

AFFIDAVIT

STATE OF GEORGIA

COUNTY OF FULTON

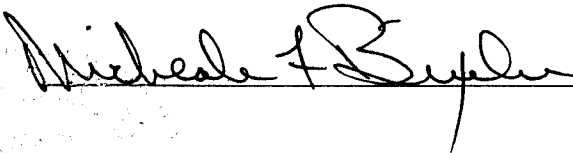
BEFORE ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Milton McElroy, Jr., who, being by me first duly sworn deposed and said that:

He is appearing as a witness before the Kentucky Public Service Commission in Case No. 2003-00379, Review of Federal Communications Commission's Triennial Review Order Regarding Unbundling Requirements for Individual Network Elements, and if present before the Commission and duly sworn, his testimony would be set forth in the annexed testimony consisting of 28 pages and 3 exhibits.



Milton McElroy, Jr.

SWORN TO AND SUBSCRIBED BEFORE ME  
THIS 9<sup>th</sup> DAY OF FEBRUARY, 2004



Notary Public

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

1 BELLSouth TELECOMMUNICATIONS, INC.

2 DIRECT TESTIMONY OF MILTON MCELROY JR.

3 BEFORE THE KENTUCKY PUBLIC SERVICE COMMISSION

4 DOCKET NO. 2003-00379

5 FEBRUARY 11, 2004

6

7 Q. PLEASE STATE YOUR NAME, YOUR BUSINESS ADDRESS, AND YOUR  
8 POSITION WITH BELLSouth TELECOMMUNICATIONS, INC.  
9 ("BELLSouth").

10

11 A. My name is Milton McElroy Jr. My business address is 675 West Peachtree  
12 Street, Atlanta, Georgia 30375. My title is Director – Interconnection Services.

13

14 Q. PLEASE SUMMARIZE YOUR BACKGROUND AND EXPERIENCE WITH  
15 BELLSouth.

16

17 A. I have over fifteen years experience in the telecommunications industry. My  
18 experience includes various engineering, operations and staff assignments at  
19 BellSouth. I earned a Bachelor of Science degree from Clemson University in  
20 Civil Engineering in 1988 and a Master's degree in Business Administration from  
21 Emory University in 2001. Additionally, I am a registered Professional Engineer  
22 in Alabama, North Carolina, and South Carolina.

23

24 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

25

1 A. The purpose of my testimony is to demonstrate that BellSouth's Bulk Migration  
2 Process of Unbundled Network Element Platform ("UNE-P") service to unbundled  
3 loop ("UNE-L") service is both seamless and effective as required by the  
4 Triennial Review Order (TRO), as well as describe how BellSouth's Mass  
5 Migration process exceeds the requirements of the TRO.

6  
7 To corroborate these facts, BellSouth engaged PricewaterhouseCoopers ("PwC")  
8 to provide an attestation on the effectiveness of BellSouth's batch process.

9 PwC's work was twofold: first, PwC observed a test of the Bulk Migration Process  
10 using a pseudo Competitive Local Exchange Carrier ("CLEC"); second, PwC  
11 observed a number of live UNE-L migrations or hot cuts in several states. The  
12 test corroborates the testimony of BellSouth's witness, Mr. Ken Ainsworth, that  
13 BellSouth provides a proven, seamless, high quality individual hot cut process to  
14 handle the UNE-L volumes that would likely result if BellSouth were to obtain full  
15 relief from unbundled circuit switching; and that BellSouth provides a batch hot  
16 cut process that offers additional ordering and provisioning efficiencies to  
17 enhance the same proven, seamless, quality migrations that are currently  
18 associated with individual hot cuts. This process will sufficiently support the  
19 batch conversion of a CLEC's embedded UNE-P customer base to UNE-L  
20 services.

21  
22 Additionally, even though BellSouth's existing batch process is efficient and  
23 seamless, and meets the obligations of the TRO, BellSouth has responded to  
24 CLECs requests, and developed a mass migration process.

25

1 Q. WHY DID BELLSOUTH ENGAGE PwC TO TEST ITS BULK MIGRATION  
2 PROCESS?

3

4 A. BellSouth introduced its batch migration process to the CLEC community in  
5 March 2003. Despite their expressed interest in having such a process, not a  
6 single CLEC took advantage of it in the months following its introduction.  
7 Therefore, BellSouth had no significant commercial data with which to  
8 demonstrate the efficiency and viability of the Bulk Migration Process other than  
9 the extensive performance data demonstrating the effectiveness of its individual  
10 hot cut process. BellSouth engaged PwC to perform an independent third party  
11 test. BellSouth selected PwC because of the Kentucky Public Service  
12 Commission's ("Commission's") familiarity with PwC's work resulting from the  
13 regionality testing PwC conducted as part of BellSouth's 271-approval process.  
14 This Commission, along with the Federal Communications Commission ("FCC"),  
15 relied upon PwC's objective and professional findings as part of its 271 decision.

16

17 Q. WHAT TYPE OF TEST DID PwC CONDUCT?

18

19 A. After discussions with PwC about the testing concept, BellSouth engaged the  
20 firm to conduct an attestation examination whereby PwC would examine two  
21 BellSouth assertions concerning its Bulk Migration Process. PwC conducted the  
22 examination in accordance with "attestation standards" established by the  
23 American Institute of Certified Public Accountants ("AICPA"). An "attestation  
24 engagement" occurs when a practitioner, such as PwC, is engaged to issue a  
25 written statement as to whether or not the written assertion of another party, such

1 as BellSouth, is reliable. Under the AICPA attestation standards, a statement  
2 resulting from such an examination is the highest level of assurance that can be  
3 provided on an assertion and, if positive, results in an opinion by the practitioner,  
4 PwC, that the original assertions have been found to be fairly and accurately  
5 stated in all material respects. To put this in more simple terms applicable to this  
6 test, BellSouth made two claims (assertions) and PwC validated the claims with  
7 the opinion that they express in their report (Report of Independent Accountants).

8  
9 Q. WHAT WERE BELLSOUTH'S ASSERTIONS?

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11 A. BellSouth's assertions, as well as the PwC opinions, can be found in Attachment  
12 MM1, BellSouth Telecommunications Inc.'s Report on the BellSouth Bulk  
13 Migration and Regional Tests, December 22, 2003. This attachment contains a  
14 collection of reports as well as a description of the Bulk Migration Test. The  
15 outline of the report package can be found on the Table of Contents page. The  
16 outline of the report is as follows:

17  
18 I. **Report of Independent Accountants for BellSouth**  
19 **Telecommunication's Bulk Migration Process**—this report was issued by  
20 PwC after they observed the bulk migration test associated with BellSouth's first  
21 assertion. They concluded and opined that the Bulk Migration Process would  
22 enable a CLEC to bulk migrate its customer base from UNE-P to UNE-L. PwC  
23 found a few deviations which can be seen on the following page of the report  
24 titled Attachment A and which will be discussed later.

25  
26 II. **Management Assertions on BellSouth Telecommunication's Bulk**  
27 **Migration Process**—this report is BellSouth's first assertion. PwC validated this  
28 assertion with their Report of Independent Accountants in section I. The same  
29 list of deviations is provided in Attachment B of the report to the BellSouth  
30 Assertion on Bulk Migrations.

1           **III. Report of Independent Accountants for BellSouth**  
2           **Telecommunication’s Hot Cut Process**—PwC issued this report after the firm  
3           observed hot cuts across the BellSouth region for the second BellSouth  
4           assertion. They concluded and opined that the hot cut provisioning process is  
5           the same when using the Bulk Migration Process or when using the single order  
6           migration process across the BellSouth region. PwC found a few deviations  
7           which can be seen in Attachment C of the report and which will be discussed  
8           later.

9  
10           **IV. Management Assertions on BellSouth Telecommunication’s Hot Cut**  
11           **Process**—this report is BellSouth’s second assertion. PwC validated this  
12           assertion with their Report of Independent Accountants in section III. The same  
13           list of deviations is provided in Attachment D of the report to the BellSouth  
14           Assertion on the Regional Test.

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17           **Supplementary Information**

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19           V. Executive Overview  
20                    A. Overview of Reports  
21                    B. Objective of Supplementary Test Information

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23           VI. Bulk Migration and Regional Test

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25           VII. Glossary of Terms

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27           Sections V, VI, and VII of the report provide an overview of the assertions and a  
28           description of the test that was conducted in Florida along with a description of  
29           the live hot cut testing across the BellSouth region.

30  
31           BellSouth made two assertions. First, BellSouth asserted that its Bulk Migration  
32           Process enables a CLEC to migrate multiple end-users from UNE-P service to  
33           UNE-L service. In order to facilitate the test, BellSouth created a pseudo-CLEC.  
34           Use of the pseudo-CLEC is an established methodology that has been utilized in  
35           other process tests. The pseudo-CLEC was established and operated similar to  
36           the methodology engaged during the 271 Third Party Tests that were conducted  
37           in Florida and Georgia. The pseudo-CLEC submitted multiple bulk order

1 requests following the written procedures provided to the CLECs on the website.  
2 Details about BellSouth's batch hot cut process can be found on-line at  
3 <http://www.interconnection.bellsouth.com/guides/unedocs/BulkManpkg.pdf>.

4  
5 The PwC examination of the Bulk Migration Process included a review of all the  
6 process steps. PwC began with a review of the project notification that would be  
7 submitted by the CLEC, and then reviewed the associated activities of the  
8 BellSouth Project Manager. Once all the preordering type of activities was  
9 completed, PwC reviewed the activities associated with the ordering process.  
10 They observed the pseudo-CLEC submissions and the activities associated with  
11 BellSouth's ordering systems and the Local Carrier Service Center ("LCSC").  
12 Next, PwC reviewed the traditional provisioning processes including those of  
13 BellSouth's Customer Wholesale Interconnection Network Services Center  
14 ("CWINS") as well as BellSouth Central Office and Field Technicians. The  
15 review of these processes for BellSouth's first assertion was very comprehensive  
16 as evidenced by the quantity of time and number of individuals utilized by PwC in  
17 testing.

18  
19 Second, BellSouth asserted that the Bulk Migration Process requires central  
20 office and field technicians to physically perform the hot cut process. This hot cut  
21 process is the very same process used for non-bulk or individual hot cuts in  
22 BellSouth's nine-state region. In spite of the multiple hot cut offerings, the act of  
23 performing a hot cut remains a simple, straightforward task – and one that  
24 BellSouth performs at high volumes with a high degree of accuracy and speed.  
25 Therefore, BellSouth made the assertion that the hot cut process is used for both

1 bulk hot cuts as well as individual hot cuts across the region served by BellSouth.  
2 PwC validated the process used across BellSouth's region by observing central  
3 office and field forces using the same hot cut process described in BellSouth's  
4 second assertion in Attachment MM1.

5  
6 Q. WHAT DID PwC USE AS CRITERIA FOR DETERMINING DEVIATIONS AS  
7 THEY VALIDATED THE TWO BELLSOUTH ASSERTIONS?

8  
9 A. PwC expresses their threshold for deviation reporting in the affidavit of Mr. Paul  
10 M. Gaynor of PwC, which can be seen in Attachment MM2. The affidavit was  
11 prepared to provide additional detail for the types of testing procedures used by  
12 PwC during the attestation examinations. It also provides criteria for the  
13 threshold testing beginning with paragraph 10, on page 6 of Attachment MM2.  
14 Their threshold or criteria transcends into three categories:

- 15  
16 1. Adherence to each process step in excess of 95% of the time.  
17 2. Any impact to customer service that exceeded 15 minutes.  
18 3. Any observation that actually met the first two criteria, but PwC  
19 determined that the action (i.e., a particular process step) was critical, thus  
20 it should be reported anyway.

21  
22 These categories of criteria will be further explored as each deviation is  
23 described and addressed.  
24  
25



1           **BellSouth's First Assertion**

2   Q.   HOW DID BELLSOUTH ESTABLISH THE PSEUDO-CLEC FOR THE FIRST  
3        ASSERTION OF THE TEST?

4  
5   A.   BellSouth created the pseudo-CLEC by establishing approximately 750 UNE-P  
6        accounts in three (3) wire centers in Florida for the test. Florida was chosen as  
7        the test location because it has the highest number of embedded UNE-P  
8        customers and it was projected to be the first state to experience extensive  
9        CLEC utilization of the Bulk Migration Process. BellSouth designed the test bed  
10       to mirror actual facility distribution and the makeup of existing UNE-P accounts.  
11       BellSouth wanted to ensure that the outside plant facilities assigned to the test  
12       bed circuits would mirror the actual distribution of facilities within the state. An  
13       evaluation of Florida's existing facility usage revealed that approximately 50% of  
14       circuits were served by copper facilities, 14% were served by Universal Digital  
15       Loop Carrier ("UDLC") and 36% were served by Integrated Digital Loop Carrier  
16       ("IDLC"). BellSouth wanted its test bed to reflect the actual make-up of existing  
17       UNE-P accounts in terms of service type or class of service. BellSouth obtained  
18       and analyzed the data associated with establishment of UNE-P service for actual  
19       customers. The data indicated that the test bed should consist of 85% residential  
20       accounts, 10% business, 3% coin, and 2% Remote Call Forwarding ("RCF").  
21       The latter class of service was further broken down into residential and business  
22       RCF products. These classes of service are consistent with the UNE-P  
23       requirements listed on page 9 of the Bulk Migration Process CLEC Information  
24       Package that can be found on-line at  
25       <http://www.interconnection.bellsouth.com/guides/unedocs/BulkManpkg.pdf>.

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Next, BellSouth simulated a CLEC switch by wiring from the originating equipment (“OE”) block on the BellSouth frame in each central office to the CLEC Connecting Facility Assignment (“CFA”) block to establish dial tone for the pseudo-CLEC switch. This methodology was employed for accounts containing telephone numbers (“TNs”) served by copper and UDLC facilities. IDLC facilities do not have a physical appearance on the BellSouth frame so a second set of TNs was established and wired as described above. This second set of TNs was mapped to the TNs served by IDLC to enable all normal conversion activities to occur. This approach also allowed for the conversion from IDLC to copper or UDLC facilities during the test.

There was one step in the provisioning process that BellSouth was not able to complete. Because the CLEC switch was simulated, BellSouth could not send any messages to the Network Portability Administration Center (“NPAC”), which cause the number port to occur. In other words, BellSouth could not actually move the UNE-P TN from the BellSouth switch to the CLEC switch because in the simulated environment, there was no CLEC switch. The absence of this step did not materially impact the testing of BellSouth’s Bulk Migration Process since the CLEC itself initiates and largely controls the routing change associated with moving the circuit from BellSouth’s switch to its own. All other BellSouth and CLEC ordering and provisioning procedural steps were followed, completed, and observed by PwC during the course of the test.

Q. HOW MANY AND WHAT TYPES OF BULK MIGRATION HOT CUTS DID

1 BELL SOUTH PERFORM TO CONFIRM THE FIRST ASSERTION OF THE  
2 TEST?

3  
4 A. BellSouth reviewed its existing base of UNE-L accounts to determine the actual  
5 class of service make-up. The analysis indicated that approximately 87% of  
6 actual UNE-L migrations were for Service Level One ("SL1") voice grade loops  
7 while 7% of the UNE-L migrations were for Service Level Two ("SL2") voice  
8 grade loops. The remaining 6% were distributed across the other designed and  
9 non-designed UNE-L classes of service. This data, combined with the list of  
10 classes of service to which UNE-Ps may migrate, guided BellSouth in issuing  
11 migration orders that were distributed based on the embedded base, yet covered  
12 all "migration-permissible" loop types. A list of loop types to which UNE-Ps may  
13 be migrated is found on page 9 of the Bulk Migration Process CLEC Information  
14 Package. The test included both central office and field cuts. As previously  
15 indicated, since 85% of the embedded base of UNE-P accounts consists of  
16 residential classes of service, most of the hot cuts were ordered as non-  
17 coordinated. The test was structured and conducted as follows:

- 18  
19 ○ Day 1 of Testing on December 2, 2003—West Hollywood Central  
20 Office (total of 125 Hot Cuts)  
21 The first day of testing was based upon four Bulk Migration Project  
22 Notifications or Bulk Order Project Identifiers ("BOPs"). These four  
23 (4) BOPs accounted for 124 migrations using the Bulk Migration  
24 Process and an additional migration was conducted via the  
25 submission of single Local Service Requests ("LSRs"). The end  
26 result was that there were a total of 125 hot cuts on the first day of  
27 testing.  
28  
29 ○ Day 2 of Testing on December 4, 2003—Arch Creek Central Office  
30 (total of 125 Hot Cuts)

1 The second day of testing was based upon six (6) BOPIs. These  
2 six (6) BOPIs accounted for 119 bulk migrations, and six (6) single  
3 migrations were included to reach the test target of 125 hot cuts.  
4

- 5 ○ Day 3 of Testing on December 5, 2003—Perrine Central Office  
6 (total of 125 Hot Cuts)

7 The third day of testing was based upon three (3) BOPIs. These  
8 three (3) BOPIs accounted for 108 bulk migrations and 17 single  
9 migrations were included to reach the test target of 125 hot cuts.  
10

- 11 ○ Day 4 of Testing on December 11, 2003—West Hollywood, Arch  
12 Creek and Perrine Central Offices (total of 383 Hot Cuts)

13 The fourth day of testing was based upon a total of five (5) BOPIs  
14 for West Hollywood, three (3) BOPIs for Arch Creek, and seven (7)  
15 BOPIs for Perrine. The 5 BOPIs in West Hollywood accounted for  
16 125 bulk migrations. Additionally, there were two (2) single  
17 migrations in West Hollywood for a total of 127 hot cuts. The three  
18 (3) BOPIs in Arch Creek accounted for 126 bulk migrations, and  
19 there were also five (5) single migrations in Arch Creek for a total of  
20 131 hot cuts. The seven (7) BOPIs in Perrine accounted for 122  
21 bulk migrations and three (3) additional single migrations, which  
22 resulted in a total of 125 hot cuts.  
23

24 The target number of bulk migrations for each of the first three (3) test dates was  
25 125, while the fourth date was designed to test simultaneous provisioning in all  
26 three (3) central offices. The end result was that BellSouth completed a total of  
27 over 375 migrations on the fourth date. Therefore, over 750 hot cut migrations  
28 occurred across the four days of testing with 724 of those resulting from bulk  
29 migration service requests. Coincidentally, since the inception of the test,  
30 BellSouth has had the opportunity to migrate more than 125 UNE-P accounts for  
31 an actual large CLEC that operates in Florida. The testimony of Mr. Ken  
32 Ainsworth will further address the outcomes of this effort.  
33

34 Q. PLEASE DISCUSS THE FINDINGS FROM THE TEST ON THE FIRST  
35 ASSERTION.

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A. PwC validated Bellsouth’s first assertion by observing bulk migration hot cuts. The details of PwC’s findings can be found in their Report of Independent Accountants in Attachment MM1. In summary, PwC observed a total of 724 bulk hot cuts during the four days of bulk migration testing. In PwC’s Report of Independent Accounts for the first assertion, they provided a positive confirmation of BellSouth’s first assertion with the qualification of some deviations. These deviations require further review and explanation; however, it is important to keep the deviations and their impact in an appropriate context. PwC observed 724 bulk hot cuts during the four (4) test days. The following paragraphs provide an explanation of the deviations found in testing BellSouth’s first assertion and its impact to the customer:

First Assertion, Deviation 1—this deviation resulted when the BellSouth technician could not ANAC (Automatic Number Announcing Circuit) the BellSouth dial tone prior to the cut for three (3) of the 724 bulk migrations. ANAC is a capability allowing a technician to plug a test set onto a given loop, dial a special code and have played out audibly the telephone number currently assigned to that loop. After investigating and resolving the issue, which took approximately 40 minutes for each dial tone, the technician was able to restore the dial tone through the BellSouth switch. The hot cut was then successfully completed. Although both BellSouth and CLECs strive for perfection, occasionally there may be an issue with the dial tone from either switch on the day of the hot cut. Therefore, it is imperative that BellSouth have procedures in place to resolve these types of issues. These three (3) cuts demonstrate that

1 BellSouth does have the procedures and ability to resolve issues, and complete  
2 successful migrations. PwC listed this as a category 2 deviation where customer  
3 service was impacted for over 15 minutes.

4  
5 First Assertion, Deviation 2—this deviation resulted after PwC observed 3 of the  
6 724 bulk migrations that took longer than 15 minutes. There was one (1) hot cut  
7 that took 20 minutes while two (2) other hot cuts took approximately 40 minutes.  
8 In these cases, the BellSouth field technician encountered and resolved an issue  
9 involving an electronic cross-connect in a remote terminal. This situation  
10 extended the hot cut's completion time by a few minutes. PwC listed this as a  
11 category 2 deviation where customer service was impacted for over 15 minutes.

12  
13 First Assertion, Deviation 3—there were two (2) of the 724 bulk migrations where  
14 BellSouth technicians failed to successfully complete hot cuts. In the first case,  
15 BellSouth performed the migration prior to the due date so the end user customer  
16 would have been able to make calls, but not receive calls. The second case  
17 resulted from the migration not being performed on the due date. In this case,  
18 the end user customer could have potentially lost service. BellSouth has a  
19 thorough process that provides for contingencies to ensure that the risk of  
20 interruption of service to the customer is minimized, but occasionally failures do  
21 occur as demonstrated in the test. PwC listed this as a category 2 deviation  
22 where customer service was impacted for over 15 minutes.

23  
24 These first three (3) deviations constitute PwC findings for the impact to  
25 customer service that exceeded 15 minutes. There were a total of eight (8)

1 instances during the 724 bulk migrations. The genesis of this 15 minute  
2 benchmark is the Service Quality Measurement (“SQM”) on the timeliness of  
3 coordinated conversions where this Commission has established a benchmark of  
4 95% within 15 minutes. Thus, BellSouth’s performance during the test translates  
5 to 98.9%, which exceeds the Commissions benchmark.

6  
7 First Assertion, Deviation 4—this deviation resulted when BellSouth field  
8 technicians were completing IDLC conversions in a field remote terminal. The  
9 technician was unable to ANAC the BellSouth dial tone for 19 lines. This issue or  
10 deviation was an artifact of the test environment when two (2) TNs were needed  
11 for all IDLC served UNE-Ps. In live customer conversions, only one (1) TN is  
12 involved, for IDLC served UNE-Ps, thus, this situation would not have occurred in  
13 live customer conversions. This deviation did not have any negative impact to  
14 the migration; the 19 hot cuts were still successfully completed within the allotted  
15 15 minute time period. PwC listed this as a category 3 deviation where the issue  
16 would not be considered reportable via the first two (2) threshold categories, but  
17 PwC elected to report the issue as a deviation to ensure that it was visible to the  
18 reader.

19  
20 First Assertion, Deviation 5—this deviation resulted when the central office  
21 technician did not completely follow the process for one (1) of the 724 bulk hot  
22 cuts. In this case, the technician found that the BellSouth jumper wire had the  
23 wrong TN, but the CLEC jumper wire had the correct TN. The technician should  
24 have contacted the CWINS center, which would have contacted the CLEC to  
25 confirm the TN and obtain the CLEC’s permission to proceed with the cut. These

1 contacts did not occur. In the end, the hot cut was successfully made with the  
2 correct TN, but the deviation was noted due to a process step miss. PwC listed  
3 this as a category 3 deviation where the issue would not be considered  
4 reportable via the first two (2) threshold categories, but PwC elected to report the  
5 issue as a deviation to ensure that it was visible to the reader.

6  
7 First Assertion, Deviation 6—this deviation resulted when PwC observed a total  
8 of six (6) instances in which BellSouth technicians missed a hot cut process step.  
9 More specifically, on Day 2 of the test, PwC observed that the BellSouth  
10 technician neglected to test the CLEC dial tone prior to performing the hot cut for  
11 six (6) telephone numbers. These were certainly process step omissions;  
12 however, the process contains several safeguards to ensure that the hot cuts are  
13 successfully executed. That was the case on these six (6) observations; these  
14 inadvertent step omissions did not negatively impact the ultimate success of all  
15 six (6) of the conversions. PwC listed this as a category 3 deviation where the  
16 issue would not be considered reportable via the first two (2) threshold  
17 categories, but PwC elected to report the issue as a deviation to ensure that it  
18 was visible to the reader.

19  
20 First Assertion, Deviation 7—this deviation resulted when a minor system issue  
21 was identified during the test while submitting bulk LSRs. The issue is not  
22 considered material since no CLEC has actually bulk ordered the associated  
23 products. The Bulk Migration test included an evaluation of the electronic LSR  
24 submission process. Using this process, the pseudo-CLEC successfully  
25 submitted LSRs resulting in BellSouth's ordering systems generating 724 bulk



1 migrations. There are two circumstances under which a bulk LSR cannot be  
2 submitted into BellSouth's ordering systems. The first circumstance involves the  
3 bulk migration to a UNE-L service known as a non-designed 2-Wire Unbundled  
4 Copper Loop or UCL-ND. The second circumstance involves the bulk migration  
5 of Remote Call Forwarding (RCF) UNE-P services. BellSouth can in fact perform  
6 migrations for both of these service types via single migration; however, the  
7 Universal Service Order Codes ("USOCs") associated with these products  
8 cannot be submitted on bulk LSRs. If a CLEC needed to order the migration of  
9 either of these products, it would simply submit single LSRs. It should be  
10 emphasized that these two (2) products constitute less than 2% of the service  
11 types within BellSouth's embedded base of services. Therefore, this particular  
12 issue would have minimal impact on CLEC customers and is not material to  
13 BellSouth's overall ability to successfully perform bulk migrations of services  
14 commonly used by CLECs. BellSouth has targeted the UCL-ND issue correction  
15 to occur in Release 15.0 in March of 2004, while the RCF issue is currently under  
16 investigation. RCF is a unique product that does not have an actual loop in the  
17 service. BellSouth is considering the removal of this product from the Bulk  
18 Migration Process since it is targeted for the migration of services that involve  
19 loops. Once again, it is important to put the magnitude of this system issue into  
20 context particularly since no CLECs have attempted to bulk order migrate these  
21 two service types. PwC listed this as a category 1 deviation where adherence to  
22 the process did not occur at least 95% of the time. If you consider the embedded  
23 base of these products and the fact that no CLEC has ever ordered the products  
24 via the Bulk Migration Process and BellSouth has targeted the UCL-ND issue

1 correction to occur in Release 15.0 in March of 2004, clearly there is no material  
2 impact to operational CLECs.

3  
4 First Assertion, Deviation 8—this deviation resulted due to poor performance  
5 observed on the first day of testing with BellSouth’s Enhanced Delivery Initiative  
6 (“ENDI”) system. For non-coordinated hot cuts, this system sends an electronic  
7 notification (commonly called a “go ahead”) to inform the CLEC that BellSouth  
8 has completed the hot cut. This notification is the signal for the CLEC to begin  
9 their porting process with NPAC. BellSouth witness, Mr. Ken Ainsworth, provides  
10 a detailed description of this system in his testimony. During the first day of  
11 testing, ENDI experienced an issue with a corrupt downstream server. There  
12 were two (2) servers that should have been submitting the notices to the pseudo-  
13 CLEC. The corrupted server was not sending messages, thus the failure  
14 occurred and the deviation was noted. BellSouth corrected the server problem  
15 on December 3, 2003. As is evidenced by PwC’s observations, the system was  
16 fixed and no failures were observed on the second and third days of testing.  
17 There was one (1) notice for a two-line service order that was not submitted on  
18 day four of testing. This failure resulted from an issue of completing the work  
19 order step in ENDI, which prevented the notice from being submitted; however,  
20 the problem was identified and corrected as evidenced by the test results on the  
21 second, third, and fourth days of testing. PwC listed this as a category 1  
22 deviation where adherence to the process did not occur at least 95% of the time.  
23 When considering the first day of testing, BellSouth failed to return 47 of the 124  
24 bulk migration notifications. However, once the server problem was corrected,  
25 BellSouth successfully submitted 119 notices on the second day, 108 notices on

1 the third day, and 371 notices on the fourth day of testing. In other words,  
2 BellSouth's performance was 99.7% after the issue was resolved from the first  
3 day of testing.

4  
5 After considering the materiality of the deviations noted by PwC in their report, it  
6 is clear that BellSouth's first assertion has been validated. PwC found that this  
7 test validated the sufficiency of BellSouth's Bulk Migration Process and the  
8 results provide quantifiable proof that BellSouth's process is effective in allowing  
9 CLECs to migrate large numbers of their customers from UNE-P to a variety of  
10 UNE-L services.

11  
12 To further support this finding, BellSouth notes that its hot cut process was also  
13 tested by KPMG (now known as BearingPoint) most recently during the Florida  
14 Third Party Test. KPMG first conducted a detailed review of BellSouth's methods  
15 and procedures documents that governed hot cuts. Next, like PwC, KPMG then  
16 physically observed BellSouth technicians as they performed actual hot cuts.  
17 Their finding was the same as PwC's; namely, that BellSouth technicians  
18 provisioned the hot cuts in accordance with documented methods and  
19 procedures. KPMG took their analysis a step further by also assessing  
20 BellSouth's performance from a SQM perspective. There were test points or  
21 evaluation criteria used to determine how well BellSouth met the SQM objectives  
22 for hot cut completions. KPMG gave a satisfactory rating to each of the  
23 evaluation criteria, a clear endorsement of BellSouth's documented hot cut  
24 process and its ability to successfully follow it. In addition to the findings of PwC  
25 and KPMG, both this Commission and the FCC likewise confirmed the

1 effectiveness of BellSouth's hot cut process during BellSouth's Section 271  
2 Application approval process. Finally, this Commission, along with eight (8) other  
3 state commissions and the FCC, have each independently found that BellSouth's  
4 hot cut process is nondiscriminatory, timely, accurate, and effective.

5  
6 **BellSouth's Second Assertion**

7 Q. WHY DID BELLSOUTH MAKE THE SECOND ASSERTION?

8  
9 A. BellSouth made the second assertion to provide proof that the Bulk Migration  
10 Process applies ubiquitously across the BellSouth region.

11  
12 Q. DOES PwC'S CONFIRMATION OF THE SECOND ASSERTION PROVIDE  
13 PROOF THAT THE PROVISIONING PORTION OF BELLSOUTH'S HOT CUT  
14 PROCESSES ARE THE SAME REGION-WIDE?

15  
16 A. Yes. In order to verify the validity of the second assertion, PwC observed live hot  
17 cuts across the region served by BellSouth. PwC employed sampling techniques  
18 as described beginning in paragraph 34 of Attachment MM2 to determine the  
19 sample size of observations needed for the BellSouth region. PwC was able to  
20 observe sufficient order volume in seven (7) of the states served by BellSouth.  
21 They were unable to obtain sufficient volume in Alabama or Kentucky, although  
22 that does not alter the fact that the same hot cut process is utilized across all  
23 nine (9) states. Beginning in paragraph 39 of Attachment MM2, PwC described  
24 the processes that they observed. They concluded that these same processes  
25 were in use across all the states in the BellSouth region. Based upon these

1 observations, PwC's testing leads to the conclusion that the same UNE-L hot cut  
2 process applies in each of BellSouth's states. Thus, Bulk Migration Process and  
3 its proven success in enabling a CLEC to migrate customers in a bulk fashion is  
4 applicable to all the states within the BellSouth region.

5  
6 Q. DID PwC LIST ANY DEVIATIONS DURING THEIR EVALUATION OF THE  
7 REGIONALITY ASSERTION?

8  
9 A. Yes, similar to the first assertion, PwC did identify and list a few items that it titled  
10 deviations. Again, it is important to look at the total context of their live hot cut  
11 testing to put their observations in perspective. PwC observed 96 live hot cut  
12 service orders for a total of 179 migrations to test BellSouth's regionality  
13 assertion. Out of 179 hot cuts, it is important to note that all 179 hot cuts were  
14 successfully completed.

15  
16 In Attachment C to their Report of Independent Accountants for the second  
17 assertion, which is contained in Attachment MM1, PwC listed the deviations that  
18 they observed. The first six (6) deviations are the same deviations cited for the  
19 first assertion. PwC elected to place deviations to the actual hot cut process  
20 itself in both reports. The deviation explanations will not be repeated. The  
21 following paragraphs provide an explanation of the deviations directly associated  
22 with the second assertion and its impact to the customer.

23  
24 Second Assertion, Deviation 7—this deviation resulted from a simple process  
25 step omission that ultimately had no direct impact on the success of the hot cut.

1 PwC found a total of nine (9) occasions in which BellSouth technicians  
2 inadvertently omitted either a CLEC or BellSouth pre-hot cut verification step. It  
3 is important to note that the observed process step omissions were not a  
4 regionality issue; they were simply issues of BellSouth technicians not completely  
5 following the same hot cut process that is used across the BellSouth region. In  
6 spite of the omitted step, all nine (9) hot cuts resulted in successful conversions.  
7 PwC listed this as a category 1 deviation where adherence to the process did not  
8 occur at least 95% of the time.

9  
10 Second assertion, Deviation 8—this deviation resulted when there was no  
11 BellSouth dial tone on the day of the cut for one (1) of the 179 hot cuts. In this  
12 case, instead of attempting to restore dial tone on the BellSouth side of the cut,  
13 the technician elected to go ahead with the hot cut. The cut was successfully  
14 made, and the CLEC accepted the migration when contacted by the CWINS  
15 center. As stated previously, no dial tone conditions infrequently occur; however,  
16 when it does, BellSouth has procedures in place to resolve these types of issues  
17 and complete a successful migration. PwC listed this as a category 1 deviation  
18 where adherence to the process did not occur at least 95% of the time.

19  
20 Second Assertion, Deviation 9—this deviation was noted after an attempt to  
21 resolve a CLEC issue on one (1) of the 179 hot cuts. When the BellSouth  
22 technician began the hot cut process on the due date, there was no CLEC dial  
23 tone so the technician correctly put the order in a missed appointment status that  
24 returns the responsibility back to the CLEC to resolve the missing dial tone issue.  
25 On the next day, there was an additional hot cut being observed by the same

1 PwC tester. While the PwC tester was in the central office, the BellSouth  
2 technician checked on the hot cut from the previous day. The CLEC had  
3 corrected their dial tone problem, so the technician completed the hot cut. The  
4 technician should not have made the cut since the service order was still in a  
5 missed appointment status, however. Thus, the hot cut process was not  
6 correctly followed and this observation was listed as a deviation. To further  
7 complicate the story, the CLEC had actually ported the TN on the day prior to the  
8 due date of the hot cut. The bottom line is that the customer could make calls,  
9 but could not receive any calls for two (2) days, and it would have been longer if  
10 the BellSouth technician had not violated the process and completed the hot cut.  
11 PwC listed this as a category 2 deviation where customer service was impacted  
12 for over 15 minutes.

13  
14 At the end of this testing period, 100% of the hot cuts were successfully  
15 completed which can be attributed to the numerous checks and balances that  
16 BellSouth has intentionally built into the hot cut process. Because of the  
17 existence of multiple crosschecks, the omission of one step, as observed by  
18 PwC, does not typically derail the actual conversion. Similarly, in these  
19 instances, there was no material impact to the CLEC customer. Again, based  
20 upon the Bulk Migration Test as well as live hot cut observations, PwC confirmed  
21 that BellSouth uses the same hot cut process for individual and bulk hot cuts.  
22 They further confirmed that this same process is used ubiquitously across the  
23 BellSouth region.

24  
25 **BellSouth's Mass Migration Process**

1 Q. PLEASE DESCRIBE HOW BELLSOUTH'S MASS MIGRATION CONVERSION  
2 PROCESS IS RELATED TO THE INDIVIDUAL AND BATCH MIGRATION  
3 PROCESSES.

4  
5 A. As described in the testimony of Ken Ainsworth, BellSouth's Batch Hot Cut  
6 Process complies with the requirements of the *Triennial Review Order* and allows  
7 for the seamless and efficient migration of UNE-P service to UNE-L service such  
8 that CLECs are not impaired without access to unbundled switching.

9  
10 That being said, BellSouth will adopt a third hot cut process to address alleged  
11 CLEC concerns about batch provisioning and non-recurring costs at such time as  
12 it receives unbundled switching relief in UNE Zones cut by Component Economic  
13 Areas. The third process is known as the Mass Migration Conversion Process.

14  
15 With the advent of the Mass Migration Conversion Process, BellSouth will offer  
16 three migration options to CLECs:

- 17  
18 1. Individual Conversions  
19 2. Batch Migration Process as described in the testimony of Mr. Ken  
20 Ainsworth  
21 3. Mass Migration Conversions.

22  
23 Exhibit MM-3, attached hereto, provides process overview and flows for the  
24 Mass Migration Conversion Process.

25



1 Q. PLEASE GENERALLY DESCRIBE THE MASS MIGRATION CONVERSION  
2 PROCESS.

3

4 A. While BellSouth disagrees with the CLEC criticism that it's Batch Process is not a  
5 batch provisioning process, BellSouth, in a further effort to meet CLEC needs,  
6 has developed the Mass Migration Conversion Process. Generally, the Mass  
7 Migration Conversion Process allows a CLEC to submit a spreadsheet of  
8 telephone numbers and some other minimal information to BellSouth for  
9 conversion. Once the CLEC submits the spreadsheet, BellSouth performs all the  
10 other tasks associated with the cut including order submission and number  
11 porting. BellSouth gains efficiencies through this process by eliminating the  
12 coordination between BellSouth and the CLEC and by batching the provisioning  
13 orders and eliminating duplicative dispatches.

14

15 The gains in efficiencies result in lower costs to the CLECs. Not only do the  
16 CLECs avoid the costs associated with the hot cuts from their side of the  
17 network, but they pay a reduced non-recurring charge for the cuts themselves.  
18 In addition, BellSouth will provide the CLEC with the UNE-L rate when the  
19 conversion process begins with the service order creation. The immediate  
20 access to the lower rate should make the CLEC indifferent as to when the end-  
21 user's loop is actually cut from BellSouth's switch to the CLEC's switch.

22

23 Q. CAN YOU PROVIDE MORE SPECIFICITY ABOUT THE PROCESS?

24

1 A. Certainly. A Mass Migration request allows a CLEC to submit a spreadsheet for  
2 the purpose of migrating large numbers of non-complex UNE-P service to UNE-L  
3 with LNP (Local Number Portability). Approximately 70% of the embedded base  
4 of UNE-P service within the BellSouth region is residential class of service. The  
5 majority of the remaining embedded base of business class of service is non-  
6 complex. The Mass Migration process has been established for simple large  
7 scale residential and small business embedded base mass conversions. The  
8 intent is for this process to provide the flexibility by applying the “80% rule” where  
9 the mass process focuses on the vast majority of the embedded base of UNE-P  
10 (i.e., the simple UNE-P conversions). In keeping with this principle, the following  
11 “simple” UNE-L services will be eligible for Mass Migrations:

- 12
- 13 ○ 2 Wire Unbundled Voice Loop – Service Level 1 (“SL1”)
- 14 ○ 2 Wire Unbundled Voice Loop – Service Level 2 (“SL2”)
- 15 ○ 2 Wire Unbundled Copper Loop – Non-Designed (UCL-ND)
- 16

17 To utilize this process, a planning phase will be conducted with the CLEC prior to  
18 the submission of its first mass migration spreadsheet. The purpose of the  
19 planning meeting is to ensure that the CLEC switch is operational and ready for  
20 the Telephone Numbers (“TNs”) to be translated. Additionally, this phase will  
21 allow for negotiations of dates based on the volume level of conversions for the  
22 mass migration batch conversions and to confirm that the CLEC is aware of the  
23 information that is required on the spreadsheet.

24

1 Next, the CLEC submits a spreadsheet with pertinent information for the  
2 telephone numbers that the CLEC wants to migrate. BellSouth then internally  
3 project manages and completes all migration activities for preordering, ordering  
4 and provisioning including all Local Number Porting (“LNP”) activity. From a  
5 CLEC perspective, the Mass Migration Process will allow for seamless pre-  
6 ordering, ordering and provisioning batch migrations. In contrast to the Batch  
7 Process, the Mass Migration Process shifts the “control” of the conversion  
8 activities back to BellSouth. This “control” allows for even greater efficiencies  
9 that can be passed along to CLECs with even higher Non-Recurring Charge  
10 (“NRC”) discounts.

11  
12 Again, the intent of the Mass Migration Conversion Process is to provide an  
13 option for a CLEC to provide minimal information to BellSouth and for BellSouth  
14 to handle all conversion activities. This will allow BellSouth to have more  
15 autonomy with the timing of conversions so as to balance its workforce with the  
16 workload.

17  
18 Due to the efficiencies in force and load balancing that BellSouth will gain in the  
19 Mass Migration Process, this process will be offered to CLECs at higher level of  
20 discount for the NRC. The discount structure can be seen in the following table.

1

<b>Number of TNs to Migrate</b>	<b>Geographic Area</b>	<b>Targeted Migration Time Period</b>	<b>Pricing Targeted UNE-L NRC Reductions</b>
500 to 2000	UNE Zones cut by Component Economic Areas	Negotiated period based on actual migration volume, but not expected to exceed 60 Days	15%
> 2000	UNE Zones cut by Component Economic Areas	Negotiated period based on actual migration volume, but not expected to exceed 180 Days	25%

2

3

4

5

6

7

8

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10

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16

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18

To address concerns that CLECs may have with the timing of mass migration conversions, BellSouth will offer to bill the CLEC at the UNE-L recurring charge price instead of the UNE-P price during the mass migration conversion period. Said another way, once a CLEC submits to BellSouth a list of telephone numbers which triggers initiation of service orders, the CLEC will enjoy the UNE-L recurring rate rather than the UNE-P recurring rate. BellSouth will also initiate the non-recurring rate for each TN conversion (minus the discount) on the same date as the UNE-P to UNE-L recurring charge change. Normally, BellSouth's billing systems are constructed to bill on the actual conversion dates when service orders are completed. In the case of the Mass Migration process, however, the pricing changes previously described will be effected through billing adjustments and credits once the individual telephone numbers are migrated to the CLEC's switch and the service orders are completed.

Q. WOULD YOU SUMMARIZE YOUR TESTIMONY?

1 A. Yes. Through the testing conducted by PwC, BellSouth has demonstrated that  
2 its Bulk Migration Process of UNE-P service to UNE-L service is both seamless  
3 and effective. PwC observed some 724 hot cuts utilizing the Bulk Migration  
4 Process and some 179 live hot cuts in several states. The test corroborates the  
5 testimony of BellSouth's witness, Mr. Ken Ainsworth, that BellSouth provides a  
6 proven, seamless, high quality individual hot cut process to handle the UNE-L  
7 volumes that would likely result if BellSouth were to obtain full relief from  
8 unbundled circuit switching; and that BellSouth provides a batch hot cut process  
9 that offers additional ordering and provisioning efficiencies to enhance the same  
10 proven, seamless, quality migrations that are currently associated with individual  
11 hot cuts. This process will sufficiently support the batch conversion of a CLEC's  
12 embedded UNE-P customer base to UNE-L services.

13  
14 Additionally, BellSouth has developed yet another efficient batch process option  
15 to speed the conversion from UNE-P to UNE-L as required by the TRO. The  
16 Mass Migration Conversion Process has been developed with a specific purpose  
17 – to convert large numbers of CLEC UNE-P facilities to CLEC switching with  
18 minimal CLEC involvement in the individual cutovers. To that end, the Mass  
19 Migration process is designed for UNE Zones cut by Component Economic  
20 Areas where relief for switching is granted.

21

22 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

23

24 A. Yes.

25

**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**

10 Tenth Street, Suite 1400

Atlanta GA 30309-3851

Telephone (678) 419 1000

Facsimile (678) 419 1239

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

Atlanta GA 30309-3851

Telephone (678) 419 1000

Facsimile (678) 419 1239

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:

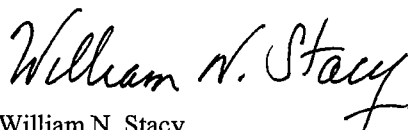
*Central Office Hot Cuts*

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**

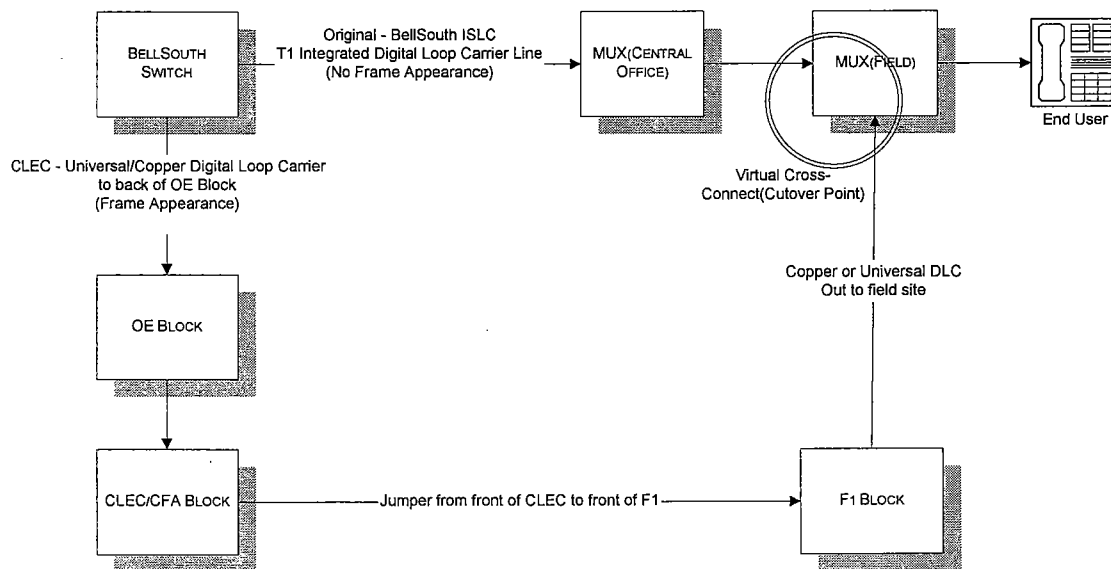
The objective of this information is to provide a description of the Bulk Migration and Regional Tests that were completed in Florida from October 30, 2003 through December 11, 2003.



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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



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.

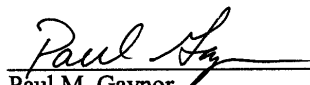
43. PwC identified the following issues as directly impacting customer service for a time period of greater than 15 minutes:

- 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.

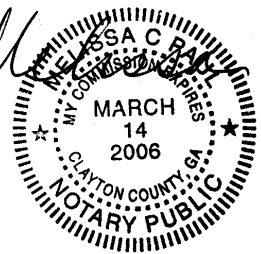

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

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.



C. Paul



**Attachment A**

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

Attachment B

Florida Bulk Migration Cutover Statistics by Quantity and Percentage

Total Orders for the BellSouth Bulk Migration Testing by Field Office & Central Office					
Central Offices in South Florida					
Date / Central Office	Coordinated		Non Coordinated		Total Lines
	Central Office	Field Office	Central Office	Field Office	
<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>

Date / Central Office	Coordinated		Non Coordinated		Total Lines
	Central Office	Field Office	Central Office	Field Office	
<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

Exhibit MM-3

# Mass Migration Conversion Process

>> *Listening >> Answering*



# Content—Mass Migration Conversion Process

- Process Overview
- Process Flow
- Day-by-Day Process Flow
- Glossary



# Mass Migration Conversion

## Offerings

- Available for non-complex embedded base UNE-P customers migrating to UVL SL1 and SL2 UNE-Loop, and UCL-ND (>80% of embedded base)
- Spreadsheet in lieu of individual LSRs or Bulk LSRs
- May include multiple COs
- No volume limitations
- Discount rates
- BLS performs ordering, porting and provisioning activities
- Joint planning phase conducted to negotiate up-front activities and migration period

## Advantages

- CLEC to submit large quantities of non-complex UNE-P lines to be migrated via a single request
- The CLEC will not be required to track individual orders or migrations
- CLECs do not have to submit LSRs or coordinate any porting activity
- CLEC experiences seamless pre-ordering, ordering and provisioning batch migrations.
- Reduced cost to CLEC



# Mass Migration Conversion

## Process Overview

- Mass Migration request are defined by UNE Zones cut by Component Economic Area (CEA)
- BellSouth will implement this Mass Migration Conversion option for CLEC at such time as it receives unbundled switching relief in UNE Zones cut by Component Economic Areas
- Mass Migration is available for migrating existing non-complex residential and business Port/Loop Combination services to Unbundled Loops with LNP
- Eligible UNE-L services:
  - 2 Wire Unbundled Voice Loop – Service Level 1 (SL1)
  - 2 Wire Unbundled Voice Loop – Service Level 2 (SL2)
  - 2 Wire Unbundled Copper Loop – Non-Designed (UCL-ND)
- Minimum of 500 lines per Mass Migration request
- Mass Migrations of 500 – 2000 lines will be completed within a negotiated period based on actual volume, but not expected to exceed to 60 days
- Mass Migrations exceeding 2000 lines will be completed within a negotiated period based on actual volume, but not expected to exceed to 180 days
- BellSouth will internally perform all of the project management, pre-ordering, ordering, provisioning, testing, and porting operations and completion notification necessary to update CLEC records and complete the project in the specified time frame on behalf of the CLEC



# Mass Migration Conversion

## Process Overview

- A Planning Phase will be conducted with each CLEC prior to the submission of the mass migration spreadsheet. The purpose of the planning meeting is to ensure that the CLEC switch is operational. Additionally, this phase will allow for negotiations of dates based on the volume level of conversions and to confirm spreadsheet requirements
- CLEC would submit spreadsheet including information for TNs to be migrated after a Planning Phase between the CLEC and the BellSouth Project Manager
- Directory listings will remain the same during the migration process
- CLEC EATN's will be considered frozen during the migration period. If an end-user customer changes carriers during the migration period, the CLEC must contact the BellSouth PM to have the TN removed from the mass migration batch conversion project.
- CLECs must establish dial tone for each TN on their switch by the day of spreadsheet submission for mass migrations involving 500 to 2000 TNs, and within a negotiated time period for mass conversions of greater than 2000 TNs.
- Monthly recurring rate will be reduced to the UNE-L rate when conversion service orders are activated
- NRC rate deductions of 15% for 500-2000 conversions and 25% for >2000 conversions will be applied at same time
- Service order charges for mechanized orders (SOMECS) will be charged based on the current rules for individual Local Service Requests (LSRs) created per EATN of a Bulk Request



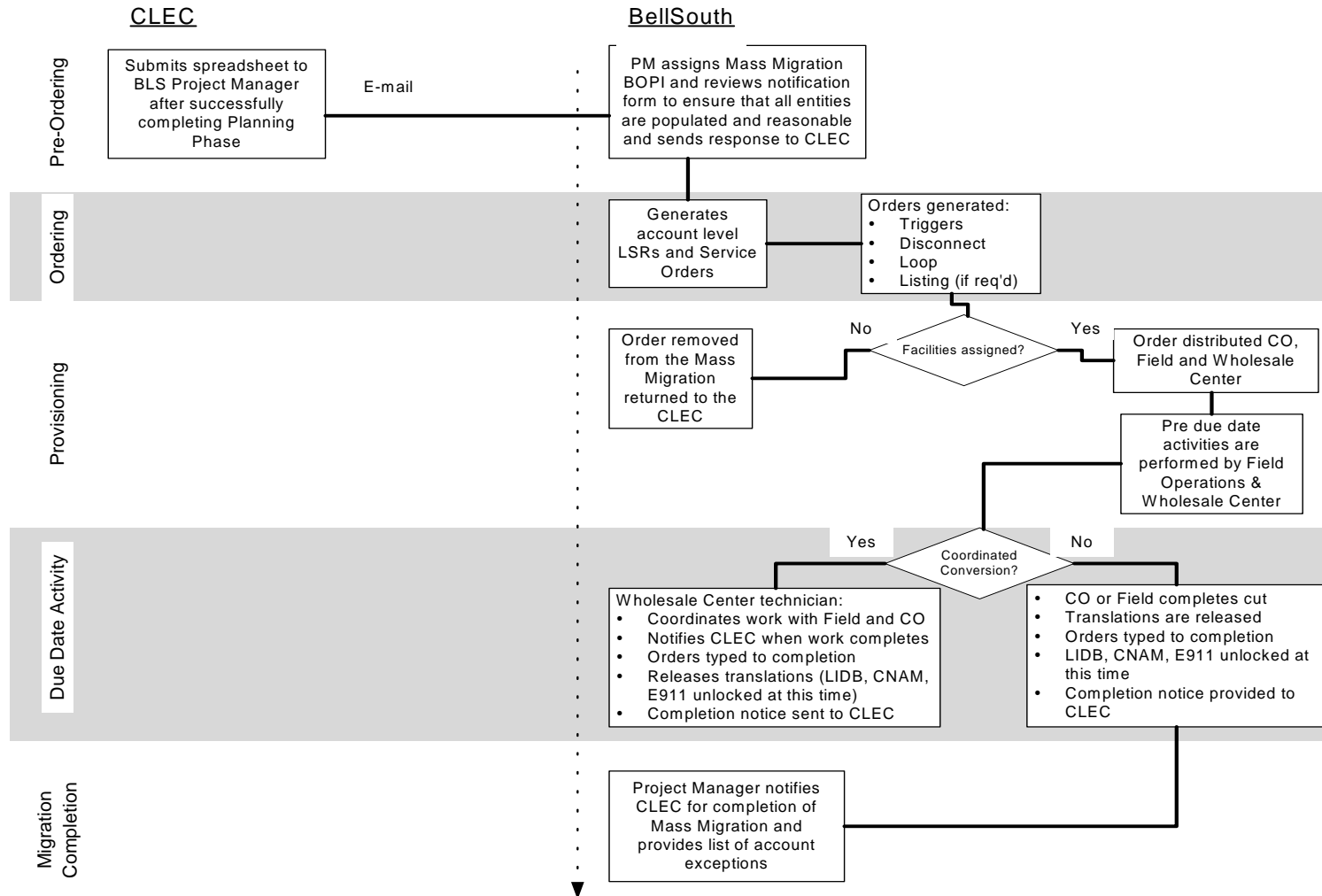
# > Mass Migration Conversion

## Day-by-Day Process Flow

<b>Pre-Order</b>	<ul style="list-style-type: none"> <li>•CLEC contacts BellSouth Project Manager to initiate planning phase</li> <li>•CLEC e-mails Mass Migration spreadsheet to BLS Project Manager after completion of planning phase</li> <li>•BLS Project Manager will respond to CLEC spreadsheet within the following time: 500 to 2000 TNs—3 business days; &gt;2000 TNs—6 business days</li> </ul>
<b>Day 1 to X within the negotiated conversion period</b>	<ul style="list-style-type: none"> <li>•Orders are issued</li> <li>•Order is assigned and distributed to network organizations</li> <li>•BLS does required NPAC activities</li> <li>•Order is screened</li> <li>•Pre due date activities are performed by Field Operations &amp; Wholesale Center</li> <li>•Conversion is completed and telephone number ported</li> <li>•Orders are completed</li> <li>•Releases translations</li> <li>•LIDB, CNAM, E911 unlocked at this time</li> <li>•Completion notices are sent to CLEC after each individual end-user conversion</li> </ul>
<b>Migration completion</b>	<p>Project Manager notifies CLEC for completion of Mass Migration and provides list of account exceptions</p>



# Mass Migration Conversion Process Flow





# Glossary

Acronyms

BLS	BellSouth Telecommunications
BOPI	Bulk Order Package Identifier
CHC	Coordinated Hot Cut
CEA	Component Economic Area
CLEC	Competitive Local Exchange Carrier
CNAM	Calling Name Delivery
CSOTS	CLEC Service Order Tracking System
CWINS	Customer Wholesale Interconnection Network Services
DD	Due Date
EATN	Existing Account Telephone Number
EnDI	Enhanced Delivery Initiative
LCSC	Local Carrier Service Center
LIDB	Line Information Database



# Glossary

## Acronyms

LNP	Local Number Portability
LSR	Local Service Request
NPAC	Number Portability Administration Center
PM	Project Manager
PN	Project Notification
PON	Purchase Order Number
SL	Service Level
TN	Telephone Number
UCL-D	Unbundled Cooper Loop – Designed
UCL-ND	Unbundled Cooper Loop – Non-Designed
UNE-P	Unbundled Network Element-Port/Loop Combination
UNE-L	Unbundled Network Element Loop
UVL	Unbundled Voice Loop