

BellSouth Telecommunications, Inc.  
Kentucky Public Service Commission  
Case No. 2003-00379  
AT&T's 1st Interrogatories  
October 10, 2003  
**ATTACHMENT 1**

Supplemental Response to Item No. 3

**BellSouth Telecommunications, Inc.**

**Report on the BellSouth Bulk  
Migration and Regional Tests**

**December 22, 2003**

**BellSouth Telecommunications, Inc.  
Bulk Migration Process and Regional Tests**

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**Report of Independent Accountants****PricewaterhouseCoopers LLP**

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Telephone (678) 419 1000

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To Management of BellSouth Telecommunications, Inc.:

We have examined management's assertion, included in the accompanying *Management Assertions on BellSouth Telecommunications' Bulk Migration Process*, that BellSouth Telecommunication, Inc. (BellSouth) utilized the BellSouth Unbundled Network Element – Port/Loop Combination (UNE-P) to Unbundled Network Element – Loop (UNE-L) Process (Bulk Migration Process Document) to complete its test of Bulk Migration service requests for three central offices in Florida. The test of the Bulk Migration Process was initiated on October 30, 2003 and completed on December 11, 2003. Management is responsible for the Company's assertion. Our responsibility is to express an opinion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence supporting management's assertion and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Our examination identified certain instances where BellSouth deviated from the Bulk Migration Process criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Bulk Migration Process* and all are outlined in Attachment A.

In our opinion, except for the deviations from the criteria described in Attachment A, BellSouth utilized the Bulk Migration Process, in all material respects, to complete its test of Bulk Migration Service Requests for three central offices in Florida that was initiated on October 30, 2003 and completed on December 11, 2003, based on the criteria defined in the accompanying *Management Assertions on BellSouth Telecommunications' Bulk Migration Process*.

This report is intended solely for the information and use of BellSouth Corporation and BellSouth Telecommunications, Inc. and appropriate regulatory agencies and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and distribution is not limited.

A handwritten signature in cursive script that reads "PricewaterhouseCoopers LLP".

PricewaterhouseCoopers LLP

December 18, 2003

## Attachment A

**Exceptions to Management Assertions on  
BellSouth Telecommunications' Bulk Migration Process**

The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. While observing the BellSouth Bulk Migration Process test, we noted the Central Office Technician was unable to ANAC the BellSouth dial tone upon commencing the Hot Cut Process for three lines. Once the Central Office Technician could not obtain a BellSouth dial tone, troubleshooting procedures were performed to resolve the issue. The BellSouth dial tone was restored by having the number downloaded to the switch translation tables. The elapsed time from the initial BellSouth dial tone check to the restoration of BellSouth dial tone was approximately 40 minutes for each line. The Field Office Technician then completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
2. While observing the BellSouth Bulk Migration Process test, we noted that three cutovers were completed and dial tone could not be reestablished within 15 minutes. Once dial tone was reestablished the BellSouth Technician successfully verified CLEC dial tone and completed an ANAC test.
3. While observing the BellSouth Bulk Migration Process test, we noted that for two orders the due dates were missed. Both orders were scheduled to be cutover on December 11, 2003. However, one of the two orders was cutover on December 5, 2003 and the other order was not cutover by December 11, 2003.
4. While observing the BellSouth Bulk Migration Process test, we noted the Field Office Technician was unable to ANAC the BellSouth dial tone for 19 lines prior to the cutover. The Field Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
5. While observing the BellSouth Bulk Migration Process test, we noted for one order that a Central Office Technician completed an ANAC on the BellSouth line prior to the cutover and received the wrong telephone number. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
6. While observing the BellSouth Bulk Migration Process test at the Arch Creek central office on December 4, 2003, PwC noted that the frame attendant did not test for CLEC dial tone prior to performing the hot cut for 6 telephone numbers. The frame attendant verified the cutover was successfully completed via a dial tone and ANAC test subsequent to the cutover.
7. The BellSouth Unbundled Network Element – Port/Loop Combination (UNE-P) to Unbundled Network Element – Loop (UNE-L) Process document states that UNE-L 2 wire unbundled copper loop-non designed and Remote Call Forwarding services can be submitted as Bulk Orders. However, BellSouth's electronic ordering systems will reject UNE-L 2 wire unbundled copper loop-non designed (UCL-ND) and Remote Call Forwarding services that would be included on Bulk Migration orders.
8. While observing the process for the completion of bulk migration orders, we noted that EnDI emails were not being received by the CLEC for 49 non-coordinated lines. We noted that 47 of the lines were

cutover on December 2, 2003 and two of the lines were cutover on December 11, 2003. The EnDI emails provide notification to the CLECs that the cutover has been completed.



**Management Assertions on BellSouth  
Telecommunications' Bulk Migration Process**

Management of BellSouth Telecommunications (BellSouth) asserts that:

BellSouth's Unbundled Network Element—Port/Loop Combination (UNE-P) to Unbundled Network Element—Loop (UNE-L) Process (Bulk Migration Process) will enable the bulk migration of Competitive Local Exchange Carrier (CLEC) customers. BellSouth's Bulk Migration Process Version 1 is published at <http://interconnection.bellsouth.com/> dated March 26, 2003. BellSouth has utilized its Bulk Migration Process to complete a test of Bulk Migration service requests for three central offices in Florida from October 30, 2003 through December 11, 2003, with the exception of those items presented in Attachment B. During the test, BellSouth submitted test local service requests as a simulated CLEC, and processed the service requests through the provisioning process, however BellSouth did not send NPAC messages. The BellSouth Bulk Migration Test has been defined in Sections V and VI of this report.

The following describes the term "utilized" criteria:

**Bulk Process Migration Test**

BellSouth Management asserts that Management utilized the Bulk Migration Process during their test of the Bulk Migration service requests. As it relates to this assertion, "utilized" will be assessed according to the following:

- BellSouth processed the service requests as per the Bulk Migration Submission/Flow Process included in the Bulk Migration Process.
- BellSouth completed all edit and validation checks on the service requests that are included in the Bulk Migration Process.
- BellSouth was able to convert all test lines by the due dates, up to 125 lines per day per central office, and reestablished dial tone on the CLEC CFA Block.
- BellSouth assigned local service request due dates according to the intervals defined by the Bulk Migration Process.
- BellSouth processed only those services (i.e., USOCs) that are included in the Bulk Migration Process.

A handwritten signature in black ink that reads "William N. Stacy". The signature is written in a cursive style with a large, stylized "S" at the end.

William N. Stacy  
Network Vice President  
Interconnection Services

**Attachment B**

The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. While observing the BellSouth Bulk Migration Process test, we noted the Central Office Technician was unable to ANAC the BellSouth dial tone upon commencing the Hot Cut Process for three lines. Once the Central Office Technician could not obtain a BellSouth dial tone, troubleshooting procedures were performed to resolve the issue. The BellSouth dial tone was restored by having the number downloaded to the switch translation tables. The elapsed time from the initial BellSouth dial tone check to the restoration of BellSouth dial tone was approximately 40 minutes for each line. The Field Office Technician then completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
2. While observing the BellSouth Bulk Migration Process test, we noted that three cutovers were completed and dial tone could not be reestablished within 15 minutes. Once dial tone was reestablished the BellSouth Technician successfully verified CLEC dial tone and completed an ANAC test.
3. While observing the BellSouth Bulk Migration Process test, we noted that for two orders the due dates were missed. Both orders were scheduled to be cutover on December 11, 2003. However, one of the two orders was cutover on December 5, 2003 and the other order was not cutover by December 11, 2003.
4. While observing the BellSouth Bulk Migration Process test, we noted the Field Office Technician was unable to ANAC the BellSouth dial tone for 19 lines prior to the cutover. The Field Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
5. While observing the BellSouth Bulk Migration Process test, we noted for one order that a Central Office Technician completed an ANAC on the BellSouth line prior to the cutover and received the wrong telephone number. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
6. While observing the BellSouth Bulk Migration Process test at the Arch Creek central office on December 4, 2003, PwC noted that the frame attendant did not test for CLEC dial tone prior to performing the hot cut for 6 telephone numbers. The frame attendant verified the cutover was successfully completed via a dial tone and ANAC test subsequent to the cutover.
7. The BellSouth Unbundled Network Element – Port/Loop Combination (UNE-P) to Unbundled Network Element – Loop (UNE-L) Process document states that UNE-L 2 wire unbundled copper loop-non designed and Remote Call Forwarding services can be submitted as Bulk Orders. However, BellSouth's electronic ordering systems will reject UNE-L 2 wire unbundled copper loop-non designed (UCL-ND) and Remote Call Forwarding services that would be included on Bulk Migration orders.
8. While observing the process for the completion of bulk migration orders, we noted that EnDI emails were not being received by the CLEC for 49 non-coordinated lines. We noted that 47 of the lines were cutover on December 2, 2003 and two of the lines were cutover on December 11, 2003. The EnDI emails provide notification to the CLECs that the cutover has been completed.



**Report of Independent Accountants****PricewaterhouseCoopers LLP**

10 Tenth Street, Suite 1400

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To Management of BellSouth Telecommunications, Inc.:

We have examined management's assertion, included in the accompanying *Management Assertions on BellSouth Telecommunications' Hot Cut Process*, that the Hot Cut Process, as it relates to the physical Unbundled Network Element—Port/Loop Combination (UNE-P) to Unbundled Network Element—Loop (UNE-L) migration, used by the central office and field technicians during BellSouth's test of its Bulk Migration Process is the same process used for non-bulk hot cuts in BellSouth's region, as of December 18, 2003. Management is responsible for the Company's assertion. Our responsibility is to express an opinion based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants and, accordingly, included examining, on a test basis, evidence supporting management's assertion and performing such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

We noted that sufficient Hot Cut order volume did not exist within Alabama and Kentucky; accordingly, we could not perform any testing over the Hot Cut Process in those states.

Our examination identified certain instances where BellSouth Field or Central Office Technicians deviated from the Hot Cut Process defined in the accompanying *Management Assertions on BellSouth Telecommunications' Hot Cut Process* and all are outlined in Attachment C.

In our opinion, except for the deviations from the criteria described in Attachment C, the Hot Cut Process used by the central office and field technicians during BellSouth's test of its Bulk Migration Process is the same process, in all material respects, as the process used for non-bulk hot cuts in BellSouth's region, as of December 18, 2003, based on the criteria set forth in the accompanying *Management Assertions on BellSouth Telecommunications' Hot Cut Process*.

This report is intended solely for the information and use of BellSouth Corporation and BellSouth Telecommunications, Inc. and appropriate regulatory agencies and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and distribution is not limited.

*PricewaterhouseCoopers LLP*

PricewaterhouseCoopers LLP

December 18, 2003

## Attachment C

**Exceptions to Management Assertions on  
BellSouth Telecommunications' Hot Cut Process**

The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. While observing the BellSouth Bulk Migration Process test, we noted the Central Office Technician was unable to ANAC the BellSouth dial tone upon commencing the Hot Cut Process for three lines. Once the Central Office Technician could not obtain a BellSouth dial tone, troubleshooting procedures were performed to resolve the issue. The BellSouth dial tone was restored by having the number downloaded to the switch translation tables. The elapsed time from the initial BellSouth dial tone check to the restoration of BellSouth dial tone was approximately 40 minutes for each line. The Field Office Technician then completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
2. While observing the BellSouth Bulk Migration Process test, we noted that three cutovers were completed and dial tone could not be reestablished within 15 minutes. Once dial tone was reestablished the BellSouth Technician successfully verified CLEC dial tone and completed an ANAC test.
3. While observing the BellSouth Bulk Migration Process test, we noted that for two orders the due dates were missed. Both orders were scheduled to be cutover on December 11, 2003. However, one of the two orders was cutover on December 5, 2003 and the other order was not cutover by December 11, 2003.
4. While observing the BellSouth Bulk Migration Process test, we noted the Field Office Technician was unable to ANAC the BellSouth dial tone for 19 lines prior to the cutover. The Field Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
5. While observing the BellSouth Bulk Migration Process test, we noted for one order that a Central Office Technician completed an ANAC on the BellSouth line prior to the cutover and received the wrong telephone number. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
6. While observing the BellSouth Bulk Migration Process test at the Arch Creek central office on December 4, 2003, PwC noted that the frame attendant did not test for CLEC dial tone prior to performing the hot cut for 6 telephone numbers. The frame attendant verified the cutover was successfully completed via a dial tone and ANAC test subsequent to the cutover.
7. While observing Hot Cuts across BellSouth's region, we noted that the central office technician did not perform a pre-cut dial tone and ANAC test for the BellSouth and CLEC lines prior to performing the hot cut for seven telephone numbers. We noted that the central office technician did not perform a pre-cut dial tone and ANAC test on the CLEC line prior to performing the hot cut for two additional telephone numbers. We also noted that the BellSouth Technician completed each cutover and successfully verified CLEC dial tone and completed an ANAC test.
8. While observing Hot Cuts across BellSouth's region test, we noted the Central Office Technician was unable to ANAC the BellSouth dial tone for one line prior to the cutover. The Central Office

Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.

9. While observing Hot Cuts across BellSouth's region, we noted that a cutover was completed despite a service order in a Missed Appointment status. Due to the service order being in a Missed Appointment status, an EnDI fax was not sent to the CWINS center.



**Management Assertions on BellSouth  
Telecommunications' Hot Cut Process**

Management of BellSouth Telecommunications (BellSouth) asserts that:

The Bulk Migration Process requires central office and field technicians to physically perform the Unbundled Network Element—Port/Loop Combination (UNE-P) to Unbundled Network Element—Loop (UNE-L) migration (the Hot Cut Process). The Hot Cut Process used by the central office and field technicians during BellSouth's test of its Bulk Migration Process is the same Process used for non-bulk hot cuts in BellSouth's region, as of December 18, 2003, with the exception of those items noted in Attachment D, based on the criteria below. A description of BellSouth's test of its Bulk Migration Process has been included in Sections V and VI of this report.

The following describes the terms "same" and "Hot Cut Process" criteria:

**Hot Cut Process**

As it relates to this assertion, "same" is defined as:

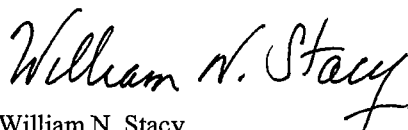
The Hot Cut Process for non-bulk hot cuts will be considered the same as the Hot Cut Process used during the Bulk Migration Process Test if each of the steps defined as the "Hot Cut Process" below for Central and Field Office Hot Cuts are completed for each process. As it relates to this assertion, the "Hot Cut Process" will be defined as the following processes:

*Central Office Hot Cuts*

1. **Order Receipt** – Central Office (CO) Technicians receive hot cut information associated with service orders via Work Force Administrator-Dispatch In (WFADI) and Switch/FOMS.
2. **Install Jumpers** – The CO technician will install jumpers according to the Switch/FOMS instructions.
3. **Pre-cut Dial Tone and ANAC Testing** – CO technician will test for dial tone and ANAC on the existing BellSouth pair and on the CFA block.
4. **Cutover** – The CO technician performs the cutover according to the Switch/FOMS assignment instructions on the Due Date. Coordinated conversions, as ordered by CLECs, will be performed when advised by the CWINS. Non-coordinated conversions, as ordered by CLECs, will be performed anytime on the Due Date.
5. **Post-Cut Dial Tone Test** – For coordinated cuts, the CO Technician tests the cutover on the BellSouth Cable Pair to ensure that dial tone has been restored and the proper phone number is received.
6. **CLEC Notification**
  - a. For Non-Coordinated Hot Cuts, the CO technician completes the WFA-DI work-step, which will also send a completion to Switch/FOMS. Also, the Enhanced Delivery Initiative system (EnDI) system sends a fax or email to the CLEC and a fax to the CWINS center as notification that the Hot Cut is complete.
  - b. For Coordinated Hot Cuts, the CO technician advises the CWINS that the cut is complete.

*Field Office Hot Cuts*

1. **Order Receipt** – Field Office (FO) receives hot cut orders via LMOS/IDS (non-design) or WFA-DO/IDS (dispatch out, design), and CO Technicians receive hot cut order information via WFA-DI and Switch/FOMS.
2. **CO Install Jumper** – The CO technician will install jumpers according to the Switch/FOMS instructions.
3. **CO Continuity Test** – The CO technician performs a continuity test to ensure that the jumper from the F1 Block to the CLEC CFA Block has continuity.
4. **CO Completion** – The CO technician completes the WFA-DI work-step, which will also send a completion to Switch/FOMS.
5. **Field Wiring** – The CO technician will install jumpers according to the LMOS or WFA-DO instructions.
6. **Pre Conversion/Migration Dial Tone & ANAC Test**
  - a. **BellSouth Dial Tone - Non-Coordinated & Coordinated** - Field Technician will verify dial tone and ANAC to verify results match disconnect order.
  - b. **CLEC Dial Tone**
    1. **Non-Coordinated** - On Due Date, Field Technician checks for CLEC dial tone on universal and copper lines.
    2. **Coordinated SL1 or SL2** - On Due Date, for universal and copper lines the Field Technician checks for CLEC dial tone, ANACs, and provide Telephone Number to CWINS to verify accuracy.
7. **Field Cutover** – The FO technician performs the cutover of the customer line.
8. **Post-Cut Dial Tone Test** – For coordinated cuts, the FO Technician will test the cutover to ensure that dial tone has been restored and the proper phone number is received.
9. **CLEC Notification**
  - a. For Non-Coordinated Hot Cuts, the FO technician completes the workstep in the WFA-DO/IDS or LMOS/IDS system. Also, EnDI sends a fax or email to the CLEC and a fax to the CWINS center as notification as the Hot Cut is complete.
  - b. For Coordinated Hot Cuts, the FO technician completes the workstep in the WFA-DO or LMOS systems and advises the CWINS that the cut is complete.



William N. Stacy  
Network Vice President  
Interconnection Services

**Attachment D**

The following issues have been numbered sequentially and have not been prioritized based on the significance of the issue:

1. While observing the BellSouth Bulk Migration Process test, we noted the Central Office Technician was unable to ANAC the BellSouth dial tone upon commencing the Hot Cut Process for three lines. Once the Central Office Technician could not obtain a BellSouth dial tone, troubleshooting procedures were performed to resolve the issue. The BellSouth dial tone was restored by having the number downloaded to the switch translation tables. The elapsed time from the initial BellSouth dial tone check to the restoration of BellSouth dial tone was approximately 40 minutes for each line. The Field Office Technician then completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
2. While observing the BellSouth Bulk Migration Process test, we noted that three cutovers were completed and dial tone could not be reestablished within 15 minutes. Once dial tone was reestablished the BellSouth Technician successfully verified CLEC dial tone and completed an ANAC test.
3. While observing the BellSouth Bulk Migration Process test, we noted that for two orders the due dates were missed. Both orders were scheduled to be cutover on December 11, 2003. However, one of the two orders was cutover on December 5, 2003 and the other order was not cutover by December 11, 2003.
4. While observing the BellSouth Bulk Migration Process test, we noted the Field Office Technician was unable to ANAC the BellSouth dial tone for 19 lines prior to the cutover. The Field Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
5. While observing the BellSouth Bulk Migration Process test, we noted for one order that a Central Office Technician completed an ANAC on the BellSouth line prior to the cutover and received the wrong telephone number. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
6. While observing the BellSouth Bulk Migration Process test at the Arch Creek central office on December 4, 2003, PwC noted that the frame attendant did not test for CLEC dial tone prior to performing the hot cut for 6 telephone numbers. The frame attendant verified the cutover was successfully completed via a dial tone and ANAC test subsequent to the cutover.
7. While observing Hot Cuts across BellSouth's region, we noted that the central office technician did not perform a pre-cut dial tone and ANAC test for the BellSouth and CLEC lines prior to performing the hot cut for seven telephone numbers. We noted that the central office technician did not perform a pre-cut dial tone and ANAC test on the CLEC line prior to performing the hot cut for two additional telephone numbers. We also noted that the BellSouth Technician completed each cutover and successfully verified CLEC dial tone and completed an ANAC test.
8. While observing Hot Cuts across BellSouth's region test, we noted the Central Office Technician was unable to ANAC the BellSouth dial tone for one line prior to the cutover. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.

9. While observing Hot Cuts across BellSouth's region, we noted that a cutover was completed despite a service order in a Missed Appointment status. Due to the service order being in a Missed Appointment status, an EnDI fax was not sent to the CWINS center.

Supplementary Information



**SECTION V – EXECUTIVE OVERVIEW****A. Overview of Reports**

In recognition that the Unbundled Network Element – Port/Loop Combination (UNE-P) to Unbundled Network Element – Loop (UNE-L) Bulk Migration Process (Bulk Migration Process Document) may be used by a CLEC to migrate existing multiple non-complex UNE-P services to a UNE-L offering, BellSouth has completed a test of Bulk Migration service requests for three central offices in Florida. The management of BellSouth requested that PricewaterhouseCoopers LLP (PricewaterhouseCoopers) perform an independent examination surrounding BellSouth's assertion that:

- BellSouth has utilized the Bulk Migration Process during their test of the Bulk Migration service requests for three central offices in Florida; and that,
- The Hot Cut Process, as it relates to the physical Unbundled Network Element—Port/Loop Combination (UNE-P) to Unbundled Network Element—Loop (UNE-L) migration, used by the central office and field technicians during BellSouth's test of its Bulk Migration Process is the same process used for non-bulk hot cuts in BellSouth's region.

The management of BellSouth has provided herein a description of the Bulk Migration Test completed in Florida and the Regional Test, as well as the criteria for the assertions noted above. BellSouth Management is responsible for identification of the criteria underlying its assertion of utilizing the Bulk Migration Process Document and the sameness of the Hot Cut Process across its region.

**B. Objective of Supplementary Test Information**

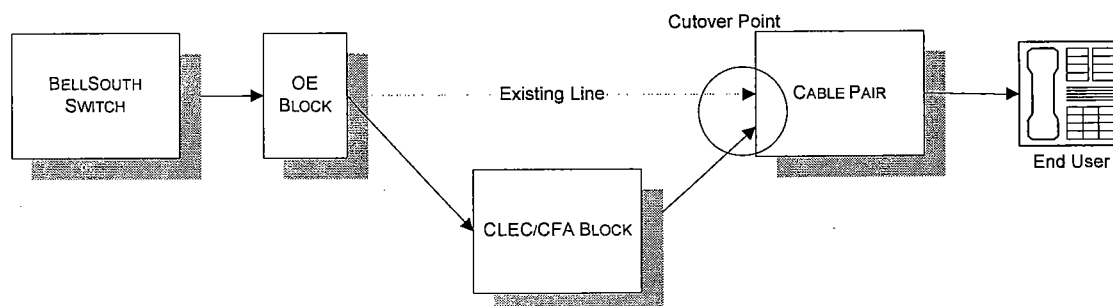
The objective of this information is to provide a description of the Bulk Migration and Regional Tests that were completed in Florida from October 30, 2003 through December 11, 2003.

### SECTION VI – BULK MIGRATION AND REGIONAL TESTS

To demonstrate the effectiveness of the Bulk Migration Process, BellSouth conducted a test for three central offices in Florida. For the BellSouth Bulk Migration Florida Test, (the Test), BellSouth simulated an operational CLEC, (Pseudo CLEC) which submitted multiple Bulk Migration Orders. The Test was completed following the guidelines outlined by the Unbundled Network Element – Port/Loop Combination (UNE-P) to Unbundled Network Element – Loop (UNE-L) Bulk Migration Process (Bulk Migration Process Document). BellSouth completed the following during the Test:

- BellSouth established a UNE-P Test Bed in three Central Offices in Florida. Florida is expected to be the first state to have a CLEC exercise the Bulk Migration Process. UNE-P telephone numbers (TNs) were established based on the make-up of outside plant facilities within the state, with approximately 50% on copper, 14% on Universal Digital Loop Carrier (UDLC), and 36% on Integrated Digital Loop Carrier (IDLC). Additionally, approximately 85% of the TNs were established as residential class of service, while 10% were business and 3% were coin. The remaining 2% were spread between business and residence classes of service for remote call forwarding solutions.
- The Pseudo CLEC created and submitted 724 Bulk Migration service orders. The submission process included interaction with a BellSouth Project Manager to assign due dates, submission of LSRs through BellSouth's electronic ordering gateways, (i.e., TAG, LENS and EDI), and interaction with the BellSouth CWINS during the provisioning of the service orders.
- Service requests submitted by the Pseudo CLEC were processed through BellSouth's systems and service centers as normal transactions.
- During a typical copper or universal CLEC Hot Cut, the CLEC will deliver dial tone from its own switch to a collocation point in a BellSouth Central Office. The CLEC collocation points are hard wired to a CLEC Block on the BellSouth Distributing Frame in the central office. Due to BellSouth operating as a Pseudo CLEC, BellSouth had to deliver dial tone from its own switch to its Pseudo CLEC Block on the Distributing Frame. This was accomplished by wiring the BellSouth OE Block to the Pseudo CLEC Block on the Distributing Frame for universal and copper services. Refer to Figure 1.0 for a diagram for the generation of Pseudo CLEC dial tone.

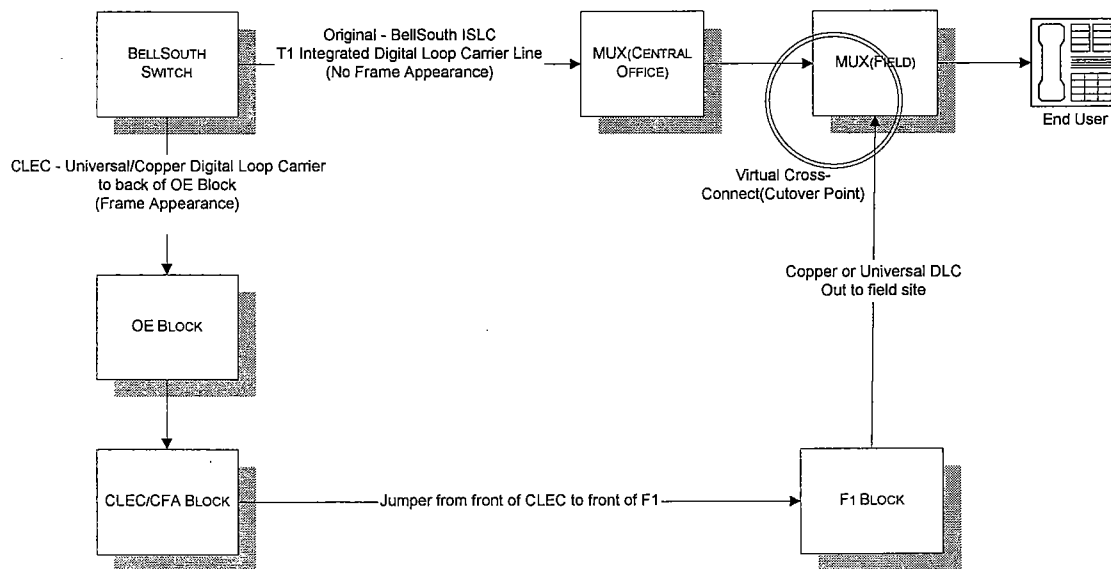
Figure 1.0



BellSouth Telecommunication, Inc.  
Bulk Migration Test-Draft

- During a typical Integrated CLEC Hot Cut, the CLEC will deliver dial tone from its own switch to a collocation point in a BellSouth Central Office. The CLEC collocation points are hard wired to a CLEC Block on the BellSouth Distributing Frame in the central office. Due to BellSouth operating as a Pseudo CLEC, BellSouth had to deliver dial tone from its own switch to its Pseudo CLEC Block on the Distributing Frame. Refer to Figure 1.1 for a diagram for the generation of Pseudo CLEC dial tone. IDLC facilities have no physical appearance on the BellSouth frame. BellSouth established a second set of TNs that were wired to an OE block on the BellSouth frame then to the CLEC CFA block to simulate dial tone for the CLEC switch.

Figure 1.1



- The Test was completed for a total of 758 lines, which include 724 lines processed in accordance to the Bulk Migration Process and 34 lines processed as single orders for Remote Call Forwarding (RCF) and 2 Wire Unbundled Copper Loop-Non Design (UCL-ND). RCF and UCL-ND migrations were initially submitted as Bulk Migration orders, however they were rejected by the electronic ordering systems.
- The central offices included in the Test were West Hollywood, Arch Creek and Perrine.
- The Test did not include the sending of NPAC messages, since the lines in the test were to remain with BellSouth. The Test also did not include a billing verification for those charges that were incurred by the Pseudo CLEC.

BellSouth Telecommunication, Inc.  
Bulk Migration Test-Draft

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To demonstrate that the Hot Cut Process as it relates to the physical Unbundled Network Element – Port/Loop Combination (UNE-P) to Unbundled Network Element (UNE-L) migration, used by the central office and field technicians during BellSouth's test of its Bulk Migration Process is the same process used for non-bulk hot cuts in BellSouth's region, BellSouth completed the following:

- BellSouth has instituted the same work instructions for central office and field technicians for Hot Cuts throughout its region.
- The Hot Cut process utilized by the Bulk Migration Process is the same process utilized by BellSouth for each hot cut provisioned throughout the BellSouth region. Hot Cuts are subject to the same provisioning steps to be completed regardless of their status as a bulk/non-bulk order.

**SECTION VII - GLOSSARY**

AICPA	American Institute of Certified Public Accountants
ANAC	Automatic Number Announcing Circuit
BOPI	Bulk Order Package Identifier
CFA	CLEC Facility Assignment
CLEC	Competitive Local Exchange Carrier
CO	Central Office
CWINS	Customer Wholesale Interconnection Network Services Center
DOE	Direct Order Entry
EATN	Existing Account Telephone Number
EDI	Electronic Data Interchange
EnDI	Enhanced Delivery Initiative
EXACT	Exchange Access Carrier Tracking
FO	Field Office
FOC	Firm Order Confirmation
IDLC	Integrated Digital Loop Carrier
IDS	Integrated Dispatch System
LAUTO	LNP Service Order Generator
LCSC	Local Carrier Service Center
LENS	Local Exchange Navigation System
LMOS	Loop Management Operations System
LNP Gateway	Local Number Portability Gateway
LOTT	Local Order Testing Tube
LSR	Local Service Request
MA	Missed Appointment
NPAC	Number Portability Administration Center
PM	Project Management

BellSouth Telecommunication, Inc.  
Bulk Migration Test-Draft

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PON	Purchase Order Number
SOCS	Service Order Communication System
SUPS	Supplemental
SWITCH/FOMS	Frame Operations Management System
TAG	Telecommunication Access Gateway
TN	Telephone Number
UDLC	Universal Digital Loop Carrier
UNE	Unbundled Network Element
UNE-L	Unbundled Network Element-Loop
UNE-P	Unbundled Network Element-Port
USOC	Universal Service Order Code
WFA	Work Force Administrator
WFA-C	Work Force Administrator – Corporate
WFA-DI	Work Force Administrator – Dispatch In
WFA-DO	Work Force Administrator – Dispatch Out

AFFIDAVIT OF PAUL M. GAYNOR

State of Georgia                                    )  
  )  
County of Fulton                                 )

Paul Gaynor, having first been duly sworn, hereby states as follows:

1. I am a Principal in PricewaterhouseCoopers LLP's (PwC's) Telecommunications Industry Practice. In this capacity, I am responsible for providing information technology assurance services to PwC's telecommunications clients. I have over 16 years of relevant experience including performing audits of financial statements and attestations in a variety of industries. In addition, I have spent 3 years as an internal auditor in the financial services and manufacturing industries. I have 2 years experience working the telecommunications industry for a Competitive Local Exchange Carrier (CLEC), where I was responsible for all systems and operations.
2. I directed and coordinated PwC's performance of an attestation examination of the BellSouth Telecommunications, Inc. management assertions that: (1) BellSouth has utilized its Unbundled Network Element-Port Loop Combination (UNE-P) to Unbundled Network Element-Loop (UNE-L) Process (Bulk Migration Process) as it completed a test of Bulk Migration service requests for three central offices in Florida; and (2) Whether the Hot Cut Process used by the central office and field technicians during BellSouth's test of its Bulk Migration Process is the same Process used for non-bulk hot cuts in BellSouth's region.
3. This affidavit was prepared to provide additional detail of the types of procedures PwC utilized in our attest examination on BellSouth's management assertions as of December 18, 2003 described within our report dated December 18, 2003, included as Attachment A.

4. A total of 17 PwC professionals spent over 2,500 hours performing the work described in this affidavit. The PwC professionals included 4 partners, a director, and 2 senior managers. Our partners, director and senior managers led all aspects of the fieldwork. All of the PwC partners, director and senior managers, and many of the staff, who worked on this engagement, have extensive telecommunications industry and telecommunications business process and/or systems experience.
5. The attestation examination discussed herein was conducted in accordance with the attestation standards of the American Institute of Certified Public Accountants (AICPA). An attestation examination is one in which a practitioner is engaged to issue a written communication that expresses a conclusion about the reliability of a written assertion that is the responsibility of another party. An attestation examination is the highest level of assurance that can be provided on a written assertion under these standards. PwC's conclusions regarding its attestation examination of BellSouth's management assertions are set forth in the "Independent Accountant's Report" which is appended hereto as Attachment A. Also, a copy of the BellSouth management assertion is appended hereto as Attachment A.
6. BellSouth Management asserted the following: (First Assertion)  
  
BellSouth has an Unbundled Network Element—Port/Loop Combination (UNE-P) to Unbundled Network Element—Loop (UNE-L) Process (Bulk Migration Process) that will enable the bulk migration of Competitive Local Exchange Carrier (CLEC) customers. BellSouth's Bulk Migration Process Version 1 is published at <http://interconnection.bellsouth.com/> dated March 26, 2003. BellSouth completed a test of Bulk Migration service requests for three central offices in Florida. During the test,



BellSouth submitted local service requests as a Pseudo CLEC, and processed the service requests through the provisioning process; however, BellSouth did not send NPAC messages. The BellSouth Bulk Migration Test has been defined in paragraph 11.

7. BellSouth Management asserts that Management utilized the Bulk Migration Process during their test of the Bulk Migration service requests. As it relates to this assertion, “utilized” will be assessed according to the following:

- BellSouth processed the service requests as per the Bulk Migration Submission/Flow Process included in the Bulk Migration Process.
- BellSouth completed all edits and validation checks on the service requests that are included in the Bulk Migration Process.
- BellSouth was able to convert all test lines by the due dates, up to 125 lines per day per central office, and reestablished dial tone on the CLEC CFA Block.
- BellSouth assigned local service requests due dates according to the intervals defined by the Bulk Migration Process.
- BellSouth processed only those services (i.e., USOCs) that are included in the Bulk Migration Process.

8. BellSouth Management also asserted the following: (Second Assertion)

The Bulk Migration Process required central office and field technicians to physically perform the Unbundled Network Element—Port/Loop Combination (UNE-P) to Unbundled Network Element—Loop (UNE-L) migration (the Hot Cut Process). The Hot Cut Process used by the central office and field technicians during BellSouth’s test of its Bulk Migration Process is the same Process used for non-bulk hot cuts in BellSouth’s region based on the criteria below.

9. The following described the terms “same” and “Hot Cut Process” criteria:

As it relates to this assertion, “same” was defined as:

- The Hot Cut Process for non-bulk hot cuts will be considered the same as the Hot Cut Process used during the Bulk Migration Process Test if each of the steps defined as the “Hot Cut Process” below for Central and Field Office Hot Cuts are completed for each process. As it relates to this assertion, the “Hot Cut Process” will be defined as the following processes:

*Central Office Hot Cuts*

1. Order Receipt – Central Office (CO) Technicians receive hot cut information associated with service orders via Work Force Administrator-Dispatch In (WFA-DI) and Switch/FOMS.
2. Install Jumpers – The CO technician will install jumpers according to the Switch/FOMS instructions.
3. Pre-cut Dial Tone and ANAC Testing – CO technician will test for dial tone and ANAC on the existing BellSouth pair and on the CLEC CFA block.
4. Cutover – The CO technician performs the cutover according to the Switch/FOMS assignment instructions on the Due Date. Coordinated conversions, as ordered by CLECs, will be performed when advised by the CWINS. Non-coordinated conversions, as ordered by CLECs, will be performed anytime on the Due Date.
5. Post-Cut Dial Tone Test – For coordinated cuts, the CO Technician tests the cutover on the BellSouth Cable Pair to ensure that dial tone has been restored and the proper phone number is received.
6. CLEC Notification

- A. For Non-Coordinated Hot Cuts, the CO technician completes the WFA-DI work-step, which will also send a completion to Switch/FOMS. Also, the Enhanced Delivery Initiative (EnDI) system sends a fax or email to the CLEC and a fax to the CWINS center as notification that the Hot Cut is complete.
- B. For Coordinated Hot Cuts, the CO technician advises the CWINS that the cut is complete.

*Field Office Hot Cuts*

1. Order Receipt – Field Office (FO) receives hot cut orders via LMOS/IDS (non-design) or WFA-DO/IDS (dispatch out, design), and CO Technicians receive hot cut order information via WFA-DI and Switch/FOMS.
2. CO Install Jumper – The CO technician will install jumpers according to the Switch/FOMS instructions.
3. CO Continuity Test – The CO technician performs a continuity test to ensure that the jumper from the F1 Block to the CLEC CFA Block has continuity.
4. CO Completion – The CO technician completes the WFA-DI work-step, which will also send a completion to Switch/FOMS.
5. Field Wiring – The CO technician will install jumpers according to the LMOS or WFA-DO instructions.
6. Pre Conversion/Migration Dial Tone & ANAC Test
  - a. BellSouth Dial Tone - Non-Coordinated & Coordinated - Field Technician will verify dial tone and ANAC to verify results match disconnect order.
  - b. CLEC Dial Tone

1. Non-Coordinated - On Due Date, Field Technician checks for CLEC dial tone on universal and copper lines.
2. Coordinated SL1 or SL2 - On Due Date, for universal and copper lines the Field Technician checks for CLEC dial tone, ANACs, and provide Telephone Number to CWINS to verify accuracy.
7. Field Cutover – The FO technician performs the cutover of the customer line.
8. Post-Cut Dial Tone Test – For coordinated cuts, the FO Technician will test the cutover to ensure that dial tone has been restored and the proper phone number is received.
9. CLEC Notification
  - a. For Non-Coordinated Hot Cuts, the FO technician completes the workstep in the WFA-DO/IDS or LMOS/IDS system. Also, EnDI sends a fax or email to the CLEC and a fax to the CWINS center as notification as the Hot Cut is complete.
  - b. For Coordinated Hot Cuts, the FO technician completes the workstep in the WFA-DO or LMOS systems and advises the CWINS that the cut is complete.

**Engagement Planning**

10. PwC completed a walkthrough of Hot Cut transactions to gain an understanding of the key project notification, ordering and provisioning activities; this included observing live Hot Cuts prior to testing to further our understanding of the provisioning process. Next, PwC developed a detailed test plan that included testing of the Bulk Migration Process key actions. For example, the receipt of a firm order confirmation and reestablishment of

customer service within 15 minutes were considered two of the key actions in the ordering and provisioning of Bulk Migrations. Refer to the *PwC Testing* section of this affidavit for a complete description of the key actions tested by PwC.

11. PwC assessed the threshold for exception reporting based on our understanding of the Bulk Migration and Hot Cut Processes. Refer to our report dated December 18, 2003, which has been included as Attachment A, for a description of all issues that exceeded the exception reporting threshold. The exception reporting threshold had been established according to the following:

- PwC identified key action points within the Bulk Migration Process. PwC identified an exception if during the BellSouth Bulk Migration Process, local service request transactions did not successfully pass each key action point at least 95% of the time. The basis for selecting 95% was historic acceptance by external parties that hold organizations to a high standard, but not an unachievable standard.
- PwC also identified an exception where customer service would have been impacted for greater than 15 minutes, regardless of the percentage of transactions affected (i.e., not subject to the 95% threshold). The Hot Cut process inherently affects customer service. However, PwC determined that any customer service that is affected for greater than 15 minutes would be deemed an exception.
- PwC applied professional judgment to determine exceptions that do not meet the criteria above, however may be required to be reported. For example, if the Bulk Migration Process of local service request transactions successfully passed a key action point 95% of the time and customer service is not impacted, it would not be deemed an exception based on the criteria above. However, due to the criticality of select action

points within the Bulk Migration Process (i.e., completing dial tone checks prior to cutover of a line), PwC has held these transactions to a “Higher Standard”. Refer to the *Exceptions* section of this affidavit for a description of all exceptions identified.

### **Florida Bulk Migration Process Test**

12. Our examination covered the submission of the project notification by the Pseudo CLEC, the review of the project manager activities as stated in the Bulk Migration Process document, the activities of the Local Carrier Service Center (LCSC), the submission of the orders into the Service Order Communications System (SOCS), the activities of the Customer Wholesale Interconnection Network Services Center (CWINS), the provisioning process including the actual hot cut, as well as the close out of the order in Work Force Administration (WFA) and Switch/FOMS. PwC reviewed the following documentation to gain an understanding of the BellSouth Bulk Migration process:

- The Bulk Migration Process Document
- Bulk Ordered UNE-P Port Out with Loop Process Flow (BellSouth)
- BellSouth procedures for Central Office Operations for UNBUNDLED Local Loop Service
- UNE-P to UNE-L Bulk Migration Overview
- Bulk Migration Process for Non-Coordinated SL1 Orders
- Screening Work Process for Designed and Non Designed Provisioning
- Network SSI&M / I&M Methods and Procedures For Provisioning Unbundled Network Elements Unbundled Voice Loops
- Enhanced Delivery Initiative Process for SL1 Group

- LNP-UNE to UNE Bulk Migration (UNE-P to UNE L) [Mechanized Procedures]
- Network SSI&M / I&M Methods and Procedures For Provisioning Unbundled Network Elements Unbundled Copper Loop-Non-Designed (UCL-ND)
- Unbundled Non-Designed (SL1) and (SL2) Voice Grade Loops-SL1 Wiring and Testing Work Steps
- Customer Care Project Management-UNE-P to UNE-L Bulk Migration Process

13. To demonstrate the effectiveness of the Bulk Migration Process, BellSouth developed a listing of local service requests (LSRs) for submission through the processes defined in the Bulk Migration Process document. In developing the list of LSRs, BellSouth sampled one year's data of single migration requests to determine the breakdown of Unbundled Network Element-Port Loop Combination (UNE-P) Universal Service Order Codes (USOCs) that could be requested for transfer to Unbundled Network Element Loop (UNE-L) USOCs, according to the Bulk Migration Process. Based on this sample, BellSouth designed the UNE-P embedded base to meet the following statistical breakdown of eligible USOCs: Business (UEPBX)-10%, Residential (UEPRX)-85%, Coin (UEPCO)-3%, Business Remote Call Forwarding-1%, and Residential Remote Call Forwarding-1%. Next, BellSouth determined the statistical representation of UNE-L USOC migrations: UEAL2 – 94%, while UEAR2, UCLPW, UCL2W, UCL4W, UCL4O, UEQ2X, UAL2W, UHL2W, and UHL4W combined comprised 6%. UNE-P telephone numbers (TNs) were established based on the make-up of outside plant facilities within the state with approximately 50% on copper, 14% on Universal Digital Loop Carrier (UDLC), and 36% on Integrated Digital Loop Carrier (IDLC).

14. Numerous BellSouth employees were engaged to emulate the role of the Pseudo CLEC.

Among the roles performed by the Pseudo CLEC were the administrative and operational roles associated with an actual CLEC.

*Administrative Roles*

15. The Pseudo CLEC created and submitted 724 Bulk Migrations. The submission process included interaction with a BellSouth Project Manager to assign due dates, submission of bulk LSRs through BellSouth electronic ordering gateways (i.e. TAG, LENS, and EDI), and the interaction with the BellSouth Local Carrier Service Center (LCSC), for processing of the orders and the interaction with the BellSouth Customer Wholesale Interconnection Network Services Center (CWINS) during the provisioning of the service orders. Service requests submitted by the Pseudo CLEC were processed through BellSouth's systems and service centers as normal transactions.

*Operational Roles*

16. The Pseudo CLEC completed a test that included 724 bulk migration lines processed in accordance with the Bulk Migration Process. The Pseudo CLEC also submitted 34 lines that were processed as single orders for Remote Call Forwarding (RCF) and 2 Wire Unbundled Copper Loop – Non Designed (UCL-ND). However, PwC's assessment included transactions submitted as Bulk Migrations and did not include the 34 RCF and UCL-ND lines. The Florida central offices included in the test were West Hollywood, Arch Creek, and Perrine.

17. The provisioning of the 724 lines included the central office and field technicians receiving the orders, installing the jumpers, performing a pre-cut dial tone and ANAC test,



performing the cutover, performing a post cut dial tone test, and informing the Pseudo CLEC or CWINS that the cut was completed.

18. Due to BellSouth acting as a Pseudo CLEC, without a CLEC switch, BellSouth did not send NPAC messages to officially port phone numbers and they did not include a billing verification for those charges that were incurred by the Pseudo CLEC.
19. The Pseudo CLEC was able to simulate the dial tone of a CLEC, for a Copper or UDLC Hot Cuts by wiring the BellSouth Originating Equipment (OE) block to the Pseudo CLEC block on the Distributing Frame. For copper and universal lines, the Pseudo CLEC half-tapped the jumper at the OE Block for each telephone number (TN) and connected a terminal pair on the Pseudo CLEC "CFA" block.
20. Due to BellSouth acting as the Pseudo CLEC, BellSouth had to deliver a dial tone from its own switch to its Pseudo CLEC CFA block. IDLC facilities have no physical appearance on the BellSouth frame. BellSouth established a second set of TNs that were wired to an OE block on the BellSouth frame then to the CLEC CFA block to simulate dial tone for the CLEC switch.

#### *PwC Testing*

21. PwC conducted testing for all 724 Bulk Migration service requests and did not select a sample.
22. In examining management's assertion that it has utilized its Bulk Migration Process to complete a test of Bulk Migration service requests for three central offices in Florida, PwC conducted numerous observations, validations, and re-performances pertaining to the responsibilities of the Pseudo CLEC and the responsibilities of the BellSouth Project

Manager (PM). PwC conducted the following examination steps relating to the PM and Pseudo CLEC:

- PwC observed the Pseudo CLEC's creation of project notifications.
- PwC obtained and examined emails used by the Pseudo CLEC for the project notification submission process.
- PwC observed the PM's process of validating project notifications and assigning them Bulk Order Package Identifiers (BOPI)s.
- PwC re-performed project manager validations on all project notifications.
- PwC observed and obtained communications pertaining to the rejection and resubmission process for project notifications.
- PwC obtained and examined email communication between the PM and the Workforce Management Center (WMC) for negotiation of due dates.
- PwC obtained and examined emails used by the PM to authorize the submission of BOPIs into the LNP Gateway by the Pseudo CLEC via TAG, EDI, or LENS.
- PwC observed and verified the submission of BOPIs into the LNP Gateway via TAG, EDI, or LENS by the Pseudo CLEC.
- PwC ensured that all orders requested were completed and communicated back to the Pseudo CLEC.
- PwC traced email communication and submission dates in order to test and verify that BellSouth operated under the timing restrictions specified in the Bulk Migration Process Document.
- PwC requested that the Pseudo CLEC submit Local Service Requests with inaccurate or incomplete data to validate BellSouth's edit/validation processes. PwC traced these

Local Service Requests and verified that the BellSouth Project Manager or electronic order systems identified the invalid transactions and rejected them.

23. In examining BellSouth management's assertion that it utilized its Bulk Migration Process to complete a test of Bulk Migration service requests for three central offices in Florida, PwC made numerous observations and completed testing pertaining to the responsibilities of the Local Carrier Service Center (LCSC). The LCSC is BellSouth's business office for all CLEC's. The LCSC receives and processes orders for LSRs. Among the observations PwC made:

- PwC obtained documentation showing that the Bulk Order Packages were processed for first and second level validations and that any rejects were clarified to the Pseudo CLEC.
- PwC obtained and reviewed Open Work Reports for the LCSC service representatives, and observed the representatives handle manual fallout of orders in LNP Gateway.
- PwC observed the representatives enter orders into DOE, EXACT or SOCS.
- PwC observed the representatives enter orders into the Local Order Numbering (LON) system. PwC obtained and reviewed printouts from LON which demonstrated that the representative performed the necessary work for orders requiring manual processing.
- PwC observed and obtained documentation for orders that were issued as supplemental.
- PwC observed LNP Gateway/LAUTO send a Firm Order Commitment (FOC) for each individual Purchase Order Number (PON). PwC obtained LNP Gateway printouts which demonstrated that the order had been FOC submitted and successfully sent to SOCS.

24. PwC observed BellSouth Central Office and Field Technicians and CWINS Service Representatives as they completed the bulk migration provisioning of 724 telephone numbers in 3 locations in Florida. Refer to Attachment B for a breakdown of the various services included in the Florida Bulk Migration Test. Our observations were completed at the following locations:

- West Hollywood Central Office and 5 serving Field Office sites,
- Arch Creek Central Office and 2 serving Field Office sites,
- Perrine Central Office and 4 serving Field Office sites, and
- CWINS Centers in Jacksonville and Atlanta.

25. PwC verified that the central office and field technicians received the service order, installed the jumper, performed the pre cut dial tone and ANAC, performed the cutover, performed a post-cut of the dial tone test, and notified the Pseudo CLEC or CWINS that the cut was completed as applicable.

26. In examining management's assertion that it utilized the Bulk Migration Process to complete a test of Bulk Migration service requests for three central offices in Florida, PwC made numerous observations pertaining to the responsibilities of the CWINS. The CWINS serves as the single point of contact for provisioning and maintenance of all unbundled network elements. PwC examined the BellSouth process for the CWINS for both the non-coordinated Hot Cuts and the coordinated Hot Cuts. The non-coordinated Hot Cuts are processed at the Atlanta CWINS center while the coordinated Hot Cuts are processed at the Jacksonville CWINS center.

- For coordinated cuts, PwC obtained copies of the confirmation emails that the CWINS screening group received from the BellSouth Project Manager and verified that the

CWINS had received notification for each of the Bulk Order Packages that were submitted by the Pseudo CLEC via one of the electronic gateways (EDI, TAG, or LENS).

- For non-coordinated cuts, PwC obtained copies of the confirmation emails that the CWINS screening group received from the BellSouth Project Manager and verified that the CWINS had received notification for each of the Bulk Order Packages that were submitted by the Pseudo CLEC via one of the electronic ordering gateways (EDI, TAG, or LENS).
- PwC verified that all coordinated orders were properly transferred to the CWINS Provisioning Technician by tracing all orders that were submitted by the Pseudo CLEC via the electronic gateway (TAG, EDI, or LENS) through to the completion of the order.
- PwC observed that the CWINS Provisioning Technician contacted the Central Office Technician and Field Technicians for all coordinated test orders and verified that the technician completed the cutover.
- PwC verified through observation that the CWINS Provisioning Technician called the Pseudo CLEC within five minutes of completion for all coordinated cutovers.
- PwC observed the CWINS Provisioning Technician close all coordinated orders in WFA-C and SOCS and verified that the orders were closed through examining the WFA log files for each coordinated order.
- PwC observed the Maintenance Administrator (MA) conduct screening procedures to process non-coordinated orders.

- All bulk orders that are considered non-coordinated, must contain time interval criteria on the order in the WFAC system to be processed. PwC validated that all non-coordinated orders processed at the Atlanta CWINS contained the requisite criteria to be considered as non-coordinated orders. PwC reviewed each service order log to verify that each non-coordinated order contained the correct timing intervals and Field Identifiers (FIDs) to be recognized as a non-coordinated.
- PwC validated that MAs monitored the Atlanta CWINS fax machine to check for incoming “Go-Ahead” notifications from EnDI in order to ensure that the Atlanta CWINS abided by the respective worksteps published in the Bulk Migration Process for Non-Coordinated SL1 Orders.
- PwC validated and monitored that MAs also utilized the Go-Ahead Notification internal website to review orders earmarked for go-ahead notification to ensure that Atlanta CWINS personnel followed the requisite worksteps published in the Bulk Migration Process for Non-Coordinated SL1 Orders. PwC obtained hard copies of the EnDI faxes and verified that the Purchase Order Numbers (PON) and telephone numbers (TN) matched what were expected.
- PwC validated that MAs tested the phone lines for each non-coordinated order to verify that the non-coordinated order could be closed. This process is called the “open-in” test. PwC verified that the MAs validated the Frame Attendant’s completed work by confirming that the MA retested the phone line to ensure that the cut was successful.
- PwC confirmed that the MAs generated and sent emails to the Pseudo CLEC to notify them of completion of the manual go-ahead. In addition to the EnDI fax, PwC obtained

copies of the manual go-ahead documents distributed from these emails. This documentation informs the Pseudo CLEC that migration completed.

- PwC verified that the Atlanta CWINS management contacted the applicable Workforce Management Center (WMC) contacts for orders that did not receive notification by 3:30 PM. PwC observed CWINS management contact the WMC via phone after 3:30PM to address orders without “go-ahead” notification. PwC observed that the WMC advised that the orders were eligible for “Go-Ahead” and PwC confirmed that the CWINS released the orders in MARCH and completed the orders in the WFA-C and SOCS systems respectively. For final verification and documentation, PwC obtained the EnDI fax and manual go-ahead documentation for these respective orders and verified that each manual go-ahead document corresponded to an EnDI fax.

27. Our examination included tracing 724 transactions through the Bulk Migration Process and noting exceptions with these transactions as they pertained to the Bulk Migration Process document. PwC defined control points throughout the Bulk Migration Process to account for all transactions. Among the control points that PwC established to ensure the integrity of the Bulk Migration Process were:

- PwC obtained copies of all Project Notifications submitted by the Pseudo CLEC to the Project Manager and compared those Project Notifications to all Bulk Order Package Identifiers (BOPIs).
- PwC obtained copies of emails demonstrating correspondence between the Pseudo CLEC and the BellSouth Project Manager for acceptance, rejection, and resubmission of PONS.

- PwC obtained copies of the BOPIs and compared those BOPIs to requests in the LNP Gateway / LAUTO systems. PwC obtained printouts for all the PONS entered into the LNP Gateway / LAUTO system by the Pseudo CLEC through either LENS, TAG, or EDI and verified the status (clarified, facilities check, FOC submitted) of each PON. From the LNP Gateway / LAUTO printouts. PwC verified that the PONS have passed both first and second level validation checks within LNP Gateway / LAUTO.
- PwC obtained copies of the PONS that were in LNP Gateway / LAUTO and traced them into the Service Order Communication System (SOCS). The FOC submitted status in LNP Gateway / LAUTO demonstrated that the Pseudo CLEC had a Firm Order Confirmation. PwC also obtained copies of the Open Work Reports which verified those LSRs which required manual intervention and compared those reports to the LON printouts that PwC obtained from the LCSC representatives. The LON system is used to send non-mechanized FOCs to CLECs.
- PwC obtained copies of the SOCS printouts and compared those printouts to the Switch / FOMS orders. The Switch / FOMS printout contains the engineering information (location of cable pair) that the frame attendant used to perform the hot cuts.
- PwC obtained copies of the EnDI faxes and emails and compared them to the BOPIs to demonstrate that all non-coordinated orders had been cut by BellSouth. EnDI faxes are received by the Atlanta CWINS for all non-coordinated cuts and EnDI emails are received by the Pseudo CLEC confirming that the non-coordinated cuts had been performed by BellSouth.
- PwC obtained the WFA logs for each service order processed during the Florida Bulk Migration Test. The WFA logs permit the tracking of the order status through the



BellSouth provisioning process. The WFA logs contain an audit trail of the work steps completed by Field Technicians, Central Office Technicians, CWINS Service Representatives and other WFA users.

- To gain an understanding of the security controls surrounding the Workforce Administration system, specifically, the WFA log, PwC inquired of BellSouth employees responsible for the operating system and application security for WFA. PwC obtained security settings for the WFA log and verified that the access rights are in place to prevent unauthorized changes.
- PwC obtained the WFA log for all service orders processed during the Bulk Migration Process test. PwC validated that the due date entries corresponded to expected results and that each service order had been closed within WFA.

#### *Exceptions*

28. PwC identified instances where BellSouth either deviated from their Bulk Migration Process or impacted customer service during the Hot Cut Process. PwC measured these instances against the criteria developed during the Engagement Planning process to assess their materiality. PwC identified the following issues as instances where BellSouth did not adhere to the Bulk Migration Process for a specific control point for at least 5% (conversely, adherence to the process was less than 95%) of the Bulk Migration Process local service request transactions:

- The Bulk Migration Process Document states that UCL-ND and RCF services can be submitted as Bulk Orders. However, BellSouth's electronic ordering systems will reject UCL-ND and RCF services if submitted on Bulk Migration orders. As such, PwC was not able to trace orders for the corresponding USOCs. Upon inquiry,

BellSouth Management stated that no UCL-ND or RCF Bulk Migration service requests had ever been received.

- While observing the process for the completion of bulk migration orders, PwC noted that EnDI emails were not received by the Pseudo CLEC for 49 non-coordinated lines. EnDI emails provide notification to the CLECs that the cutover has been completed. PwC noted that 47 of the lines where emails were not received were cutover on December 2, 2003. BellSouth indicated that a systems issue existed in sending the EnDI emails and had corrected this issue on December 3, 2003. No missing EnDI emails were reported on the December 4, 2003 and December 5, 2003 test days. PwC noted that two of the lines where emails were not received were cutover on December 11, 2003.

29. PwC identified the following issues as directly impacting customer service for a time period of greater than 15 minutes:

- While observing the BellSouth Bulk Migration Process test, PwC noted that the Central Office Technician was unable to ANAC the BellSouth dial tone upon commencing the Hot Cut Process for three lines. Once the Central Office Technician could not obtain a BellSouth dial tone, troubleshooting procedures were performed to resolve the issue. The BellSouth dial tone was restored by having the number downloaded to the switch translation tables. The elapsed time from the initial BellSouth dial tone check to the restoration of BellSouth dial tone was approximately 40 minutes for each line. The Field Office Technician then completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.

- While observing the BellSouth Bulk Migration Process test, PwC noted that three cutovers were completed and dial tone could not be reestablished within 15 minutes. Once dial tone was reestablished the BellSouth Technician successfully verified CLEC dial tone and completed an ANAC test.
- While observing the BellSouth Bulk Migration Process test, PwC noted that for two orders the due dates were missed. Both orders were scheduled to be cutover on December 11, 2003. However, one of the two orders was cutover on December 5, 2003 and the other order was not cutover by December 11, 2003.

30. Certain instances were noted that did not meet the Bulk Migration Process 5% or customer impacting tolerance guidelines defined by PwC in the Engagement Planning process. However, based on the nature of the Hot Cut Process and the importance to all parties involved, these exceptions warranted reporting to provide greater transparency to all readers. The following issues have been deemed reportable by PwC:

- While observing the BellSouth Bulk Migration Process test, PwC noted that the Field Office Technician was unable to ANAC the BellSouth dial tone for 19 lines prior to the cutover. The Field Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
- While observing the BellSouth Bulk Migration Process test, PwC noted that for one order a Central Office Technician completed an ANAC on the BellSouth line prior to the cutover and received the wrong telephone number. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.

- While observing the BellSouth Bulk Migration Process test at the Arch Creek central office on December 4, 2003, PwC noted that the frame attendant did not test for CLEC dial tone prior to performing the hot cut for 6 telephone numbers. The frame attendant verified the cutover was successfully completed via a dial tone and ANAC test subsequent to the cutover.

31. The following items were identified by PwC as instances where BellSouth deviated from their Bulk Migration Process, however these instances occurred less than 5% of the time and therefore were considered non-reportable:

- The Pseudo CLEC submitted a BOPI that did not meet the time interval requirements per the Bulk Migration Process Document. However, this BOPI was submitted electronically 14 days prior to the due date, which met the minimum time interval required for submission.
- PwC noted that they were unable to obtain two emails associated with the correspondence between the Pseudo CLEC and BellSouth. The emails were regarding the granting of authorization by the BellSouth Project Manager to the Pseudo CLEC to input two BOPIs into the electronic ordering gateways. Per discussion with the BellSouth Project Manager and Pseudo CLEC, the authorization was given verbally.
- While observing the BellSouth Bulk Migration Process test, PwC noted that one EnDI fax was not received by the Atlanta CWINS. The EnDI fax notifies the CWINS that the cutover has been completed.
- PwC noted that the Pseudo CLEC input Bulk Migration service requests prior to receiving the authorization to do so from the BellSouth Project Manager. PwC also noted that the BellSouth Project Manager was aware of the submission.

32. Our conclusion is included within our report dated December 18, 2003, which has been included as Attachment A.

### **Regional Test**

33. In conjunction with Florida Bulk Migration testing, PwC verified whether the Hot Cut Process used by the central office and field technicians during BellSouth's test of its Bulk Migration Process was the same process used for non-bulk hot cuts in BellSouth's region according to the criteria defined within Management's assertion. As part of PwC's approach to verifying whether this process was the same, PwC viewed UNE-L non-bulk cuts across the BellSouth region.

#### *Sample Size Determination for Regional Hot Cuts*

34. PwC employed the following sampling techniques to determine the number of regional Hot Cuts to be tested across the BellSouth region:

- Total Population: > 300
- Confidence Factor: 95%
- Tolerable Rate: 5%
- Expected Error Rate: 1%

35. PwC loaded this criteria into Audit Command Language (ACL) and used the Sampling Size function to determine what sample size should be employed. Based on these criteria, our test population was identified to be 95 transactions.

36. PwC was unable to determine an exact population of future hot cuts due to the unpredictability of CLEC service orders. For purposes of identifying a sample size, PwC used a population of 1,000. Based on the other sample size criteria (i.e., confidence factor

of 95%, Tolerable Rate of 5% and Expected Error Rate of 1%), all populations that are greater than 300 will return a sample size of 95, therefore it is unnecessary to identify an exact population.

*PwC Testing*

37. From October 1, 2003 to December 18, 2003 PwC observed 96 Hot Cut service orders (which comprised of 179 telephone numbers) throughout BellSouth's region. Each week, BellSouth provided PricewaterhouseCoopers a listing of Coordinated Hot Cuts that were scheduled to be completed the following week. The lead times for Coordinated Hot Cuts are typically greater than Non-Coordinated Hot Cuts, which allowed for earlier notification of upcoming service orders. PwC also inquired of BellSouth when Non-Coordinated Hot Cuts were to be completed throughout the region. However, notice for Non-Coordinated Hot Cuts was given approximately two days in advance. Hot Cuts were viewed based upon the volume of CLEC activity in those states. Refer to Attachment C for details of the 96 Hot Cuts observed throughout BellSouth's region. PwC noted that sufficient Hot Cut order volume did not exist within Alabama and Kentucky; accordingly, we could not perform testing over the Hot Cut Process in those states.

38. PwC observed the following Hot Cuts as part of BellSouth's Bulk Migration Florida Test:

- December 2, 2003 – 124 Bulk Migration Hot Cuts in West Hollywood.
- December 4, 2003 – 119 Bulk Migration Hot Cuts in Arch Creek.
- December 5, 2003 – 108 Bulk Migration Cuts in Perrine.
- December 11, 2003 – 125 Bulk Migration Hot Cuts West Hollywood, 126 Bulk Migration Hot Cuts in Arch Creek, 122 Bulk Migration Hot Cuts in Perrine.

39. PwC observed the provisioning of the 96 Hot Cuts included in the Regional Test and the 724 Hot Cuts included in the Bulk Migration Process Test. The following processes were observed:

- PwC observed the Central Office and Field Technician receive the hot cut information associated with service orders via Work Force Administration – Dispatch (WFA-DI), Switch/FOMS, LMOS or IDS.
- PwC observed that the jumpers had been installed in accordance with the system instructions.
- PwC validated that Central Office continuity had been established by verifying the telephone number via an ANAC on the BellSouth jumper.
- PwC observed the Central Office Technician test for dial tone and Automatic Number Announcing Circuit (ANAC) on the CLEC pair and on the existing BellSouth pair. PwC validated that the telephone numbers were ANAC'd for the CLEC and BellSouth lines.
- PwC observed the cutover process performed by the Central Office Technician. PwC timed the total duration that the customer was without service. The timing began when the existing BellSouth pair was removed from the frame until the CLEC pair was punched into the frame. For any cutover that exceeded one minute, PwC noted the length of the duration the customer would have been without service.
- PwC observed the Central Office Technician test the cutover on the new CLEC cable pair to ensure dial tone had been restored and that the proper telephone number was received.

- PwC observed the workstep system closeout process performed by the Central Office Technician. PwC also obtained and examined the Switch/FOMS orders and the WFA logs and verified that the worksteps had been closed for each cutover.
- PwC obtained and examined the EnDI faxes received at the Atlanta CWINS facility for each to verify that each non-coordinated order was cut.

40. Specifically for Field Office Hot Cuts, PwC performed the following:

- PwC observed the field technician perform the electronic cross connect on the laptop. The electronic cross-connect was performed by entering the cable pair information: 1) the cable pairs migrating from 2) the cable pairs migrating to.
- PwC observed the Field Office Technician test for dial tone and ANAC on the CLEC pair and on the existing BellSouth pair at the Remote Terminal. PwC validated that the telephone numbers were ANAC'd for the CLEC and BellSouth lines.
- PwC observed the cutover process performed by the Field Office Technician. PwC timed the total duration the customer was without service. The timing began when the existing BellSouth pair was removed from the field terminal until the CLEC pair was connected into the field terminal. For any cutover that exceeded one minute, PwC noted the length of the duration the customer would have been without service.
- PwC observed the Field Office Technician test the cutover on the new CLEC cable pair to ensure dial tone had been restored and that the proper telephone number was returned via an ANAC test.
- PwC observed the workstep closeout process performed by the Field Office Technician in WFA-DO via Technet. PwC also obtained and examined the Switch/FOMS order and the WFA logs and verified that the worksteps had been closed for each cutover.



- PwC obtained and examined the standardized BellSouth Central Office Technician UNE-P to UNE-L SL1 and SL2 work instructions from each state in the BellSouth region. PwC also verified that the SL1 and SL2 work instructions in each BellSouth state were consistent.
- PwC obtained the EnDI faxes from the CWINS which notifies them that the CLEC's line was cut for non-coordinated cuts.
- PwC observed the CO and Field Technicians inform the CWINS that the CLEC's line was cut for coordinated cuts.

### *Exceptions*

41. PwC noted that six exceptions identified during the Bulk Migration Process Test, directly related to the physical Hot Cut provisioning process included in the Regional Test, noted below, and have been reported in our exceptions noted during the Bulk Migration Test.

- While observing the BellSouth Bulk Migration Process test, PwC noted that the Central Office Technician was unable to ANAC the BellSouth dial tone upon commencing the Hot Cut Process for three lines. Once the Central Office Technician could not obtain a BellSouth dial tone, he began troubleshooting the issue. The BellSouth dial tone was restored by having the number downloaded to the switch translation tables. The elapsed time from the initial BellSouth dial tone check to the restoration of BellSouth dial tone was approximately 40 minutes for each line. The Field Office Technician then completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.

- PwC noted that three cutovers were completed and dial tone could not be reestablished with 15 minutes. Once dial tone was reestablished the BellSouth Technician successfully verified CLEC dial tone and completed an ANAC test.
- While observing the BellSouth Bulk Migration Process test, PwC noted that for two orders the due dates were missed. Both orders were scheduled to be cutover on December 11, 2003. However, one of the two orders was cutover on December 5, 2003 and the other order was not cutover by December 11, 2003.
- While observing the BellSouth Bulk Migration Process test, PwC noted that the Field Office Technician was unable to ANAC the BellSouth dial tone for 19 lines prior to the cutover. The Field Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
- While observing the BellSouth Bulk Migration Process test, PwC noted that for one order that a Central Office Technician completed an ANAC on the BellSouth line prior to the cutover and received the wrong telephone number. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.
- PwC noted that while observing the cutover process for the 125 hot cuts at the Arch Creek central office on December 4, 2003, PwC noted that the frame attendant did not test for CLEC dial tone prior to performing the hot cut for 6 telephone numbers. The frame attendant verified the cutover was successfully completed via a dial tone and ANAC test subsequent to the cutover.

42. PwC identified instances where BellSouth either deviated from their Hot Cut Process or impacted customer service during the Hot Cut Process. PwC measured these instances

against the criteria developed during the Engagement Planning process to assess whether they are reportable. PwC identified the following issues as instances where BellSouth did not adhere to the Hot Cut Process for a specific control point for at least 5% (conversely, adherence to the process was less than 95%) of the Hot Cut Process:

- While observing Hot Cuts across BellSouth's region, we noted that the central office technician did not perform a pre-cut dial tone and ANAC test for the BellSouth and CLEC lines prior to performing the hot cut for seven telephone numbers. We noted that the central office technician did not perform a pre-cut dial tone and ANAC test on the CLEC line prior to performing the hot cut for two additional telephone numbers. We also noted that the BellSouth Technician completed each cutover and successfully verified CLEC dial tone and completed an ANAC test.
- While observing Hot Cuts across BellSouth's region test, we noted that the Central Office Technician was unable to ANAC the BellSouth dial tone for one line prior to the cutover. The Central Office Technician completed the cutover and successfully verified CLEC dial tone and completed an ANAC test.

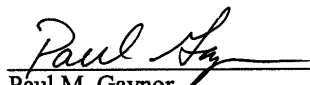
43. PwC identified the following issues as directly impacting customer service for a time period of greater than 15 minutes:

- While observing Hot Cuts across BellSouth's region, we noted that a cutover was completed despite a service order in a Missed Appointment status. Due to the service order being in a Missed Appointment status, an EnDI fax was not sent to the CWINS center.

44. Our conclusion is included within our report dated December 18, 2003, which has been included as Attachment A.


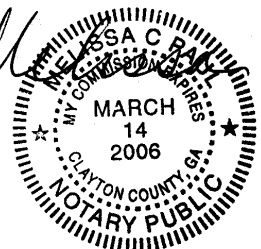

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Executed on December 23, 2003



Paul M. Gaynor  
Principal, PricewaterhouseCoopers LLP

Subscribed and sworn to before me this 23<sup>rd</sup> day of December 2003.



**Attachment A**

(Our reports dated December 18, 2003 with BellSouth Assertions in PDF)

Attachment B

Florida Bulk Migration Cutover Statistics by Quantity and Percentage

<b>Total Orders for the BellSouth Bulk Migration Testing by Field Office &amp; Central Office</b>					
<b>Central Offices in South Florida</b>					
<b>Date / Central Office</b>	<b>Coordinated</b>		<b>Non Coordinated</b>		<b>Total Lines</b>
<b>Quantity</b>	<b>Central Office</b>	<b>Field Office</b>	<b>Central Office</b>	<b>Field Office</b>	
<b>12/2/2003</b>					
West Hollywood	17	5	99	3	124
<b>12/4/2003</b>					
Arch Creek	9	12	83	15	119
<b>12/5/2003</b>					
Perrine	0	37	38	33	108
<b>12/11/2003</b>					
West Hollywood	17	4	94	10	125
Arch Creek	4	21	40	61	126
Perrine	9	10	21	82	122
<b>Totals</b>	<b>56</b>	<b>89</b>	<b>375</b>	<b>204</b>	<b>724</b>

<b>Date / Central Office</b>	<b>Coordinated</b>		<b>Non Coordinated</b>		<b>Total Lines</b>
<b>Percentage</b>	<b>Central Office</b>	<b>Field Office</b>	<b>Central Office</b>	<b>Field Office</b>	
<b>12/2/2003</b>					
West Hollywood	2.35%	0.69%	13.67%	0.41%	17.13%
<b>12/4/2003</b>					
Arch Creek	1.24%	1.66%	11.46%	2.07%	16.44%
<b>12/5/2003</b>					
Perrine	0.00%	5.11%	5.25%	4.56%	14.92%
<b>12/11/2003</b>					
West Hollywood	2.35%	0.55%	12.98%	1.38%	17.27%
Arch Creek	0.55%	2.90%	5.52%	8.43%	17.40%
Perrine	1.24%	1.38%	2.90%	11.33%	16.85%
<b>Totals</b>	<b>7.73%</b>	<b>12.29%</b>	<b>51.80%</b>	<b>28.18%</b>	<b>100.00%</b>

Attachment C

Regional Hot Cut Cutover Statistics

<b>Total Orders for the Regional Hot Cut Testing by State</b>		
<b>State</b>	<b>Orders Viewed</b>	<b>Lines Viewed</b>
Alabama	1	1
Florida	33	46
Georgia	25	54
Kentucky	0	0
Louisiana	7	17
Mississippi	3	4
North Carolina	17	40
South Carolina	4	6
Tennessee	6	11
<b>Totals</b>	<b>96</b>	<b>179</b>

	<b>Coordinated</b>	<b>Non Coordinated</b>	<b>Total</b>	<b>Central Office</b>	<b>Field Office</b>	<b>Totals</b>
<b>Orders Viewed</b>	71	25	96	86	10	96
<b>Lines Viewed</b>	154	25	179	151	28	179