregating products and processes, and creating performance standards based on the differences in these products and processes. Where the performance standards are retail analogs, in most cases these retail analogs are reasonable and relevant. Where they are not reasonable or relevant, CLEC and retail performance results cannot be compared to arrive at a meaningful conclusion. In this instance, more analysis of the data is necessary to determine whether a

performance problem exists. The erroneous standard can be revised in the next periodic review. Contrary to this approach, which CLECs agreed to and this Commission ordered, CLECs now propose to establish UNE-P performance as the analog for UNE-L performance, despite the fact that the two products are not analogous in all cases.

The Commission has determined that the performance standard for both UNE Loops and UNE-P is a retail analog. In the absence of something more tangible, the fact that the standards adopted by all nine state commissions in BellSouth's region and accepted by the FCC, reflect differences based on the different products and processes renders moot this point stressed by Ms. Lichtenberg, and other CLEC witnesses. I should also point out that failure to meet this Commission's prescribed standards for order completion interval, as set forth in the Service Quality Measurement Plan, is met with immediate penalty plan consequences. This occurs, in some cases, even where the performance standard is clearly improper.

Q. TURNING AGAIN TO MS. BURSH, ON PAGES 5 THROUGH 7 OF HER REBUTTAL TESTIMONY, MS. BURSH, NOTING AS MS. LICHTENBERG DID, THAT UNE-P AND UNE-L HAVE DIFFERENT INTERVALS, GOES FURTHER AND MAKES THE ASSERTION THAT IF "UNE-P IS NO LONGER AVAILABLE, THE ILEC MUST FOLLOW THE SAME STANDARD IN PERFORMING ITS REPLACEMENT." DOES THIS CONCLUSION HAVE MERIT?

A. Not entirely. It is a reasonable conclusion when the processes required to provide the two products are analogous. Ms. Bursh, however, is narrowly asserting that the performance standard for Order Completion Interval (OCI) should be the same for these two products even though the processes measured by OCI are not analogous. The basis for this illogical approach is purported to be the FCC in the TRO.

The only determination that the Commission need make is: Will BellSouth's performance for UNE loops provide the CLECs with a meaningful opportunity to compete? Stated another way: does UNE-L performance impair the CLEC's ability to compete? In making this determination, the Commission should consider not only the order completion interval but also the other measurements for the maintenance, billing, provisioning, and ordering processes. The Commission should also consider the fact that UNE-L provides the CLEC with a number of competitive advantages that they do not have with UNE-P. For instance, once an end-user is served by a UNE loop which is terminated on the CLEC's switching equipment, the CLEC can change switch dependant features and offer promotional packaging without involving BellSouth.

Q. YOU STATED THAT MS. BURSH, MS. LICHTENBERG, AND MR. VAN DE WATER ALL CLAIM THAT PERFORMANCE FOR UNE-P AND ITS REPLACEMENT, PRESUMABLY UNE-L, MUST BE THE SAME. DO YOU AGREE WITH THEIR BASIS FOR THIS CLAIM?

A. No. In coming to the conclusion that the Order Completion Interval for UNE-P and UNE-L should be the same, these witnesses cite a partial reference to footnote 1574 in the TRO. The entire footnote is as follows:

> In determining whether granular evidence contradicts our finding that the hot cut process imposes an operational barrier, the state commission should review evidence of consistently reliable performance in three areas: (1) Timeliness: percentage of missed installation appointments and order completion interval; (2) Quality: outages and percent of provisioning troubles; and (3) Maintenance and Repair: customer trouble report rate, percentage of missed repair appointments, and percentage of repeat troubles. This review is necessary to ensure that customer loops can be transferred from the incumbent LEC main distribution frame to a competitive LEC collocation as promptly and efficiently as incumbent LECs can transfer customers using unbundled local circuit switching. This evidence will permit states to evaluate whether competitive carriers are impaired because the quality of their services is below that offered by the incumbent.

While the state commission is encouraged to review performance, there is nothing in this footnote that requires an identical standard for UNE-P and UNE-L. Ms. Bursh and Mr. Van de Water cite the portion of the footnote that discusses "transferring customer loops from the incumbent LEC main distribution frame to a competitive LEC collocation." This function has a performance standard that the activity must be completed within 15 minutes, 95% of the time. They erroneously conclude that the Order Completion Interval for UNE-L, which is not even a measure of the process that they address, must therefore be the same as UNE-P. Once again, these products are different, which means they have inherent advantages and disadvantages. For example, some forms of UNE-P will have a shorter order completion interval than some forms of UNE-L, such as migration only orders. Other forms of UNE-P, such as those orders requiring the dispatch of a technician, will have longer intervals as shown in my rebuttal testimony on this subject. Finally, UNE-L as previously stated provides the CLEC with more direct

control of some of the services provided to their customer. Particularly, CLECs can change custom calling features themselves with UNE-L.

There are significant parallel processes for ordering and provisioning UNE-P and UNE-L services, but they are not analogous with respect to order completion interval. The CLEC's ignore, in the same order, the language to which this footnote applies. Namely, in paragraph 512, which references footnote 1574, the FCC states:

> We therefore ask the state commissions to consider more granular evidence concerning the incumbent LEC's ability to transfer loops in a timely manner. Specifically, we ask the states to determine whether incumbent LECs are providing nondiscriminatory access to unbundled loops. [fn. 1574] Evidence relevant to this inquiry might include, for example, commercial performance data demonstrating the timeliness and accuracy with which the incumbent LEC performs loop provisioning tasks and the existence of a penalty plan with respect to the applicable metrics. <u>For incumbent LECs that are BOCs subject to the requirements of section 271 of the Act, states may chose to rely on any performance data reports and penalty plans that might have been developed in the context of a past, pending, or planned application for long-distance authority</u>. (emphasis added)

Clearly, the FCC is asking states to use existing performance plans with full knowledge that those plans equate performance on UNE-L to retails analogs, not to UNE-P. Therefore, given that the performance data that the FCC encourages states to use in their evaluations do not reflect the same standards for UNE-P and UNE-L, it would be illogical to interpret the footnote cited by the CLECs as meaning that these two performance standards should be equivalent.

Further, the CLECs fail to cite the portion of the footnote that directs "states to evaluate whether competitive carriers are impaired because the quality of their services is below that offered by the incumbent." In other words, the FCC directed the states to use the same tests used to establish the retail analogues and benchmarks in the performance plan – substantially the same time and manner, and meaningful opportunity to compete. Given that the Commission has already established analogues and benchmarks setting those standards, it should rely on that data to meet the FCC's directive.

Significantly, AT&T made this same argument before the FCC that the standard must be the same for UNE-P and UNE-L, contending that until ILECs offer an electronic loop provisioning (ELP) method of transferring large volumes of local customers, unbundled switching for voice grade loops is essential. The FCC, in paragraph 491 of its TRO, rejected this contention stating: "the evidence in the record suggests that an ELP process, to be effective, would require significant and costly upgrades to the existing local network at both the remote terminal and the central office…we, decline to require ELP at this time, although we may reexamine AT&T's proposal if hot cut processes are not, in fact, sufficient to handle necessary volumes." Clearly, the FCC did not support the idea that UNE-P and UNE-L installation intervals must be the same. Consequently, it is impractical for this Commission to superimpose such a blatantly self-serving standard simply because CLECs want to do so.

A more rational interpretation of the TRO is that BellSouth's performance relative to the applicable standards for UNE-L should be equivalent to BellSouth's

performance relative to applicable standards for UNE-P. Said another way, it means that BellSouth must provide nondiscriminatory UNE-L performance just like it must provide nondiscriminatory UNE-P performance. Of course, the data show that BellSouth meets this rational test, which is a fact that CLEC witnesses cannot refute.

Q. MS. BURSH ON PAGE 7 PRESENTS TABLE 1 THAT SHE CLAIMS DEMONSTRATES THAT BELLSOUTH'S LOOP PERFORMANCE FALLS "WOEFULLY SHORT" WHEN COMPARED AGAINST UNE-P PERFORMANCE. WHAT IS THE RELEVANCE OF THIS COMPARISON IN THIS PROCEEDING?

A. It provides no useful information to this Commission. Ms. Bursh is reiterating the same point raised by Mr. Van De Water on pages 15 and 16 of his direct testimony and that I addressed in my rebuttal of Mr. Van De Water's testimony and just addressed again in this testimony. Ms. Bursh's Table (page 7 of her rebuttal testimony) simply points out that the Order Completion Interval (OCI) is the average time interval to complete UNE-P orders, which are mostly orders requiring a records change only, and require no physical work, is less than the average time to complete 2W Analog Loop w/LNP Non-Design < 10 / Dispatch-In, where some form of physical work is required. In other words, UNE-P orders are primarily "switch as is" and 2W Analog Loop w/LNP Non-Design < 10 / Dispatch-In orders are not. Here Ms. Bursh twists her analysis as she attempts to draw conclusions by equating the installation interval for two different products and processes. Many of the UNE-P orders that Ms. Bursh refers to here are

largely orders for feature changes. So, she has stated incorrectly what OCI would be in a UNE-L environment. In particular, for features changes, the order completion interval in the UNE-L environment would be zero, because the CLEC would do this work itself, compared to the "fraction of a day" for UNE-P orders reflected in Ms. Bursh's Table. Further, it should be noted that the interval for 2-W Analog Loop w/LNP Non-Design < 10 / Dispatch-In includes a 3-day minimum for the LNP portion of the work, which has been requested by the CLECs in collaborative teams so that the CLECs have the time to perform the work necessary to provision the service. The origin of this 3-day minimum is actually an industry agreement, which allows for the new service provider (either CLEC or BellSouth) to accomplish the work and coordination necessary to perform a number port. In July 2003, the Local Number Portability Administration Working Group (LNPAWG), which includes CLEC and ILEC representatives, approved a set of number porting procedures that place a lower limit on the Order Completion Interval for number ports in an NPA-NXX exchange. These procedures, in part, state: "Any subsequent port in that NPA NXX will have a due date no earlier than three (3) business days after FOC receipt." A subsequent port refers to any number port that occurs after the very first one in that NPA-NXX code, which would encompass virtually all of the number ports applicable here. The LNPAWG is a sanctioned committee of the North American Numbering Council (NANC). AT&T is a member of the LNPAWG who approved these procedures requiring the 3-day minimum.

However, despite the aforementioned 3-day minimum, BellSouth is investigating ways to shorten the OCI time, particularly for UNE Loop orders not requiring a

dispatch. Of course, any such change must still adhere to industry standards and may be delayed by CLECs through the CCP.

As pointed out in my rebuttal testimony on page 14 and 15, an order for UNE-P typically involves little more than changing the billing of an existing end-user from BellSouth retail, or from another CLEC, to the acquiring CLEC. It is important to note that for most UNE-P orders, the following three factors apply: 1) no physical work is required, 2) no outside dispatch is needed, and 3) the order is not subject to facility shortages. The other order type listed in Ms. Bursh's Table, 2W Analog Loop w/LNP Non-Design < 10 / Dispatch-In, will always require some form of physical work.

Finally, to reiterate, the relevant question is not whether UNE-L and UNE-P are the same, but whether an efficient CLEC can compete using UNE-L. BellSouth's UNE-L performance, coupled with the advantages to the CLEC of UNE-L, provides CLECs a meaningful opportunity to compete. For instance, any alleged timeliness advantage that BellSouth has with respect to loops connected to its switch, becomes an advantage to the CLEC after the CLEC has acquired the customer using UNE-L. In that case, because the loop is already connected to the CLEC's switch and only requires minimal work, BellSouth and the CLEC must perform a hot cut to win-back the customer. Other advantages include the business opportunities to perform their own work on their own switches, and the marketing opportunities to offer their own features and functionalities that are not offered by BellSouth. I only make these points to illustrate the lack of logic

surrounding the CLECs claim that Order Completion Interval results should be viewed in a vacuum and are required to be the same for UNE-P and UNE-L.

Q. ON PAGE 10 OF HIS REBUTTAL TESTIMONY, MR. VAN DE WATER ARGUES THAT BELLSOUTH'S HOT CUT MEASURE BENCHMARK SHOULD BE 5 MINUTES AS OPPOSED TO 15 MINUTES. DO YOU AGREE?

A. No, I do not agree. Mr. Van De Water's allegation that BellSouth insisted in performance measure proceedings to be able to keep the customer out of service for 15 minutes "should it so choose" is quite untrue. First, BellSouth does not have an average interval benchmark like the one that Mr. Van de Water describes. Instead, the standard is to complete 95% of all hot cuts within 15 minutes.

Second, the benchmark provides for the conversion work described in BellSouth witness Mr. Ainsworth's testimony. By performing the pre-conversion work before the actual transfer from switch to switch, BellSouth increases its efficiencies and minimizes the actual impact of the physical transfer to the end-user.

Third, the benchmark is reasonable, as all of the state commissions already have determined.

III. BELLSOUTH HAS PROVIDED ALL OF THE UNE LOOP DATA NECESSARY TO ASSESS ITS PERFORMANCE AND, CONTRARY TO

IMPLICATIONS BY THE CLECS, DID NOT "HIDE" ANY RELEVANT LOOP OR HOT CUT PERFORMANCE RESULTS.

Q. MS. BURSH, ON PAGES 7 THROUGH 9 CLAIMS THAT CONSOLIDATING RESULTS FOR "ALL LOOPS" HIDES PERFORMANCE RESULTS RELEVANT TO THE ISSUE OF OPERATIONAL BARRIERS TO MARKET ENTRY ABSENT UNBUNDLED LOCAL SWITCHING. HOW DO YOU RESPOND?

A. BellSouth did not aggregate or offset the performance assessments in a manner that masks the more relevant performance as Ms. Bursh claims on page 8. On the contrary, Exhibit AJV-1 and Attachment 1 provided hot cut performance in detail, as well as the other performance data for UNE Local Loops in Alabama. The data show that BellSouth met the Coordinated Customer Conversion 15-minute benchmark for over 93.75% of all cutovers in the past 12 months in Alabama. This measurement reflects the average time it takes to disconnect an unbundled loop from the BellSouth switch and cross connect it to the CLEC equipment. For UNE Local Loops, BellSouth met the specified benchmark intervals for FOCs at a rate of 97% during the 12-month period (November 2002 – October 2003). For the same period, BellSouth met the performance standard for 93% of the provisioning sub-metrics and 95% of the maintenance & repair sub-metrics.

Further, the detailed data for each individual sub-metric was provided. This was clearly the case, because Ms. Bursh refers to some of that data in her testimony. The problem with analyzing performance at the sub-metric level is that many of

the sub-metrics have such small volumes, that they don't provide a useful basis for analysis. To help remedy that problem, I refer to aggregate statistics in the body of the testimony; however, the detail is plainly visible for anyone who wants to see it. Moreover, when the detail is considered, BellSouth's performance actually seems to be better than the aggregate statistics indicate.

Q. ON PAGE 9, BEGINNING ON LINE 3 MS. BURSH APPEARS TO BELIEVE THAT BELLSOUTH'S AGGREGATED ASSESSMENT MAY MASK PERFORMANCE. HOW DO YOU RESPOND?

A. As I indicated above, BellSouth did not aggregate the performance assessments in a way that masks anything. On pages 8 and 9 of my Direct Testimony, I explain which products are included within the UNE Loop performance data. Also, as previously stated, Exhibit AJV-1 provides a detailed discussion of the data <u>and</u> the detailed performance results at the sub-metric level. That exhibit beginning on page 12 provided overall hot cut performance and the charts in Attachment 1 to the Exhibit AJV-1 provided the data individually. It is this detailed comparative performance data for UNE Local loops that actually facilitates evaluation of the extent to which nondiscriminatory performance is provided. But regardless of the individual or aggregated presentation of the data, the fact remains that BellSouth's performance is very high.

Q. MS. BURSH AGAIN PRESENTS PERFORMANCE RESULTS (PAGES 9 AND 10) FOR SUB-METRICS TO BOLSTER THE CLAIM "THAT

BELLSOUTH IS NOT PROVIDING EXCELLENT SERVICE LEVELS IN STATES WITH MORE VOLUME." HOW DO YOU RESPOND?

A. Ms. Bursh continues her pattern of identifying anecdotal examples of sub-metrics where BellSouth has not met the benchmark and ignoring the overall performance of the measurement. Ms. Bursh picks a few sub-metrics of the partially mechanized FOCs as her examples. As stated previously, overall FOC performance actually averaged 97% over the period from November 2002 through October 2003. However, Ms. Bursh focuses on only <u>one</u> sub-metric, FOC Timeliness – Partially Mechanized. In previous states such as North Carolina, Ms. Bursh focused her attention on the FOC and Reject Completeness fully mechanized sub-metric. However, because BellSouth met 100% of the 2W Analog Design loops for that sub-metric in Alabama, she has moved to another sub-metric instead of looking at the overall performance being provided to the CLECs.

Lastly, Ms. Bursh fails to account for the fact that for the period in question (March through September 2003 in Georgia), that in several of the months where BellSouth performance missed the 90% benchmark, the transaction volume was sufficiently low that <u>BellSouth could not miss more than a few transactions</u>. For example, in the month of June 2003 for 2W Analog Design Loops with LNP where the volume of transactions for the sub-metric was 16, BellSouth returned 13 FOCs with the benchmark; thus the 3 failures result in a 81.25% performance but a miss of the 90% benchmark for this sub-metric. In short, with such a low volume, only near-perfection could have achieved the standard. Ms. Bursh's

analysis ignores these practical facts. Also, in March 2003 this benchmark changed from 85% in 10 hours to 90% in 7 hours for partial mechanized LSRs in Georgia, which is the example Ms. Bursh cited in her rebuttal. This benchmark is the most stringent in any of the 9 states that BellSouth serves.

Q. STARTING ON PAGE 10, LINE 13 OF HER REBUTTAL TESTIMONY, MS. BURSH APPEARS TO ALLEGE THAT BELLSOUTH IS MISREPRESENTING THE PERFORMANCE RESULTS BY INCLUDING LOOPS THAT ARE NOT MIGRATABLE FROM UNE-P. HOW DO YOU RESPOND?

A. Actually, it appears that Ms. Bursh seems to be creating confusion with the Commission by making an argument that appears to have little, if any, relevance. BellSouth is presenting performance data for all products that a CLEC might use in significant volume to provide service using UNE-L. This inquiry should not be limited simply to those loops that can be migrated from UNE-P because a CLEC can acquire customers by conversion from retail, or from new installations. Additionally, CLECs can add lines to existing accounts. All of these possibilities allow a CLEC to compete, but none of them involve migration from UNE-P.

Also, Ms. Bursh's testimony and that of other witnesses indicate that they are certainly interested in ensuring that no operational impairment exists on loops regardless of whether they can be migrated from UNE-P. The data represents all loops including those that are newly provisioned, migrated from Retail, switched

from other CLECs, as well those that are migrated from UNE-P and is not limited to hot cuts. This is the appropriate scope of the inquiry, and allows the Commission to assess BellSouth's performance in provisioning UNE Loops for all relevant products.

IV. THE EXISTING ALABAMA SERVICE QUALITY MEASUREMENT PLAN METRICS TOGETHER WITH THE PROPOSED CHANGES INCLUDED IN MY DIRECT TESTIMONY ARE MORE THAN SUFFICIENT TO ADDRESS CURRENT AND ANTICIPATED HOT CUT PERFORMANCE CONCERNS.

Q. ON PAGE 11, LINES 16 - 25, MS. BURSH ASSERTS THAT BELLSOUTH'S PROPOSED ENHANCEMENTS TO THE PERFORMANCE MEASURES AND SEEM PLAN ARE INADEQUATE. DO YOU AGREE?

A. No. Contrary to Ms. Bursh's assertion, Bellsouth indeed suffers negative consequences if elongated response intervals to the Bulk Migration Notification forms are reflected in the results for PO-3, UNE Bulk Migration – Response Time. As stated in my Direct Testimony, any extensive response intervals to the Bulk Migration Notification forms would penalize BellSouth since BellSouth's incentive is to migrate the customer to UNE-L and not to delay any response and lengthen response time of the Bulk Migration. BellSouth does not believe it should offer to write the CLECs a check for the privilege of providing them UNE-P at today's highly discounted rate after it is no longer required. The SEEM plan should be designed to penalize poor performance, not simply generate an

unwarranted windfall to CLECs. Ms. Bursh's view, that CLECs should receive payments whether they are harmed or not, is consistent with her past positions, so it comes as no surprise.

Q. ON PAGE 12, MS. BURSH CONTENDS THAT BELLSOUTH SHOULD ESTABLISH ADDITIONAL METRICS FOR MONITORING THE BATCH HOT CUT PROCESS. DOES THIS CONTENTION HAVE ANY MERIT?

A. No. The new measurements and modifications to existing measurements proposed in my Direct Testimony provide sufficient additional data to monitor BellSouth's performance during hot cuts. Although Ms. Bursh asserts that even more measurements are essential, she does not provide any specifications for the additional measurements that she claims are so desperately needed. All companies, not just the CLECs, have the need to optimize the utilization of resources. Creating and producing unnecessary measurements does not assist that goal. Although, Ms. Bursh proposes titles for new measures, such as "Percent of Batches Started on Time", "Percent of Batches Completed On Time", and "Percent Conversion Service Outages," she does not provide the specifics of the measurements she is suggesting. In any event, it appears that her concerns have already been addressed.

Regarding the requested "Percent Batches Started on Time" measure, this Commission has already established and BellSouth already produces a measurement, P-7A, for Hot-Cut Timeliness that measures whether or not a coordinated hot cut begins within 15 minutes of the requested start time. For non-

coordinated hot cuts, the hot cuts simply need to start on the due date. If a non-coordinated hot cut does not start on the due date, the existing missed installation appointment metric and the new measure P-7E described in my Direct Testimony and again below capture that performance.

Likewise, it appears that Ms. Bursh's suggestion for a metric for "Percent of Batches Completed on Time" data is already being addressed. For coordinated hot cuts, measure P-7A, Coordinated Customer Conversions – Hot Cut Timeliness % within Interval and Average Interval coupled with P-7, Coordinated Customer Conversions Interval, captures whether the cut was started on time and completed on time. To address the "Percent of Batches Completed On Time" for non-coordinated hot cuts, BellSouth has already proposed P-7E, Non-Coordinated Customer Conversions - % Completed and Notified on Due Date as referenced in my direct testimony on page 43. The proposed new measure, complete with a definition, exclusions, business rules, calculation, report structure and benchmark is included in Exhibit AJV-2. To summarize, this report measures the percentage of non-coordinated conversions that BellSouth completed on the due date and provided notification to the CLEC on the same date. This measure is also proposed to be included in both Tier 1 and Tier 2 of SEEM.

Lastly, Ms. Bursh proposes the establishment of a "Percent Conversion Service Outages" measurement. It appears, however, that this performance is already covered by measures P-7B and P-7C, which are the Average Recovery Time, and Percent Provisioning Troubles in 7 Days measures.

As for the SEEM consequences, my disagreement with Ms. Bursh's proposal, *i.e.*, equal to the average net revenue time the average life of the customer, has already been addressed in my rebuttal to Mr. Van De Water's testimony.

V. OTHER ISSUES

Q. HOW WOULD BELLSOUTH PROPOSE TO ADDRESS PROCESS CHANGES THAT WOULD AFFECT MEASUREMENTS?

A. BellSouth is planning several enhancements to the batch hot cut process, as discussed in the surrebuttal testimony of BellSouth witness Mr. Ken Ainsworth. In my direct testimony, I proposed two new measurements, PO-3 and P-7E, and changes to measures O-7, O-8, O-9, O-11 and P-7. To the extent that these enhancements affect the measurements, BellSouth will, of course, modify its proposed measurement changes and additions accordingly.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF MIDDLESEX
STATE OF MASSACHUSETTS

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared ANIRUDDHA BANERJEE, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase III – Continued Availability of Unbundled High Capacity Loops and Transport), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Rebuttal testimony consisting of 7 pages and 0 exhibits.

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 15th DAY OF MARCH, 2004

Notary Public

SILVIA SANTOS
NOTARY PUBLIC
My commission expires Sept 24, 2004

ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.

REBUTTAL TESTIMONY OF ANIRUDDHA (ANDY) BANERJEE, Ph.D.

BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054 PHASE III

MARCH 24, 2004

I. INTRODUCTION AND SUMMARY

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT POSITION.

A. My name is Aniruddha (Andy) Banerjee. I am a Vice President at NERA Economic Consulting located at One Main Street, Cambridge, Massachusetts 02142.

Q. HAVE YOU TESTIFIED PREVIOUSLY IN THIS PROCEEDING?

A. Yes, I filed Direct Testimony in this proceeding on March 5, 2004.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. My Rebuttal Testimony responds to certain economic issues raised in the Direct Testimonies of Gary J. Ball (on behalf of Competitive Carriers of the South) that was filed in this proceeding on March 5, 2004. Mr. Ball purports [at 4] to offer "a workable framework for evaluating ILEC claims of non-impairment that is faithful to the principles and requirements set forth in the *TRO*."[1] My Rebuttal Testimony indicates that Mr. Ball's "framework"—as far as it concerns the conduct of the potential deployment test—is deficient in at least two important respects.

Q. WHAT ARE THE TWO FLAWS IN MR. BALL'S "FRAMEWORK?"

A. First, in providing an example of "how the definition of a loop could be misinterpreted by an ILEC," Mr. Ball [at 19] adopts a flawed definition of the term "customer location."

[1] "ILEC" is the acronym for incumbent local exchange carrier. "*TRO*" is shorthand for the *Triennial Review Order*, released on August 21, 2003 by the Federal Communications Commission ("FCC") in CC Docket Nos. 01-338, 96-98, and 98-147.

Although Mr. Ball does so in his discussion of the requirements for satisfying the FCC-specified self-provisioning trigger analysis, the definition has serious consequences for the potential deployment analysis as well.

Second, Mr. Ball dismisses [at 35] the relevance of the potential deployment test in the event that the self-provisioning trigger test is not satisfied for a given customer location or transport route. In fact, the reasons he constructs for conducting the potential deployment test are themselves flawed and run counter to the FCC's own instructions about when and how that test should be conducted.

Q. PLEASE EXPLAIN WHY MR. BALL'S DEFINITION OF "CUSTOMER LOCATION" IS FLAWED.

A. Mr. Ball offers [at 19] the following example of how an ILEC *could* misinterpret the definition of a loop for the purposes of the self-provisioning trigger analysis.

> In a multi-tenant building, two CLECs may have provisioned fiber-optic facilities to serve one customer each, while the rest of the building is being served solely by the ILEC. Even though there are two competing loop facilities into the building, an ILEC request that the trigger is satisfied for the entire building, or even the two customers served by the CLECs, would be incorrect, as no customer location within the building is being served by the facilities of two or more competing providers. The key distinction in this example is that the customer location, which is the endpoint of the loop per the FCC, is a subset of a building location in a multi-tenant environment.[2]

This example is misleading because it relies on a flawed definition of "customer location." Mr. Ball draws an explicit distinction between a customer location and a building with multiple tenants. Nothing in the *TRO* or instructions given by the FCC to conduct either the trigger test or the potential deployment test makes that distinction. To the contrary, there is ample evidence that, in the context of the enterprise market, the FCC uses the term "customer location" in the same sense as a "multiunit premises location" or building with multiple tenants. For example, while discussing the record on CLEC deployment of OCn-level fiber loops, the FCC states:

[2] "CLEC" is the acronym for "competitive local exchange carrier."

> … the record shows that competitors have built fiber loops to *buildings* that carry a significant portion of the competitive traffic in certain MSAs. [*TRO*, ¶298; emphasis added]

The FCC's concern is clearly not so much with end-user customers as with buildings that are occupied by those customers. A similar reference by the FCC to the record on CLEC deployment of DS3 loops, in fact, cites WorldCom and AT&T:

> *See, e.g.*, WorldCom Fleming Decl. at para. 10 (when customer demand is projected at several DS3s or optical level capacity a self-build decision is made); WorldCom Comments at 7 (customers in a *building* must commit to at least three DS3 circuits before it is economically viable to extend fiber to that building); AT&T Comments at 134 (a competitive LEC can only self-deploy to a location with enormous demand, the smallest of which would be at the OC3 level); AT&T Nov. 25, 2002 *Ex Parte* Letter at 3 (the amount of committed traffic to support construction of loops for large business customers is about three DS3s, i.e., an OC3), and Attach. B at 9 (at least three DS3s worth of demand is required before a facility build can generally be proven as financially prudent). The record also contains some evidence that DS3 loop services may be available from alternative providers other than the incumbent LECs in some buildings where competitive capacity to the *building* has already been provisioned at the OCn level. [*TRO*, fn. 860; emphasis added]

Another example of the FCC's usage of the term comes from its discussion of the importance of demand and revenue, not just cost, in the CLEC's decision to deploy its own fiber loops:

> Because the cost to self-deploy local loops at any capacity is great, and the cost to deploy fiber does not vary based on capacity, a competitive LEC that plans to self-deploy its own facilities must target customer locations where there is sufficient demand from a potential customer base, usually a *multiunit premises location*, to generate a revenue stream that could recover the sunk construction costs of the underlying loop transmission facility, including laying the fiber and attaching the requisite optronics to light the fiber. [*TRO*, ¶303; emphasis added][3]

[3] Other passages in the *TRO* reinforce the reasons for using the term "customer location" in the same sense as "building." See, e.g., *TRO*, ¶¶343-358 (on subloops for multiunit premises access and network interface devices). Indeed, both the potential deployment analysis in my Direct Testimony and the trigger analysis in the Direct Testimony of Shelley Padgett in this proceeding have made such a usage. In its discussion of the impairment issue, the FCC also reports that 3-5% of the nation's *commercial office buildings*—a term used by the FCC—are served by CLEC-deployed fiber loops. See the *TRO*, fn. 856.

Again, there is no evidence that the term "customer location" should mean "customer" or imply, as Mr. Ball puts it, a "subset of a building location in a multi-tenant environment."

Q. WHAT ARE THE LIKELY CONSEQUENCES OF ADOPTING MR. BALL'S DEFINITION OF "CUSTOMER LOCATION?"

A. Despite the clear record of how the FCC has used that term, Mr. Ball appears to equate "customer location" with "customer," or at least with some entity short of the building itself. That is neither inadvertent nor inconsequential. As is obvious from the passage reproduced above from Mr. Ball's testimony, such a definition would oblige any trigger or potential deployment analysis to demonstrate that at least two competing providers are serving either a customer or some undefined entity between the level of a customer and the building in which that customer is an occupant. Taken to the extreme, this would amount to having to show that each customer (such as a medium or large-sized firm that is a tenant in the building) is in a position to be served by two or more competing providers using their own fiber loop facilities. In my reading of the *TRO*, the FCC has never required that, in order to establish non-impairment, a trigger or a potential deployment test be undertaken in the manner suggested by Mr. Ball. Indeed, it is doubtful that non-impairment can ever be established in the circumstances envisioned by Mr. Ball. The FCC's requirement for conducting either test is only that two or more competing providers be shown to be able to (either actually or potentially) serve the customer location of interest (namely, a building with multiple tenants)—not individual customers or the offices they occupy—using their own fiber loop facilities. Hence, the presence in the building of two or more self-deployed CLECs alongside the ILEC would suffice to satisfy the FCC's requirement.

Q. PLEASE EXPLAIN WHY MR. BALL IS WRONG TO DISMISS THE RELEVANCE OF THE POTENTIAL DEPLOYMENT TEST WHEN, FOR SOME REASON, THE SELF-PROVISIONING TRIGGER TEST IS NOT SATISFIED.

A. Mr. Ball reasons that if the self-provisioning trigger test is not satisfied, then it must mean that two or more competing providers have not deployed their own fiber loops to a customer location, or that three or more competing providers have not deployed their own transport facilities over a particular route. In any such situation, Mr. Ball argues, CLECs

would clearly be impaired without unbundled access to ILEC fiber loop or transport facilities. In fact, Mr. Ball further reasons [at 35] that the only purpose of the potential deployment test at that point would be to demonstrate that "something unique to this particular customer location or this transport route rebuts the national finding of impairment."

This is a complete misinterpretation of the FCC's purpose behind conducting a potential deployment test. Consider the following statement by the FCC of its rationale for such a test:

> In applying the Self-Provisioning Trigger to high capacity loops, we find that actual competitive deployment is the best indicator that requesting carriers are not impaired, and therefore emphasize that this quantitative trigger is the primary vehicle through which non-impairment findings will be made. We recognize, however, that this high-capacity loop trigger measures only the existence of *actual* deployed competitive alternatives at a customer location rather than whether that particular customer location *could* be economically served by competitive carriers through deployment of alternative loop transmission facilities. Thus, when conducting its customer location specific analyses, a state must consider and may also find no impairment at a particular customer location even when this trigger has not been facially met *if* the state commission finds that no material economic or operational barriers at a customer location preclude competitive LECs from economically deploying loop transmission facilities to that particular customer location at the relevant loop capacity level. [*TRO*, ¶335; emphasis in original][4]

The FCC makes no reference here to "unique" characteristics of the customer location in the manner suggested by Mr. Ball. Rather, it is clear that, when the self-provisioning trigger test is not fully satisfied, the role of the potential deployment analysis is to show that some required number of self-deployed CLECs would not be precluded by "material economic or operational barriers" from providing service to the customer location or building in question. Thus, as explained in my Direct Testimony, if the trigger analysis shows that a building is actually being served by one self-deployed CLEC, then it would suffice for the potential deployment analysis to show that at least one more CLEC can potentially (i.e., in a financially viable manner) serve that building using its own fiber

[4] A similar rationale appears in the *TRO*, ¶410, for a potential deployment analysis of transport routes.

loops. In addition, if the trigger analysis shows that no CLEC is actually serving a building, then it would suffice for the potential deployment analysis to show that at least two CLECs can potentially serve that building using their own fiber loops. In that sense, the FCC's two tests can be regarded as being complementary: between them, they must establish the actual or potential presence of two or more self-deployed CLECs at a given customer location.

It is particularly noteworthy that, although it considers "actual competitive deployment" to be the "best indicator" of non-impairment, the FCC certainly does not hold *actual* deployment to be the *only* indicator for that purpose. From this, it is reasonable to infer that even customer locations for which there is *no* actual competitive deployment presently may be subjected to the potential deployment test. Upon doing so, non-impairment would be established if at least two CLECs could be found to potentially serve a customer location using their own fiber loops.[5] For this reason, I disagree with Mr. Ball's assertion [at 35] that "the potential deployment test posits a situation that is extremely unlikely to occur." It is *not* that unlikely when the complementary nature of the two tests is properly understood.

A similar logic applies to the use of the two tests for non-impairment on transport routes. The FCC has established that, to demonstrate non-impairment on a given transport route, three or more self-deployed CLECs should be able to actually or potentially serve that route. Thus, if the trigger analysis shows the presence of two such CLECs on that route, then the potential deployment analysis must establish that it would be financially viable for at least one more self-deployed CLEC to serve that route. If the trigger analysis shows the presence of only one (or zero) self-deployed CLEC, then the potential deployment test would have to establish that at least two (or three) self-deployed CLECs could viably serve that route. This is exactly the direction followed in my Direct

[5] Logically, *any* demonstration that at least two CLECs could potentially deploy their own fiber loops to a building would establish non-impairment. This would be true *regardless* of whether any actual competitive deployment has occurred to either fully or partially satisfy the self-provisioning trigger test. In that sense, my conduct of the potential deployment test in my Direct Testimony clearly *exceeded* the FCC's minimum requirements for demonstrating non-impairment.

Testimony.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

ALABAMA PUBLIC SERVICE COMMISSION

COUNTY OF Fulton
STATE OF Georgia

BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Shelley W. Padgett, who being by me first duly sworn deposed and said that he/she is appearing as a witness on behalf of BellSouth Telecommunications, Inc. before the Alabama Public Service Commission in Docket No. 29054, IN RE: Implementation of the Federal Communications Commission's Triennial Review Order (Phase III – Continued Availability of Unbundled High Capacity Loops and Transport), and if present before the Commission and duly sworn, his/her statements would be set forth in the annexed Rebuttal testimony consisting of 10 pages and 0 exhibits.

Shelley W. Padgett

SWORN TO AND SUBSCRIBED BEFORE ME
THIS 19th DAY OF MARCH, 2004

Micheale F. Bixler Notary Public

MICHEALE F. BIXLER
Notary Public, Douglas County, Georgia
My Commission Expires November 3, 2005

BELLSOUTH TELECOMMUNICATIONS, INC.

REBUTTAL TESTIMONY OF SHELLEY W. PADGETT

BEFORE THE ALBAMA PUBLIC SERVICE COMMISSION

DOCKET NO. 29054, Phase III

MARCH 24, 2004

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

A. My name is Shelley W. Padgett. I am employed by BellSouth as Manager – Regulatory and Policy Support in the Interconnection Services organization. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375.

Q. ARE YOU THE SAME SHELLEY W. PADGETT THAT FILED DIRECT TESTIMONY IN THIS PROCEEDING ON MARCH 5, 2004?

A. Yes.

Q. DO YOU HAVE ANY OVERALL COMMENTS CONCERNING MR. BALL'S DIRECT TESTIMONY?

A. Yes, I do. Mr. Ball's testimony is not relevant to the identification of the customer locations and transport routes where CLECs are not impaired without unbundled access to high-capacity loops and transport, which is the goal of this proceeding. Indeed, most of Mr. Ball's testimony simply discusses the FCC's *Triennial Review Order* ("TRO"), describing his interpretation of its policy objectives and applications. As I described in my direct testimony however, the TRO is quite clear in specifying how the self-provisioning and wholesale triggers tests should be correctly applied, and most of Mr. Ball's interpretations are substantially incorrect. Furthermore, Mr. Ball erroneously states that the ILECs bear the burden of proof in this case (page 15), which is flatly contradicted by TRO, ¶ 92, in which the FCC states that "[w]e do not adopt a 'burden of proof' approach that places the onus on either incumbent LECS or competitors to prove or disprove the need for unbundling."

Q. HOW IS YOUR TESTIMONY ORGANIZED?

A. There are at least two primary areas of the TRO that Mr. Ball interprets incorrectly: the definition of a route and the definition of a customer location. Mr. Ball also addresses, albeit incorrectly, the transition period. I will address each of these in turn.

(1) The definition of a route

Q. WHAT DOES MR. BALL SAY ABOUT THE DEFINITION OF A "ROUTE"?

A. Mr. Ball claims that, for a CLEC to count towards the transport triggers on a given route, the CLEC must provide service directly connecting the two central offices at each end of the route, stating that to support a trigger claim, the ILEC must produce evidence that "the CLEC self-provisions transport service (…) between the two wire centers and that each collocation arrangement in question is being used as an endpoint for a transport route at the specific capacity level between two wire centers." (page 19 and 20)

Q. IS THIS INTERPRETATION CORRECT?

A. No. Mr. Ball's interpretation of a transport route is puzzling, at best. Mr. Ball apparently believes that even if a carrier can indirectly send traffic between two ILEC central offices, this carrier does not count toward the triggers test for that route. Mr. Ball further argues that most CLEC networks are constructed such that collocation arrangements are used as a traffic aggregation point that can only route back to the CLEC's switch and that the CLEC is incapable of routing traffic from its switch to the ILEC's central office across those same facilities (pages 12-13).

However, as the FCC has explained, passing through an intermediate wire center or an intermediate switch – ILEC or CLEC – does not prevent the connection of

two central offices to form a route. Rule 319(e) clearly provides that "a *route* is a transmission path between one of an incumbent LEC's wire centers or switches and another of the incumbent LEC's wire centers or switches. A route between two points (e.g., wire center or switch "A" and wire center or switch "Z") may pass through one or more intermediate wire centers or switches (e.g., wire center or switch "X"). Transmission paths between identical end points (e.g., wire center or switch "A" and wire center or switch "Z") are the same *route*, irrespective of whether they pass through the same intermediate wire centers or switches, if any."

Q. WHAT SHOULD BE ASSUMED ABOUT CLECS' ABILITY TO PROVIDE TRANSPORT BETWEEN ILEC WIRE CENTERS?

A. As explained by Mr. Gray in his direct testimony (page 9, line 6 through page 7, line 6), it is reasonable to assume that a carrier has a "route" between any pair of incumbent LEC wire centers in the same LATA where it has operational collocation arrangements. MCI even indicated that any point on their network may be connected to any other point on the network. In short, it is logical and reasonable to assume that a carrier's network within a LATA is fully interconnected.

Q. ARE THERE ANY OTHER PROBLEMS WITH MR. BALL'S DEFINITION?

A. Yes. Mr. Ball claims the FCC requires that a CLEC must be "providing transport service between the two ILEC wire centers" for a route to be counted (page 20, lines 3-5).

Q. WHY IS THIS INCORRECT?

A. The FCC's rules do not require that for a CLEC to qualify for the triggers it has to currently provide service between the two ILEC central offices at the ends of the route, but only that the "competing provider has deployed its own transport facilities and is operationally ready to use those transport facilities to provide dedicated (…) transport along the particular route" ((47 C.F.R. §51.319(e)(2)(i)(A)(1)). Therefore, the statements made in Mr. Ball's testimony regarding the need to show evidence that a CLEC is "providing service between the two ILEC wire centers" are inconsistent with the TRO and should be disregarded by this Commission.

As stated in the FCC's rules, the qualifying condition is that the CLEC has to be "operationally ready" to use those facilities to provide transport along the specific route, which a CLEC clearly is when it has operational fiber-based collocation arrangements at both ILEC central offices. Establishing a connection between two operationally ready collocations via a switch or hub typically requires only a software-based configuration of a circuit. Thus, even if a CLEC does not ordinarily use its interoffice facilities to provide transport between ILEC central

offices, this fact is irrelevant for the proceeding since they are operationally ready to do so.

Q. MR. BALL STATES ON PAGE 17 OF HIS TESTIMONY THAT THE PRESENCE OF OCN EQUIPMENT IN A BUILDING OR ON A ROUTE IS NOT INDICATIVE OF WHETHER ANOTHER CARRIER CAN ECONOMICALLY PROVIDE DS3S SERVICES. DO YOU AGREE?

A. No. OCn facilities indicate that a carrier can, and most likely is, providing or capable of providing DS3 services to a building or along a route. The FCC recognized that carriers don't deploy stand-alone DS3s when it stated, "When competitive LECs self-deploy fiber, they predominantly do so at the OCn-level." ¶298 The FCC found that there were economic barriers to deploying stand-alone DS3 facilities, yet found that significant competition exists in some locations and established the triggers specifically to identify these locations. "Despite the economic barriers that a competitive LEC faces in deploying single DS3 loops, the record indicates that some carriers have been able to overcome these barriers when providing multiple DS3s to a specific customer location." ¶321 Clearly, the FCC included facilities that carry multiple DS3s – OCn facilities – in determining that some carriers have overcome barriers to entry.

Further, the FCC's discussion of the rationale behind the triggers clearly includes DS3s that are channelized on an OCn facility. Paragraph 298 states, "evidence of

self-deployment [of DS3s] …is directly related to location-specific criteria". The footnote attached to this sentence (Note 860) explains these location-specific criteria. It says, "[W]hen customer demand is projected as several DS3s or optical level capacity a self-build decision is made…[There is] some evidence that DS3 loop service may be available from alternative providers…in some buildings where competitive capacity to the building has already been provisioned at the OCn level."

(2) The definition of a customer location

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Q. HOW DOES MR. BALL DEFINE A "CUSTOMER LOCATION"?

A. Mr. Ball claims in his testimony that in multi-tenant building, the customer location is defined as the tenant unit rather than the building (page 19). The implication of this assertion is that meeting the self-provisioning trigger for loops would require an individual end user to be served by two or more competing providers in order for the trigger to apply, and, even then, the unbundling relief would only apply to the facilities serving that particular end user.

Q. IS MR. BALL'S INTERPRETATION CORRECT?

A. No. Mr. Ball's interpretation is contrary to the rules, which distinguish between "customer locations" and "individual unit[s] within that location". 47 C.F.R. §

51.319(a)(4)(ii), (5)(i)(B). This distinction indicates that a customer location is a building, not an individual unit or suite in a multi-unit building.

Indeed, based on their discovery responses, the CLECs in Florida agree. The Commission's discovery specifically asked the CLECs to identify the "customer locations" to which they have deployed loop facilities and, in response, the CLECs provided the addresses of specific buildings.

Further, Mr. Ball contradicts his own position when he says on page 18 that "the loop must permit the CLEC to access all units within a customer location, such as all tenants in a multi-tenant building," indicating that the "customer location" is the building rather than the tenant unit.

(3) The transition period

Q. SHOULD THE COMMISSION ADDRESS THE TRANSITION PERIOD IN ANOTHER PROCEEDING FOLLOWING THIS PROCEEDING AS MR. BALL SUGGESTS?

A. No. Any transition period should be addressed in this proceeding. It would make little sense to expend additional time and resources at a later time and further delay opening the market on routes or to locations for which the Commission has already found that competing carriers are not impaired.

Q. MR. BALL RECOMMENDS THAT THIS COMMISSION INSTITUTE A MUTLI-TIERED TRANSITION PROCESS. (PAGES 37-39). PLEASE RESPOND.

A. Mr. Ball's plan apparently relies upon the switching and line sharing plans established by the FCC. Without commenting on the merits of such plans, I disagree with Mr. Ball's reliance. This Commission may determine that CLECs are not impaired in competing along specific routes or to specific customer locations, not an entire market. There is absolutely no reason for a phased in approach.

Q. MR. BALL CLAIMS THAT PARAGRAPH 584 OF THE TRO MANDATES THAT COMPETING CARRIERS MAY CONTINUE TO HAVE ACCESS TO COMBINATIONS OF LOOP AND TRANSPORT EVEN IF ONE OF THE ELEMENTS OF A PARTICULAR COMBINATION HAS BEEN DELISTED. (PAGE 37). PLEASE RESPOND.

A. Mr. Ball has inaccurately interpreted the FCC's intentions. Paragraph 584 was modified in the FCC's Errata, released September 17, 2003, to remove any reference to network elements made available to competing carriers pursuant to Section 271 of the Telecommunications Act of 1996 (the Act). In note 1990, the FCC explicitly stated its intentions with regard to such network elements. It

states, "[w]e decline to require BOCs, pursuant to section 271, to combine network elements that no longer are required to be unbundled under section 251. Unlike section 251(c)(3), items 4-6 and 10 of section 271's competitive checklist contain no mention of 'combining' and, as noted above, do not refer back to the combination requirement set forth in section 251(c)(3)." The FCC does not appear to agree with Mr. Ball.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.