

# **BELLSOUTH REPLY COMMENTS**

**WC Docket No. 04-313  
CC Docket No. 01-338**

**October 19, 2004**

**Attachment 1**

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

In the Matter of	)	
	)	
Unbundled Access to Network Elements	)	WC Docket No. 04-313
Review of the Section 251 Unbundling	)	CC Docket No. 01-338
Obligations of Incumbent Local Exchange	)	
Carriers	)	

**REPLY AFFIDAVIT OF KENNETH L. AINSWORTH, W. KEITH MILNER,  
ALPHONSO J. VARNER, MILTON McELROY AND GARY TENNYSON ON  
BEHALF OF BELLSOUTH TELECOMMUNICATIONS INC. (“BELLSOUTH”)**

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Being of lawful age, and duly sworn upon my oath, I do hereby depose and state:

**I. PROFESSIONAL EXPERIENCE**

1. My name is Kenneth L. Ainsworth. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. My title is Director – Interconnection Operations for BellSouth Telecommunications, Inc. (“BellSouth”). Having been a party to BellSouth’s joint affidavit submitted as part of these proceedings on October 4, 2004, before the Federal Communications Commission (“FCC” or “Commission”), I herein respond to claims made in comments received on the issues I addressed in that affidavit.
2. My name is W. Keith Milner. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am Assistant Vice President – Interconnection Operations for BellSouth. Having been a party to BellSouth’s joint affidavit submitted as part of these proceedings on October 4, 2004, before the FCC, I herein respond to claims made in comments received on the issues I addressed in that affidavit.
3. My name is Alphonso J. Varner. My business address is 675 West Peachtree Street, Atlanta, Georgia 30375. I am Assistant Vice President – Interconnection Operations for BellSouth. Having been a party to BellSouth’s joint affidavit submitted as part of these proceedings on October 4, 2004, before the FCC, I herein respond to claims made in comments received on the issues I addressed in that affidavit.
4. My name is Milton McElroy Jr. My business address is 2300 Northlake Centre Drive, Tucker, Georgia 30084. My title is Director – Interconnection Services. I

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

5. My name is Gary Tennyson. My business address is 1884 Data Drive, Birmingham, AL 35244. My title is Principal Member – Technical Staff. I am employed by BellSouth Telecommunications. I have a Bachelor of Science degree in Electrical Engineering from Mississippi State University and a Masters of Science degree in Electrical Engineering from the University of Alabama at Birmingham. I have been employed in the telecommunications industry for more than 28 years, all with BellSouth, and one of its predecessors, South Central Bell. From 1976 through 1984, I held line and staff positions in Outside Plant Engineering, where I was responsible for the planning and engineering of local loop facilities. From 1984 through 1987, I held a staff position in Marketing. Since 1987, I have been involved with representing BellSouth in various industry standards forums dealing with loop access and associated technical interfaces. During this time, I served a four-year term as the chair of T1E1.1, a Working Group of T1E1, an Industry Standards forum. This Working Group dealt with Analog Interfaces. Currently in BellSouth, I provide expertise on local loop transport issues.

## **II. PURPOSE OF REPLY AFFIDAVIT**

6. This reply affidavit will provide responses to issues and allegations made by AT&T, MCI, and Supra (the “CLECs”) in their affidavits filed with the Commission in this proceeding. Many of the issues they raise were the subject of state and federal Commission orders in previous dockets, but the CLECs are nonetheless resurrecting them again in hopes of obtaining yet another delay in the conversions to facility-based arrangements. This joint reply rebuts the most significant of the CLECs’ concerns, and demonstrates again that BellSouth’s batch hot cut process is effective, efficient, and seamless.
7. Various other CLECs made general, vague allegations about batch hot cut processes, but not only failed to provide facts to support their claims, they did not even provide sworn affidavits to attest to their position. BellSouth is not taking the Commission’s time responding to these allegations and the Commission should not waste time considering these allegations.

## **III. DISCUSSION**

### **BellSouth’s Batch Hot Cut Process Is Effective.**

8. No CLEC has credibly rebutted the fact that BellSouth has an effective batch hot cut process. In fact, while AT&T filed an extensive hot cut affidavit, at the end of the day, BellSouth already has the batch process advocated by AT&T. As advocated by AT&T in the Declaration of John S. Szczepanski, Mark David Van de Water and Sharon E. Norris (hereinafter “AT&T” or “Szczepanski”), BellSouth’s process allows “project-managed, after-hours, bulk transfers of customers, on a central office and competitive carrier specific basis....” AT&T at ¶ 33. Thus, the

Commission can and should conclude that hot cuts are not a source of impairment.

**Collocation does not impede the use of UNE-L**

9. Several CLECs claim that limited collocation impedes their ability to utilize UNE-L. The facts, however, demonstrate otherwise. See AT&T, at ¶ 12; Supra, at 16. AT&T's 134 collocation sites, for example, allow AT&T to access about 24% of BellSouth's customer lines without the use of so-called Enhanced Extended Links ("EELs").
10. MCI (Comments at ¶47), claims that because it is only collocated in a fraction of the ILECs' central offices, and if UNE-P is unavailable, MCI would either have to serve customers via EELs or "immediately collocate in literally hundreds of central offices." The facts are, however, that MCI currently has 123 collocation sites in the BellSouth region. As is the case for AT&T, MCI's existing collocation arrangements give MCI access to a significant portion of BellSouth's lines. Through its existing collocation arrangements, MCI has access to about 28.6% of BellSouth's customer lines without the use of EELs.
11. Supra, at Page 16, claims that it has collocated in 18 of BellSouth's central offices, but it is unable to directly provide service without using collocation or Plain Old Telephone Service ("POTS") Enhanced Extended Links ("EELs") in the majority of BellSouth's central offices. Actually, Supra is now collocated in 21 of BellSouth's central offices and can serve 32% of Supra's UNE-P customers without using any EELS. These figures do not include the 18,000 customer lines that Supra has already converted from UNE-P arrangements to unbundled loop

arrangements (“UNE-L”). The 21 collocation arrangements Supra has already acquired give it access to about 23.1% of BellSouth’s lines in Florida without using EELs.

12. Moreover, if a CLEC requires new or additional collocation space for the placement of its network equipment to achieve the migration of its UNE-P customers over to UNE-L, EELs, or some other UNE service, BellSouth will provide that collocation in accordance with the applicable state commission requirements.

**IDLC is not a source of impairment**

13. Integrated Digital Loop Carrier (“IDLC”) is not an impediment to UNE-L. As was explained in the Affidavit of W. Keith Milner in this proceeding, BellSouth employs a number of methods to provide all its loops, including loops provided via IDLC equipment, on an unbundled basis to requesting CLECs. While admittedly some of the alternatives BellSouth makes available will require more or less work effort to accomplish, that result is a function of the type, configuration and availability of installed loop equipment in a given location and instance. BellSouth does not claim that each of its eight (8) alternatives will be available in every instance. Instead, BellSouth asserts that at least one (1) of those eight (8) alternatives is available in every single instance. Thus, there are no loops in BellSouth’s network that cannot be provided on an unbundled basis.
14. Importantly, BellSouth does not exclude IDLC from its batch hot cut process. BellSouth did, however, establish daily IDLC batch hot cut limitations because of network operation considerations and processing efficiencies. The limits will not

impede CLECs who want to move to UNE-L. Establishing daily IDLC limitations allows the CLEC the ability to effectively plan its work related to batch hot cuts and allows BellSouth to execute its process in the most efficient manner possible. The limitations imposed on the number of IDLC conversions, AT&T, ¶ 61-62, is reasonable given the CLECs' own capabilities to achieve large volumes of hot cuts on a given day. A CLEC may use BellSouth's batch hot cut process to order up to 125 lines to be migrated within a single central office on a single day. Of those 125 lines, all 125 may be hot cuts that only require work in the central office or the CLEC may order a combination of hot cuts (that is, hot cuts involving both those that only require work in the central office and hot cuts that require field dispatches due to the presence of IDLC equipment) up to a volume of 125 per day per central office. While it is correct that BellSouth limits the number of IDLC lines per central office to 70 lines per day in given central office, it only takes a little "quick math" to dispel AT&T's concern. BellSouth operates about 1,600 central offices across its nine-state region. Thus, on a given day, BellSouth is able to convert about 112,000 IDLC-derived loops to unbundled loop arrangements. There is no problem regarding BellSouth's limit that this Commission needs to address. AT&T correctly points out that BellSouth also limits the total number of hot cuts per competitive carrier per day to 125 in any given central office. (Para. 61-62) Here again, BellSouth's limit is not a problem as this quantity per central office will allow about 200,000 hot cuts per day across its region for a single CLEC. Indeed, at the maximum of 200 hot cuts per central office per day, BellSouth would be able to convert about 320,000 lines per day. If

there is a question for the Commission here, that question is of AT&T's readiness to perform hot cuts in large volumes. Independent audits have already confirmed BellSouth's ability to perform at high daily volumes. The same cannot be said of AT&T's ability to do likewise.

15. In some cases, there could be a shortage of non-ILDC facilities whereby some UNE-P circuits could not be rolled off UNE-P onto UNE-L. However, this is not a restriction of the hot cut process but rather a limitation of available loop facilities. In instances where BellSouth has received relief from unbundled local switching obligations and where facilities are not available to migrate the loop to the requesting CLEC's network due to IDLC concerns, BellSouth will give the CLEC the option of paying special construction charges to have the unbundled loop made available or the CLEC can keep its customer on the existing UNE-P arrangement. This should adequately address the CLECs' concerns in this regard.
16. Limits on IDLC conversions make technical and operational sense. Migrations of lines currently working on IDLC facilities usually require new facility assignments and a field technician dispatch on the due date to perform the conversion. The physical location to which a technician must be dispatched to perform the required work to effect the conversion may be different for each line in the CLEC's batch hot cut request, thus requiring multiple dispatches of multiple technicians within the same work unit. BellSouth coordinates carefully the quantity of technicians dispatched on a given day to perform hot cuts. BellSouth's limit of daily IDLC hot cut volumes will ensure that due dates are met, not just for the CLEC requesting a batch hot cut, but for all of the customers

that depend on BellSouth to honor prior due date commitments.

17. BellSouth's batch migration policy is that it will migrate a maximum number of 200 lines (IDLC and non-IDLC) for all competitive carriers, combined, in a central office on a given day. AT&T claims this imposes a significant burden on competitive carriers. (Para. 64 & 68) BellSouth's current limit per office, per day, does not limit the CLECs ability to schedule multiple central office migrations in a given day. Additionally, CLECs may schedule multiple days to accomplish the desired number of migrations. While AT&T claims this imposes a "significant burden" on competitive carriers, just a little more "quick math" will prove otherwise. (See AT&T Declaration at Para. 64 & 68) BellSouth could handle as many as 320,000 hot cuts across its region in a single day without exceeding this supposed "limitation". Here again, the Commission should focus on AT&T's ability (as well as the abilities of other CLECs) to handle hot cut volumes anywhere close to the daily volumes BellSouth can handle. Moreover, AT&T's criticism of volume cuts limits directly contradicts the position it took in the state cases in which it insisted that BellSouth's lack of commitments regarding daily hot cut volumes was a significant impediment to AT&T's planning efforts.
18. MCI (Comments at ¶63) states that in a conversion from IDLC to Universal Digital Loop Carrier ("UDLC"), there is an increase in the number of analog-to-digital and digital-to-analog conversions thereby reducing the operating speed of the customer's circuit. BellSouth agrees that additional conversions will occur and that it is a very difficult problem, as evidenced by the fact that there is no readily-available solution. It should be noted, however, that this situation only affects

dial-up data speeds and does not impact voice service. BellSouth conducted a trial with ITC^DeltaCom which attempted to unbundle a loop delivered via IDLC without incurring additional analog-to-digital conversions. The trial results are attached as Exhibit BLS-14. While some of the eight (8) alternatives BellSouth employs to provide unbundled loops in cases where the end user is currently served via IDLC equipment do not incur additional analog-to-digital conversions (i.e., transferring a loop to copper facilities, routing IDLC transmission facilities through a Digital Cross-Connect System, or using the switch-based 'hairpin' capability), additional analog-to-digital conversions do occur in some cases. In short, the trial demonstrated this is a problem for which there is at present no technical solution.

19. MCI states in its Comments at ¶66 that IDLC is generally used in the suburbs and rural areas and suggests that “while only 20% of the total access lines in a state may be impacted, a far higher percentage of residential and very small business (i.e., mass market) customers are impacted.” While this may have been true in the past, with the advent of a newer form of IDLC (namely, Next Generation Digital Loop Carrier or “NGDLC”), it is easier to control the integrated and non-integrated portions of BellSouth’s network and thus IDLC supplied via NGDLC equipment is being deployed throughout BellSouth’s network rather than only in suburban and rural areas. This is being done because the Plain Old Telephone Service (“POTS”) can be sent via the integrated capabilities of the NGDLC system and the non-switched special services can be sent to the non-integrated capabilities of the NGDLC system. Moreover, it is uncommon that BellSouth

would serve any cross box with only IDLC facilities. Instead, most cross boxes are served via a mixture of integrated and non-integrated facilities in order to be able to serve any non-switched services. Sometimes the demand for non-integrated facilities is small enough that it can be satisfied by using Digital Cross-connect Systems (“DCS”) or so-called side-door/hairpin capabilities of the switch.

20. MCI (Comments at ¶68) states that ILECs are replacing copper cables with fiber. This is true. However, MCI’s implication that before 2002 BellSouth did not replace any copper cables with fiber optic facilities is incorrect. The requirement to report copper cable replacements with fiber optic facilities via a Network Disclosure notice was established in an FCC order and was later modified by the Triennial Review Order (“TRO”). The first year BellSouth was required to provide notifications of its copper replacements with fiber optic facilities was Year 2002. Before that date, BellSouth replaced copper cables with fiber optic facilities as an ongoing process of network upgrades to the newer technology. The FCC has affirmed that ILECs have the right to upgrade their network to the newest technologies and the replacement of copper facilities with fiber optic facilities is part of that technology evolution, a fact no party refutes. This Commission established its Notification process to allow for an orderly transition from the older technologies to the newer technologies with ample notification for all concerned to prepare for the new architecture.
21. In its Comments at ¶76, MCI states that “in an effort to remove itself from obligations related to UNE switching in state-specific *TRO*-related proceedings (e.g., Docket No. 17749-U before the Georgia Public Service Commission)

BellSouth *finally* identified eight IDLC unbundling options that it would pursue, if need be, to provide access to unbundled loops. Those options included, for example, the use of a side door port, or ‘hair-pinning.’” (Emphasis added). MCI’s statement is wrong. First, while it gives some comfort that MCI recognizes BellSouth’s use of the methods MCI apparently prefers, it should be noted that BellSouth first proposed its eight (8) IDLC unbundling options during its first Section 271 applications. See, for example, the direct testimony of W. Keith Milner in Georgia PSC Docket 7253-U dated May 22, 2008. Thus, despite MCI’s characterization of BellSouth’s adoption of these methods “finally”, the truth is that these methods were adopted almost over six (6) years ago.

22. Supra, on page 33 of its Comments, that if 10% or more of the residential customer base cannot be served with UNE-L, based on IDLC facilities, then a finding of impairment should be made. However, on page 34 of its comments, Supra recommends a percentage threshold of 5%. The fact that Supra has no evidence to support its recommendation should be clear from the fact that its recommendation changes within its own comments. Regardless, this should not be a concern to Supra because, as detailed in our initial affidavit, BellSouth will continue to bill at UNE-P rates for UNE-Ps that cannot be converted to UNE-L where the CLEC does not wish to bear the cost of Special Construction.

**BellSouth’s batch hot cut process includes migrations to third-party switches**

23. In response to AT&T’s request, BellSouth implemented third party migrations into the batch hot cut process in February 2004. See Initial Ainsworth Affidavit, at ¶ 21 (discussing CLEC-to-CLEC migrations).

24. AT&T's complaint, AT&T, ¶¶ 17, 54, 75-82, is not really about CLEC-to-CLEC migrations generally, but a situation specific to AT&T. AT&T complained in the state TRO cases that one AT&T entity could not place orders on behalf of another AT&T entity for services that it wished to originate or terminate to the second AT&T entity's collocation space. Rather than change its company codes, AT&T wants BellSouth to eliminate the edits and screening tools intended to ensure that one CLEC does not inappropriately use the assets (in this case collocation arrangements and connecting cables and database assignments referred to as Connecting Facilities Assignments ("CFAs") of another CLEC. Here are the facts: AT&T has established its collocation sites using the Access Customer Name Abbreviation ("ACNA") "ATX" (for AT&T), but placed service requests to these sites using the ACNA "TPM" for Teleport Communications Group or "FIM" for North Point (both of which AT&T acquired). In other words, AT&T wishes to permit those entities it has acquired over the years, which have different ACNAs (such as TPM and FIM), to place orders to the collocation sites that belong to the ACNA "ATX" for AT&T.
25. BellSouth will migrate AT&T's UNE-P arrangements to UNE-L arrangements via TCG's facilities. However, AT&T must follow the same ordering and provisioning requirements as every other CLEC.
26. AT&T has several options to achieve the cutovers it wants. First, AT&T could change the records designating TCG's collocation arrangements, CFAs and the like to reflect AT&T's ownership. This record changing is routinely done when one CLEC acquires the assets of another and includes changing records such as

ACNA codes. Alternatively, AT&T could effect a collocation sharing arrangement with its wholly owned subsidiary, TCG. This would allow either AT&T or TCG to order unbundled network elements that would be delivered to TCG's collocation arrangement. Lastly, AT&T could submit a New Business Request ("NBR") to implement this functionality. In short, AT&T has created this problem, not BellSouth.

**Timing of the cutover**

27. BellSouth's batch hot cut process gives CLECs adequate control over the cutover process. CLECs may pick the day of the cut, and can pick a four-hour window during which the cut will occur. This, of course, does not mean that all the end user's lines (or, in fact, any of the lines) will be out of service for four hours. It does mean, however, that the end user's lines will be cut sometime in this window. This window allows CLECs and end users to plan for the outage.
28. The use of the four-hour window balances the realities of a batch hot cut (involving perhaps hundreds of lines) with the customer's need for certainty. While AT&T (at Para. 18) appears to want a specific time commitment for each loop, this is neither practical nor efficient. It is far more effective to allow a technician to process a group of orders that are organized for efficient execution. Efficiencies gained within the batch hot cut process are a direct result of 1) a provisioning interval that allows for additional network planning and preparation prior to the due date; and 2) flexibility to sequence due date activities to achieve greater productivity. Batch hot cuts are performed by central office and field installation and maintenance personnel who are also loaded with provisioning and

maintenance activities required for other wholesale and retail customers. To coordinate the time and migration sequence, line for line, as stated by AT&T, would require additional time and increased cost to BellSouth due to the inability to group work activities together.

29. BellSouth's scheduling for batch hot cuts works as follows: starting on October 29, 2004, with the availability of the Scheduling Tool, CLECs may control the time of the Bulk Migrations on the desired due date by selecting the "Time Windows for Coordinated Conversions" Special Handling option. This will ensure that all batch hot cuts are completed within either an 8:00 AM to 12:00 PM or a 1:00 PM to 5:00 PM time window. Additionally, as conversion activities are completed for each individual service order, the CLEC will be notified to test, port the telephone number, and accept the service as complete. CLECs may also control the time of the cutover by selecting one of the "After Hours Migrations" Special Handling options. After Hours Migrations allow the CLEC to select specific accounts within the Bulk Migration to be converted within a one (1), two (2), five (5), or eight (8) hour window of time outside of the BellSouth normal business hours of operation. Again, as conversion activities are completed for each individual coordinated service order, the CLEC will be notified to test, port the telephone number, and accept the service as complete. BellSouth's batch hot cut process currently will allow a CLEC to request a migration from 6:00 AM to 12:00 Midnight, Monday to Friday, and on Saturday from 8:00 AM to 5:00 PM. An explanation of Bulk Migration Special Handling options may be found within the CLEC Information Package for Unbundled Network Element Platform (UNE-

P) and DSO Wholesale Local Platform Service to UNE-Loop (UNE-L) Bulk Migration at <http://www.interconnection.bellsouth.com>.

30. AT&T further claims that the time window creates a situation in which “[t]he competitive carrier has no idea precisely when the cutover will begin or when it can be expected to end.” AT&T, ¶ 122. This allegation is unreasonable. CLECs have the opportunity to schedule time windows during normal working hours, after hours for critical customers, and in early morning hours to suit their end users’ needs. AT&T should use these scheduling capabilities, which BellSouth offers, to organize AT&T’s own work activities. It is hardly burdensome to expect that a CLEC requesting high volumes of hot cuts would make its technician available for a four-hour window to provision service to a large CLEC customer.
31. Contrary to AT&T’s suggestion, AT&T at Para. 123, BellSouth’s batch hot cut process may be used to perform so-called “out of hours” cutovers. BellSouth requires only that if such “out of hours” cutovers result in BellSouth paying its personnel overtime, evening, or night differential payments, BellSouth will pass such costs on to the requesting CLEC.

**Batch hot cut intervals**

32. MCI (Comments at ¶43) states “BellSouth’s proposed interval for batch hot cuts is 15 business days, and its interval for individual hot cuts is 5 days.” BellSouth’s existing interval for batch hot cuts continues to decrease based on enhancement implementations. Currently, BellSouth’s interval is 15 days for batch hot cuts; however, this interval will decrease to eight (8) business days upon the implementation of the Scheduling Tool that will be made available to the CLECs

on October 29, 2004. This interval is appropriate for a batch cutover, particularly when the end users are already UNE-P customers of the CLEC.

**Sequencing of cutovers**

33. AT&T complains in ¶ 136 that “BellSouth denies competitive carriers the right to specify the sequence of the batch cut.” Business customers with several lines often have established features that require all lines to be working together. The batch hot cut process is used to move large volumes of lines to unbundled loops quickly and efficiently. Individual accounts with special dialing patterns as described by AT&T may best be served by utilizing of the Project Management option rather than the batch hot cut process. Sequencing, like AT&T’s demand for time-specific batch hot cuts, would add unnecessary costs and decrease efficiencies gained by batching the orders and would not result in any material improvement to the process or improvement to customer service.

**All relevant loop types are included in BellSouth’s batch hot cut process**

34. AT&T argues that a batch hot cut process should include all migrations of loops from one carrier’s switch to another carrier’s switch. AT&T at ¶ 53. BellSouth’s process includes a variety of migrations from one carrier’s switch to another. BellSouth’s batch hot cut process can accommodate conversions of a CLEC’s UNE-P arrangements to unbundled loop arrangements; and conversions of one CLEC’s UNE-P arrangements to a second CLEC’s unbundled loop arrangements. Having said that, the batch process does not include all loop types for the simple reason that there are loop types that are not used in the mass market. For example, it is extremely unlikely that a given CLEC would have a quantity of

mass-market customers requiring High bit-rate Digital Subscriber Line (“HDSL”) capable loops in a single central office so as to make the use of the batch hot cut process efficacious. BellSouth’s process does include all of the loop types a CLEC will use to serve its mass-market customers.

**Timely CLEC notifications**

35. AT&T argues that the ILECs should “provide the competitive carrier with real-time notifications.” AT&T at ¶ 139. BellSouth’s process provides timely notifications for both coordinated and non-coordinated cutovers.
36. Batch coordinated conversion notifications are made real time by a telephone call to the CLEC at the conclusion of the conversion. Non-coordinated conversion notifications are received by CLECs via one (1) of three (3) methods; fax, e-mail, or web notification tool. Non-coordinated notifications are initiated at the completion of the technician’s work activity document. BellSouth’s notification methods in its batch hot cut process meet the CLECs’ needs. BellSouth’s systems allow CLECs to “monitor, track, and verify their batch hot cut orders” and allow CLECs to “take corrective action promptly in response to problems that arise during the process.” AT&T at ¶ 151.
37. For example, if a CLEC orders a non-coordinated individual or batch hot cut, information is available electronically to the CLEC via the CLEC Service Order Tracking System (“CSOTS”) for order status, including PD, pending facility (“PF”), missed appointments (“MA”), etc. Additionally, the BellSouth’s electronic Notification Tool provides status and go-ahead information and electronic Jeopardy Notifications are sent for PF delays as well as MAs.

BellSouth also sends a Firm Order Confirmation (“FOC”) for each PON/EATN included in the batch which provides standard FOC information including the due date, associated circuit identification, etc. Further, BellSouth offers the use of the Circuit Provisioning Status System (“CPSS”) that allows remarks to be transmitted between BellSouth and the CLEC for designed loops. BellSouth makes the tools available for the CLEC to check for IDLC and DSL capability through loop make up requests or reservation of compatible facilities. Additionally, for coordinated conversions, a Customer Wholesale Interconnection Network Services (“CWINS”) technician communicates directly via a phone call to keep the CLEC updated on status, cut complete information and is a single point of contact in the rare event of a post cut problem. Once BellSouth has provided the underlying information, it is the CLEC’s responsibility to use that information to maintain its own operating records in whatever manner it sees as most appropriate.

38. BellSouth’s notification tool, while not identical to Verizon’s WPTS system as cited by AT&T, performs the notification functions that the CLECs need. See AT&T at ¶¶ 158-159. BellSouth uses the web based Notification Tool to provide go-ahead notifications to allow CLECs to port after a non-coordinated hot cut is completed. This tool provides a status as to whether the order is still pending conversion or the conversion work has been completed and a ‘go-ahead’ message has been sent. The ‘go-ahead’ message is displayed immediately after the technician has made the physical cut and closed out his work. This message advises the CLEC that the cut is complete and ready to port.

39. For coordinated services, notification is provided via a live BellSouth representative in the CWINS center. The CWINS tester is involved directly with the CLEC to advise of the hot cut's completion. Also, when the CWINS tester is involved in the coordination, the technician will notify the CLEC of dial tone or Automatic Number Announcement Capability ("ANAC") results as well as any known dial tone jeopardy situation.

**BellSouth's process includes a "throw-back" process**

40. BellSouth's restoral process is effective. The process affords the CLEC the opportunity to test and either accept or turn-back the unbundled loop. If CLECs order non-coordinated conversions, notification of completed cutover activity is provided by either fax, e-mail, or the web-based notification tool. CLECs can request a "throw-back" to BellSouth's switch within 24 hours of the hot cut due date. Upon receipt of such notification, BellSouth will assist the CLEC in restoring its end user's service. The time frame for the restoral varies depending on the following circumstances: Pre-order completion/pre-port restorals may be completed within minutes of the notification. Post-order completion/post number port (i.e., after the CLEC has accepted the loop and ported the number) will require additional time due to the fact that the customer already has been transferred to the CLEC. In such a case, service orders must be created and number porting work steps must be performed to port the telephone number back to the BellSouth switch. These work steps will require timely Local Service Request ("LSR") submissions by the CLEC to expedite the restoral process.
41. AT&T's proposal that the ILEC restore the end user's service within one hour

after being notified by the CLEC that a hot cut has failed, AT&T at ¶ 146, is unworkable in those circumstances in which the CLEC has accepted the loop. As described above, once the CLEC accepts the loop, it must submit a new LSR to move service back to the ILEC. While this process can be handled expeditiously, it cannot be handled in an hour. For expeditious (within minutes) throwbacks, it is incumbent on the CLEC to test the loop before the CLEC accepts the loop and ports the number. Moreover, in some cases, the responsibility for much of the work to accomplish a throw-back (including submission of a service order and performance of local number portability (“LNP”) work steps) lies with the CLEC.

42. AT&T further demands that the ILEC be required to “provide the competitive carrier with electronic notification of the cause of the failure, the means by which the ILEC will remedy the failure, and the estimated time when the customer can be migrated to an unbundled loop,” AT&T at ¶ 146. AT&T’s demand highlights its skewed view of the wholesale process – it is entirely possible and, in fact, highly likely given BellSouth’s excellent performance data, that errors in the cutover will be the CLEC’s fault. Thus, the CLEC needs to troubleshoot; the CLEC needs to fix the problem; and the CLEC needs to reschedule the cutover. While AT&T apparently wants to ignore it, the fact is that being a local service provider requires work on the CLEC side of the network and accountability for one’s actions.

#### **Automated frame technology and other issues**

43. MCI (Comments at ¶¶ 26-28) discusses automated frame technology and suggests that it could become a viable alternative to the manual hot cut processes presently

used by the ILECs and would permit the functionality for remote unbundling of loops served by IDLC. While it is true that some vendors are selling automated cross-connect devices that employ a physical, electrical connection, there are two (2) issues that strongly counsel against the Commission considering this option - scale and cost.

44. First, let us explain the scale issue. Consider a hypothetical situation involving a small central office with only one thousand lines. If we could assume that practically all of the loops would connect directly to the switch ports, then such an automated cross-connect may be economically feasible. In such an instance, the cross-connect device could be built with a thousand loop-side connections, a thousand switch-side connections, and could be built to be capable of cross-connecting any loop to any switch port. In fact, there are devices on the market today that have this capability, and BellSouth is looking at deploying such products in some of its very small central offices.
45. When it becomes necessary to connect a loop to something other than a switch port, such as a Digital Subscriber Line Access Multiplexer (“DSLAM”) or other miscellaneous equipment, however, the ‘switching matrix’ becomes much more complex. In larger central offices, the size and complexity of the ‘switching matrix’ makes such products financially impractical. BellSouth is not aware of any implementation offering more than 16,000 terminations, combined loop-side and switch-side. Thus, the maximum such devices can accommodate would be 8,000 loop/port combinations. Another constraint, of course, would be the requirement to accommodate a number of interfaces to CLECs such that

unbundled loops could be handed off. Given that each carrier would need some capacity above and beyond that currently used; the capacity would be considerably less than the 8,000 loops as suggested above. In summary, the technology is not capable of operating at the scale needed to address the need.

46. The second issue is cost. The cost of installing these automated frames is an issue, with respect to both the amount of cost and who (the ILEC or the CLEC) would bear those costs. It is BellSouth's position that if the use of automated frames were mandated, the CLECs themselves are the "cost causers" and should bear the expense.
47. MCI, in its Comments at ¶49, addresses broadband demands and implies that a hot cut is likely to be required if a subscriber who has DSL services on their existing loop wants to change its entire service package or just its voice services to another carrier. BellSouth's batch hot cut process does not accommodate MCI's suggestion for two reasons. First, BellSouth designed the batch hot process to facilitate mass market conversions required for voice services, particularly UNE-P to UNE-L conversions. Adding CLEC-provided DSL service to a loop that also carries CLEC voice service breaks apart the combined UNE-P, and recombines the UNE-P elements with additional cross connects, and a splitter in order to facilitate the CLEC provided DSL service. Second, although growth of broadband service has been significant, the existence of significant intermodal competitive alternatives has kept the line penetration of DSL services below 9% overall. Additionally, BellSouth currently has only 3,300 line splitting lines region wide, which is an extremely small fraction of all CLECs' UNE-P lines. Even

in those areas where state Commissions have ordered BellSouth to place its DSL service over the UNE voice services provided by CLECs, over 75% of the CLECs in those areas have not adopted the necessary interconnection agreement language allowing BellSouth to place its DSL service on the CLECs' UNE facilities. This relatively low adoption of line splitting, the limited number of CLECs allowing BellSouth to offer its DSL to their end users, and the existence of significant intermodal competition, has kept the number of customers with DSL well below the threshold required for inclusion in BellSouth's hot cut process.

48. Additionally, MCI raises the concern that when its customers utilize the DSL service of another CLEC (line splitting), that subsequent voice migrations between CLECs cause significant down time for the DSL service. This issue, while it may be the case, is entirely outside BellSouth's control. Specifically, the amount of downtime for CLEC provided DSL services associated with conversions of CLEC provided voice services needs to be coordinated between the CLEC(s) providing the voice service, and the CLEC(s) providing the DSL service. BellSouth is not a necessary party in these discussions, as the service providers already have all of the required tools necessary to facilitate both the DSL and voice service, and they can minimize any service disruption by coordinating cuts between themselves.
49. MCI, in its Comments at ¶50, further seeks to embroil the ILECs in a CLEC-to-CLEC relationship by stating that "CLECs have pursued an approach in which the customer's loop would be transferred to the data CLEC's cage by bringing a loop back to the ILEC's MDF and cross-connecting the loop to the data CLEC's

collocation arrangement.” In the situation where two (2) CLECs have partnered to provide voice and DSL services to end-users, BellSouth no longer maintains any relationship with the end-user, and is not obligated to facilitate the connection and relationship between the two (2) CLECs. Because the two (2) services (voice and DSL) are sharing a common network facility (that is, the unbundled loop), the CLECs need to determine which service provider will terminate the BellSouth provided UNE loop, and perform the signal splitting function required to send either the voice signal or the data signal to the second CLEC. This is not a BellSouth function. There are alternatives available to the involved CLECs and the CLECs must use them. The fact that utilizing a data CLEC’s splitter with cage-to-cage cabling might not be as efficient as requiring BellSouth to develop and introduce a new cross connect product (which, importantly is not available today) does not mean BellSouth is obligated to be the mediator between a CLEC-to-CLEC relationship.

50. MCI, in its Comments at ¶70, discusses the establishment of separate GR-303 interface groups at the IDLC remote terminal for accessing individual lines at the DS0 or DS1 level. There are, however, technical problems with setting up remote GR303 interface groups out of a NGDLC system as MCI proposes as will be explained below. The NGDLC systems only can support a finite quantity of interface groups (between one (1) and four (4) for the NGDLC systems BellSouth deploys in its network). MCI omits the fact, however, that if such an arrangement were worked out technically, the CLECs would be responsible for ordering and paying for the interface group transport. This would be an expensive endeavor.

Each NGDLC system would need to be set up for a remote interface group for any CLEC that required one. Also, each NGDLC system can only support a finite number of DS1 transport trunks back to the central office. It might occur that, due to CLECs' combined use of available interface groups, the BellSouth NGDLC transport would exhaust prematurely and require placement of additional NGDLC systems and multiplexers with associated DS1 facilities.

51. MCI further states that while it has concerns about the presence of IDLC in the network, a method that uses a side-door port on the ILEC's digital switch for purposes of accessing individual DS0s for migration to the CLEC's switch would be a way to ameliorate this perceived problem. (MCI Comments, at ¶¶71&73). BellSouth provides such an alternative as described in the initial Affidavit of W. Keith Milner. When IDLC terminates at a switch peripheral that is capable of serving "side-door/hairpin" capabilities, BellSouth will utilize this switch functionality. The loop will remain terminated directly into the switch while the "side-door/hairpin" capabilities allow the loop to be provided individually to the requesting CLEC. Additionally, if a given IDLC system is not served by a switch peripheral that is capable of side-door/hairpin functionality, BellSouth will move the IDLC system to switch peripheral equipment that is side-door capable.
52. MCI (Comments at ¶¶74-75) cites the Alaska Communications System and its willingness and ability to provide multi-hosting arrangements to its CLEC interconnectors where GR-303 capable systems have been deployed. The implication being that ILECs have until recently "spent considerable time and effort discounting many methods by which Telcordia and numerous equipment

manufacturers have described unbundling IDLC.” The fact of the matter is that BellSouth has over 100,000 integrated systems within its region. Modifying that many discrete systems as MCI suggests be done would be an enormous, expensive undertaking. Tellingly, nowhere does MCI offer to shoulder the costs it suggests.

53. Supra claims on Page 4 of its Comments that not all of BellSouth’s residential customers can be reached via UNE-L as BellSouth does not have enough facilities to convert the loops to UDLC or copper facilities, which would allow Supra to serve its customers via UNE-L. BellSouth does not agree that any of its loops cannot be made available on an unbundled basis. Supra’s apparently believes it need not pay the special construction charges that, in rare instances, may be required to provide loops on an unbundled basis. Rarely, a given loop may be unbundled only by the exercise of Alternative 7 or 8 as described in the Affidavit of W. Keith Milner in this proceeding. In such a scenario, which BellSouth anticipates occurring very infrequently, BellSouth will provide the CLEC two (2) choices – the CLEC may pay special construction charges to build the necessary facilities, or BellSouth will provide the CLEC a Unbundled Network Element Platform (“UNE-P”) at the Total Element Long Run Incremental Cost (“TELRIC”) rate. BellSouth only will make the second of these options available in those areas in which it receives relief from unbundled switching. This should eliminate Supra’s concerns in this regard.

**BellSouth’s Batch Hot Cut Process Works.**

54. The Commission should not give credence to any CLEC suggestion that

BellSouth's process is ineffective. AT&T, for example, relies on the same six-year old data it relied on in the initial TRO case and in the state cases to support its generalization that AT&T's experience "illustrates the deficiencies of the processes that the ILECs use to provision individual hot cuts." AT&T, ¶ 38. Incredibly, AT&T asks the Commission to rely on six-year old data and ignore the thousands of data points produced by ILEC performance measures over the last four years.<sup>1</sup> If the stakes were not so high, AT&T's position would be laughable.

55. Not only is AT&T's alleged "evidence" ridiculously old, it is woefully inadequate --- rather than producing data, AT&T simply alleges "significant provisioning delays" and "widespread dissatisfaction." These unsubstantiated statements are not facts and cannot be treated as such by the Commission.
56. As described in our initial affidavit, BellSouth's data flatly contradicts AT&T's outdated and unsubstantiated allegations. First, during the period of November 2002 through October 2003 there were a total of 1,017 customer coordinated conversions for AT&T with BellSouth meeting 1,008 (99.12%) of them within the 15 minute benchmark. Also, 85% (869) of these conversions were completed within five (5) minutes. Next, during this same 12-month period there were only a total of five (5) trouble reports in the first seven (7) days after completion for all AT&T hot cut conversions (coordinated and non-coordinated). This amounted to 99.55% of all hot cuts (100% - (5 troubles / 1,105 conversions = 0.45%)) being trouble free in the first seven (7) days following their cutover. And finally, there were only two (2) occurrences requiring recovery during this period, one (1) in

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<sup>1</sup> Note that this is an apples-to-apples comparison – AT&T cites to individual hot cut performance and BellSouth produces individual hot cut performance data in PMAP.

March for one (1) minute and one (1) in April for 157 minutes. All other hot cuts were completed without any outages during this 12-month period.

57. Examining the same three measures for the period of November 2003 through July 2004 for AT&T orders, BellSouth met 100% of all 248 customer coordinated conversions with the 15-minute benchmark and there were no reported troubles within the first seven (7) days after cutover for all of the AT&T 244 total conversions or any outages during AT&T hot cuts for this period.
58. AT&T cites, at AT&T ¶ 26, back to the FCC's conclusions in the TRO about the hot cut processes of the ILECs. These TRO conclusions, however, were not based on facts. Discovery and cross-examination in the state proceedings confirmed that the so-called "evidence" upon which the FCC relied to draw these conclusions was misleading. For example, in TRO ¶ 465, cited by AT&T, the FCC relied on AT&T Comments at 212, 214-17, and WorldCom comments at 86-87 to conclude that "hot cuts frequently lead to provisioning delays and service outages." In the BellSouth state proceedings, however, AT&T could not produce one shred of evidence underlying its allegations about poor hot cut performance in its Brenner Declaration (see TRO, fn 1418), and (as described in our initial affidavit) MCI's witness admitted that MCI's so-called evidence of poor hot cut performance in BellSouth's region was "speculative."
59. Supra states that "as a direct result of ... BellSouth's exorbitant and cost-prohibitive non-recurring charges for hot cuts compounded by BellSouth's poor operational performance in executing hot cuts, Supra has only cut over a fraction of its customers." Supra's allegations, like AT&T's, are not based on facts. To

the contrary of this statement, first, BellSouth has performed thousands of migrations from UNE-P to UNE-L for Supra. Second, even though BellSouth attempted to work with Supra, Supra submitted migration orders with no apparent planning or attempt to balance the volumes. For example, even though Supra had advised BellSouth of its intent to convert 150 loops per day in single specified central offices, Supra never submitted orders as the plan provided. Supra submitted zero conversion requests on some days and over 350 requested migrations on their highest day for a single office in March 2004. BellSouth continued to work the orders, with virtually no planning or advance notification, as received through individual requests, and still maintained an average of over 98% due dates completed on time for the migration period of October 2003 through March 2004 when Supra, for no apparent reason, stopped sending orders.

### **Third Party Testing**

60. AT&T claims that “suitable testing” should be required for a batch hot cut process. BellSouth had done such third-party testing. Twice. BellSouth’s individual hot cut process was independently examined as part of BellSouth’s Section 271 proceedings. BellSouth’s batch hot cut process was independently examined as part of the state TRO proceedings.
61. To verify the quality of its process, BellSouth engaged an independent third-party auditor (Price-waterhouse-Coopers or “PwC”) to conduct a thorough and extensive test of BellSouth’s batch hot cut process. The PwC evaluation specifically tested “whether the processes work as described in the ILEC’s oral and written representations.” AT&T, ¶ 87. It is incumbent on the trier of fact, in

- this case the Commission, to determine “whether the processes are seamless, efficient, and cost-effective” – that is not the job of an auditor. AT&T, ¶ 87. PwC’s audit demonstrates that BellSouth’s process is both seamless and effective.
62. Continuing its pattern of unsubstantiated criticisms, AT&T alleges, in AT&T, ¶ 99, that PwC only is an “arguably independent third party.” This statement, made without any supporting evidence, is patently ridiculous. On its website ([www.pwc.com](http://www.pwc.com)), PwC states it provides industry focused services to 82% of the Fortune Global 500 and, in fact, has performed audit work for AT&T. Deposition of Paul Gaynor, at 15 (“I’ve given attestations for AT&T”). Furthermore, PwC testified under oath that “our [PwC] view is, we need to be objective and independent.” Gaynor Dep., at 22.
63. The height of AT&T’s hypocrisy is embodied in its claim that “PwC’s evaluation is of no value because the batch cut process that it evaluated is not the same process that BellSouth offers today.” AT&T, ¶ 106. BellSouth audited the batch hot cut process that existed as of December 2003. During the course of the state proceedings, the CLECs, including AT&T, raised certain criticisms about BellSouth’s process. To alleviate those criticisms, and make them non-issues for the state commissions, BellSouth agreed to make the vast majority of the changes the CLECs advocated. The process that PwC audited, however, met all of the criteria the FCC set forth in the TRO. The enhancements were simply additions to the already sufficient batch hot cut process and thus do not need to be tested. See Exhibit BLS-15 attached to this Affidavit to see the material AT&T used in those hot cut workshops and the changes AT&T proposed. What AT&T is really

saying here is that BellSouth did what AT&T wanted and now AT&T is criticizing BellSouth for doing so. The facts are this: PwC found BellSouth's batch hot cut process to be efficient, non-discriminatory and capable of handle large volumes of hot cuts. Based on CLECs' requests (led by AT&T), BellSouth further improved upon a process that was already sufficient to meet the Commission's criteria. AT&T criticizes the PwC test (AT&T, ¶ 107) because all it did was confirm "that BellSouth is able to migrate large volumes of lines even using an unacceptable process." AT&T's position that some sort of qualitative testing is necessary directly contradicts Mr. Van de Water's testimony in Florida when he advocated operational testing of the process to make sure it worked. Van De Water Dep., at 36 ("something that tested the process enough so the CLECs are comfortable that they can move customers when they choose...."). Moreover, AT&T loses sight of the fact that it is the FCC's job to determine whether the process is acceptable – part of that assessment is an evaluation of evidence that the process works. It is the independent third party auditor that provides the evidence that the process works. See Gaynor Dep., at 32 (PwC reviewed whether BellSouth "followed its Bulk Migration Process and also tested the capacity to perform up to a certain number.")

64. AT&T attempts to discredit the results of the PwC test based on the deviations PwC noted during the test. (Para. 108-109). An examination of the facts in PwC's findings is more than sufficient to refute AT&T's suggestion. In summary, PwC observed a total of 724 bulk hot cuts during the four days of batch hot cut testing. The following paragraphs provide an explanation of the deviations found in

testing BellSouth's first assertion and demonstrate that the deviations had no meaningful impact on the customer:

65. First Assertion, Deviation 1—this deviation resulted when the BellSouth technician could not verify the BellSouth dial tone prior to the cut for three (3) of the 724 batch hot cuts. 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) hot cuts demonstrate that BellSouth does have the procedures and ability to resolve issues, and complete successful migrations.
66. First Assertion, Deviation 2—this deviation resulted after PwC observed three (3) of the 724 batch hot cuts that took longer than 15 minutes. There was one (1) hot cut that took 20 minutes while two (2) other hot cuts took approximately 40 minutes. In these cases, the BellSouth field technician encountered and resolved an issue involving an electronic cross-connect in a remote terminal. This situation extended the hot cut's completion time by a few minutes.
67. First Assertion, Deviation 3—there were two (2) of the 724 batch hot cuts where BellSouth technicians failed to successfully complete hot cuts. In the first case, BellSouth performed the migration prior to the due date so the end user customer would have been able to make calls, but not receive calls. The second case

resulted from the migration not being performed on the due date. In this case, the end user customer could have potentially lost service. BellSouth has a thorough process that provides for contingencies to ensure that the risk of interruption of service to the customer is minimized, but occasionally failures do occur as demonstrated in the test.

68. First Assertion, Deviation 4—this deviation resulted when BellSouth field technicians were completing IDLC conversions in a field remote terminal. The technician was unable to verify BellSouth dial tone for 19 lines. This was an artifact of the test resulting from the two (2) TNs being needed for all IDLC served UNE-Ps. In live customer conversions, only one (1) TN is involved, thus this situation would not have occurred. This deviation did not have any negative impact to the migration; the 19 hot cuts were still successfully completed within the allotted 15 minute time period.
69. First Assertion, Deviation 5—this deviation resulted when the central office technician did not completely follow the process for one (1) of the 724 batch hot cuts. In this case, the technician found that the BellSouth jumper wire had the wrong telephone number (“TN”) assigned, but the CLEC jumper wire had the correct TN assigned. The technician should have contacted BellSouth’s CWINS center that would have contacted the CLEC to confirm the TN and to get the CLEC’s permission to proceed with the cut. These contacts did not occur. In the end, however, the hot cut was successfully made with the correct TN, but the deviation was noted due to a process step miss.
70. First Assertion, Deviation 6—this deviation resulted when PwC observed a total

of six (6) instances in which BellSouth technicians missed a hot cut process step. More specifically, on Day 2 of the test, PwC observed that the BellSouth technician neglected to test the CLEC dial tone prior to performing the hot cut for six (6) TNs. These were certainly process step omissions; however, the process contains several safeguards to ensure that the hot cuts are successfully executed. That was the case on these six (6) observations; these inadvertent step omissions did not negatively impact the ultimate success of all six (6) of the conversions.

71. First Assertion, Deviation 7—this deviation resulted when a minor system issue was identified during the test while submitting bulk LSRs. The issue is not considered material since no CLEC has actually bulk ordered the associated products. The third party test included an evaluation of the electronic LSR submission process. Using this process, the pseudo- CLEC successfully submitted LSRs resulting in BellSouth's ordering systems generating 724 batch hot cuts. There are two (2) circumstances under which a bulk LSR can not be submitted into BellSouth's ordering systems. The first circumstance involves a batch hot cut to a UNE-L service known as a non-designed 2-Wire Unbundled Copper Loop or UCL-ND. The second circumstance involves the batch hot cut of Remote Call Forwarding UNE-P services. BellSouth can in fact perform migrations for both of these service types via its individual hot cut process, however the Universal Service Order Codes (USOCs) associated with these products could not be submitted on batch hot cut LSRs. If a CLEC needed to order the migration of either of these products, it would simply submit single LSRs. It should be emphasized that these two products constitute less than 2% of the service types

within BellSouth's embedded base of services. Therefore, this particular issue would have minimal impact on CLEC customers and is not material to BellSouth's overall ability to successfully perform batch hot cuts of service types commonly used by CLECs to serve mass market end users. It is important to put the magnitude of this system issue into context particularly since no CLECs have attempted to batch hot cut these two service types. Nonetheless, BellSouth has resolved the source of these two (2) deviations.

72. First Assertion, Deviation 8—this deviation resulted due to problems observed on the first day of testing related to BellSouth's Enhanced Delivery Initiative ("ENDI") system. For non-coordinated hot cuts, this system sends an electronic notification (commonly called a "go ahead") to inform the CLEC that BellSouth has completed the hot cut. This notification is the signal for the CLEC to begin its number porting process with the Number Porting Administration Center ("NPAC"). During the first day of testing, ENDI experienced an issue with a corrupted downstream server. There were two (2) servers that should have been submitting the notices to the pseudo CLEC. The corrupted server was not sending messages, thus the failure occurred and the deviation was noted. BellSouth corrected the server problem on December 3, 2003. As is evidenced by PwC's observations, the system was fixed and no failures were observed on the second and third days of testing. There was one (1) notice for a two-line service order that was not submitted on day four of testing. This failure resulted from an issue of completing the work order step in ENDI which prevented the notice from being submitted. The problem was identified and corrected as evidenced by the test

results on the second, third and fourth days of testing. When considering only the first day of testing, BellSouth failed to return 47 of the 124 batch hot cut notifications. However, once the server problem was corrected, BellSouth successfully submitted 119 notices on the second day, 108 notices on the third day and 371 notices on the fourth day of testing. In other words, BellSouth's performance was 99.7% after the issue was resolved from the first day of testing.

73. After considering the lack of materiality of the deviations noted by PwC in their report, it is clear that BellSouth's first assertion was validated. In fact, PwC ultimately found that this test validated the sufficiency of BellSouth's Bulk Migration Process and the results provide quantifiable proof that BellSouth's process is effective in allowing CLECs to migrate large numbers of their customers from UNE-P to a variety of UNE-L services.

74. AT&T also tries to discredit BellSouth's PwC test by claiming that "it is unclear ... when and over what period of time the pre-wiring (the most time intensive part of the hot cut) was completed." AT&T, ¶ 108. PwC addressed that question in its deposition, however, and confirmed that "[PwC] concluded that by testing the dial tone subsequent to the cutover, that in effect you would be testing where the...rewiring was completed." Gaynor Dep., at pp. 71-72. Thus, the AT&T issue is a red herring. AT&T also finds fault with the PwC test because it did not provide "information regarding how the non-hot cut central office work was handled." AT&T, ¶ 108. Again, PwC addressed this issue in its deposition by responding, when asked whether it appeared that there was other framework activity going on besides just the testing, that "it appeared that there was."

- Gaynor Dep., at 65. Finally, AT&T challenges the test because the majority of the cuts were non-coordinated – this percentage, however, was established based on BellSouth’s educated estimation of the type of hot cuts that BellSouth will perform should it obtain switching relief.
75. In the AT&T Declaration, at ¶ 111, AT&T sets forth a series of requirements it contends are necessary in a test of the batch hot cut process. Not surprisingly, these criteria are very similar to the criteria that AT&T alleged were necessary in the third party test of BellSouth’s Operations Support Systems (“OSS”) conducted during the Section 271 proceedings (for example, AT&T asserts “the test administrator must solicit input from the competitive carriers and the State commissions for the test plan”). AT&T’s contentions in this proceeding, however, are contrary to AT&T Witness Van de Water’s position in the state TRO proceedings during which he specifically testified that while he advocated commission-supervised testing, “nothing to the extent I understand that there was in Florida some years ago with OSS ...” *Van de Water Dep.*, at 36. Finally, AT&T advocates the adoption of the Michigan test plan. To do so is neither appropriate nor necessary as the following paragraphs will make clear.
76. AT&T attached the Michigan Public Service Commission's Proposed “Joint Test Plan” to AT&T’s Declaration as Attachment 6. The Joint Test Plan document itself runs for 16 single-spaced pages. This Affidavit will not respond to each and every detail of that Plan. Instead, we will address the major components of the Michigan Plan and show that PwC’s audit of BellSouth’s batch hot cut process contains those same attributes. Consequently, the Commission may be assured

that PwC's audit is entire sufficient and even meets the suggested goals of the Michigan Plan.

77. On Page 1 of the Test Plan, the Michigan Commission stated its intent "to make sure the batch cut migration processes *will work as anticipated* in a real environment." [Emphasis in original.] PwC's audit affirmed that BellSouth performed its batch hot cut process as that process is expected to be performed and is documented in BellSouth's methods and procedures regarding same. Next, the Commission stated its intention to evaluate "whether SBC is capable of migrating multiple lies in a timely manner." PwC confirmed BellSouth's attestations regarding its batch hot cut process and found that BellSouth's process is capable of moving large volumes of loops from BellSouth's switches to CLECs' respective switches.
78. The Joint Test Plan ("JTP") was described as being "based on pseudo testing and commercial deployment using actual customer accounts." Likewise, the third party test of BellSouth's batch hot cut process involved the creation of a pseudo CLEC and the creation of customer accounts to be physically migrated.
79. Page 3 of the JTP states the test "will also involve daily hot cut volumes that are greater than those that the SBC [sic] is experiencing in the current environment." The audit of BellSouth's process on Day Four of the testing included roughly 375 hot cuts occurring in three (3) central offices in Florida. This volume was above the average daily volume actually encountered during the general timeframe in which the audit was performed. As was contemplated in the JTP, BellSouth's audit was accomplished using "working test lines" (that is, customer accounts

established for the audit with dial-tone and call-making capabilities provisioned before the hot cuts were performed.)

80. The only significant departure between the JTP and PwC's audit is the JTP's suggestion that "The test should take place over a sufficient time period (six months to a year)..." BellSouth disagrees that such an extended period is required or that material additional benefit would accrue. Standard statistical methods were employed to determine the overall size of PwC's audit, the makeup of the customer accounts, the loop types tested, etc. Thus, PwC's audit reached meaningful, reliable conclusions without the extraordinary expenses that an audit of "six months to a year" would entail.

**BellSouth's Hot Cut Performance Measures, Existing and Proposed, Are Appropriate.**

81. AT&T, at ¶ 20, states, "the Commission should require both the adoption of performance measurements and standards specific to the batch cut process, and the inclusion of such metrics and standards in the performance assurance mechanisms ('penalty plans') governing their performance."
82. BellSouth already has hot cut measurements in place in all nine (9) states in its region and recently proposed adding additional hot cut measures in these states. Specifically, BellSouth currently captures its performance results relative to hot cuts and Coordinated Customer Conversions ("CCC"), including batch hot cuts, via four (4) measures: (1) "Coordinated Customer Conversion Interval"; (2) "Coordinated Customer Conversions – Hot Cut Timeliness % within Interval and Average Interval"; (3) "Coordinated Customer Conversions – Average Recovery Time"; and (4) "Hot Cut Conversions - % Provisioning Troubles Received within

seven (7) days of Completed Service Order”. These measurements capture four (4) discrete operational aspects of the hot cut process.

83. The first measure, “Coordinated Customer Conversions Interval”, is used to report the time interval from the point at which BellSouth disconnects an unbundled loop from the BellSouth switch until the loop is cross connected to the CLEC collocation space. In most of BellSouth’s states the interval within which BellSouth is expected to complete the cutover of a given loop is 15 minutes and in order to meet the requirements of this metric BellSouth must complete the cutover of 95% of the unbundled loops within this 15 minute standard. The 15-minute standard does not include the time to notify the CLEC. However, BellSouth has proposed to include the notification interval into the measure with an objective to notify the CLEC within five (5) minutes of completion of coordinated hot cuts. The CWINS center monitors each coordinated hot cut and knows when it is completed so that the CLEC can be notified.
84. The second measure, “Coordinated Customer Conversions – Hot Cut Timeliness % Within Interval and Average Interval”, provides an indication of whether or not BellSouth began the cutover in a timely matter. In all BellSouth states, for cutovers that do not involve IDLC, BellSouth must begin the cut within 15 minutes of the scheduled start time. In some states, when IDLC is involved, BellSouth is required to begin the cut within a four-hour window centered on the scheduled start time. The four-hour window on hot cuts involving IDLC, two (2) hours before and two (2) hours after the scheduled time, is necessary because of the additional work activities required to begin this type of hot cut.

85. The third measure, “Coordinated Customer Conversions – Average Recovery Time”, addresses those situations where a service outage due to the cutover is isolated to BellSouth’s side of network, prior to completion of the service order. The time that it takes BellSouth to resolve the service outage after notification by the CLEC is reported via this measure.
86. Finally, the measure, “Hot Cut Conversions - % Provisioning Troubles Received 7 Days of a Completed Service Order”, is designed to assess the quality of the work performed for coordinated cutovers by capturing the number of troubles that occur within seven (7) days of the cutover. This measure is calculated as the percentage of circuits associated with coordinated conversions that incur troubles within seven (7) days of the service order completion. In most BellSouth states, the standard established by the commissions or authorities requires that CLECs should experience troubles on only 5% or less of the circuits involved in the coordinated cutover.
87. In addition to these measures, BellSouth also proposed two (2) additional hot cut measures in each of its states - namely, “UNE Bulk Migration – Response Time” and “Non-Coordinated Customer Conversions - % Completed and Notified on Due Date”.
88. The BellSouth measure entitled “UNE Bulk Migration – Response Time” is a Pre-Ordering measure. This proposed measurement is designed to capture the time that it takes for BellSouth to provide the requesting CLEC with a response to its UNE Bulk Migration Notification Form, which begins prior to the creation of a LSR. The submittal of this form by the CLEC triggers the assignment of a project

manager to this request who handles providing a timely response back to the CLEC. This measure is based on the current manual pre-ordering process for batch hot cut requests. However, BellSouth has developed a mechanized pre-ordering process for batch hot cut requests, which it is in the process of implementing, and will propose an analogous measure for the mechanized process as well.

89. The second new measure that BellSouth proposed in each of its states, “Non-Coordinated Customer Conversions - % Completed and Notified on Due Date”, is designed to display whether BellSouth meets its provisioning obligations for non-coordinated hot cuts. Specifically, this measure would provide results indicating whether BellSouth completes a non-coordinated customer conversion on the due date and provides notification of completion to the CLEC on the same date.
90. Thus, with the new hot cut measures that BellSouth proposes there are a total of six (6) measures dedicated to the hot cut process, including the batch process. Further, four (4) of these six (6) measures (“Coordinated Customer Conversions Interval”, “Coordinated Customer Conversions – Hot Cut Timeliness % Within Interval and Average Interval”, “Hot Cut Conversions - % Provisioning Troubles Received 7 Days of a Completed Service Order”, and “Non-Coordinated Customer Conversions - % Completed and Notified on Due Date”) are included in the Self-Effectuating Enforcement Mechanism (“SEEM”) as both Tier 1 and Tier 2 measurements. The SEEM plan is BellSouth’s enforcement plan, and under this plan Tier 1 measurements require payments directly to CLECs if a metric standard is missed and Tier 2 measurements require payments to the state commission or

its designee for missed performance standards.

91. Beyond these measurements, which are specifically designated as hot cut measurements, BellSouth also proposed in each of its states to modify four (4) of the Ordering measurements to include project managed batch hot cuts that were previously excluded. These measures are: “Percent Rejected Service Requests”, “Reject Interval”, “Firm Order Confirmation Timeliness”, and “Firm Order Confirmation and Reject Response Completeness”.
92. In summary, BellSouth’s current set of measurements plus its proposed changes constitute a comprehensive set with respect to customer conversions/hot cuts in that the data reflect performance on the important aspects of the process for hot cuts. Particularly, BellSouth measures and reports, specifically for hot cuts: whether the cutover started on time; how long it takes to complete the cutover; if service outage problems are encountered after the cutover, but before service order completion, the time it takes to resolve the problem; and after the service order is completed, any problems identified within a short time after the cutover associated with circuits involved in the cutover are tracked.
93. AT&T recommends, AT&T, ¶ 199, the establishment of thirteen measures related to the batch hot cut process. These measures, however, are either already included in BellSouth’s set of measurements or do not capture any meaningful data. For instance, AT&T proposed the measures “Percent of batch hot cuts started on time” and “Percent of batch hot cuts completed on time.” As already discussed, BellSouth currently measures whether a hot cut started on time through its measure “Coordinated Customer Conversions - Hot-Cut Timeliness % Within

- Interval and Average Interval,” which measures whether or not a coordinated hot cut begins within 15 minutes of the requested start time. For non-coordinated hot cuts, the proposed new measure “Non-Coordinated Customer Conversions - % Completed and Notified on Due Date” captures the same type of data.
94. Likewise, it appears that for AT&T’s proposed measure “Percent of batch hot cuts completed on time” this result is already being captured in BellSouth’s measurement set. For coordinated hot cuts, the BellSouth measure “Coordinated Customer Conversion Interval” captures whether the cut was completed on time. And again, for non-coordinated hot cuts, BellSouth has already proposed the measure “Non-Coordinated Customer Conversions - % Completed and Notified on Due Date.”
95. Also, with respect to AT&T’s proposed measure “Average provisioning interval,” these same BellSouth measures “Coordinated Customer Conversion Interval” and “Non-Coordinated Customer Conversions - % Completed and Notified on Due Date” capture the time interval unique to the hot cut process, i.e., the average time it takes BellSouth to disconnect the loop from the BellSouth switch and cross connect it to the CLEC equipment. Moreover, the overall provisioning interval for batch hot cuts is predominately driven by the customer requested due dates due to the customized nature of these orders and are based on mutually agreed upon intervals. Thus, the CLECs requested dates that meet their needs. Measuring this interval would not necessarily indicate anything concerning BellSouth’s performance, but would simply reflect the intervals selected by the CLEC.

96. AT&T's proposed measure "Percent of trouble reports" is in essence BellSouth's measure "Hot Cut Conversions - % Provisioning Troubles Received within 7 days of Completed Service Order." Further, the AT&T proposed measures "Percentage of batch hot cuts completed without a service interruption" and "Average duration of any service interruption" are merely two (2) different ways of measuring the same occurrence. In any event, BellSouth currently reports data regarding service interruptions during a hot cut via its measure "Coordinated Customer Conversions – Average Recovery Time."
97. The purpose of the measure "Percentage of batch hot cuts completed without timely notification to the competitive carrier" proposed by AT&T appears to be a determination of whether the ILEC is providing timely notification to the CLEC that the cutover has been completed. BellSouth's proposed modification to its current measure "Coordinated Customer Conversion Interval" to include the time to notify the CLEC that the hot cut is completed and the addition of the measure "Non-Coordinated Customer Conversions - % Completed and Notified on Due Date" should address this concern. This is because in order to meet the requirements of these measures, BellSouth would have to both complete the hot cut and notify the CLEC within the specified interval.
98. The objectives of the two (2) AT&T proposed measures "Timeliness of rejection notices" and "Timeliness of firm order confirmations ('FOCs')" are also covered under BellSouth's measurement set. As already mentioned, BellSouth proposed to modify the existing measures, "Reject Interval" and "Firm Order Confirmation Timeliness", to include batch hot cut requests in these Ordering measurements.

99. The remaining measurements proposed by AT&T, namely “Flow-through rate for batch cut orders,” “Average offered interval,” “Timeliness of jeopardy notices issued by the ILEC for batch hot cuts that it cannot complete,” and “Percentage of orders where the due date on the FOC was the due date requested by the competitive carrier,” are unnecessary. Because a batch hot cut is simply a process for providing UNEs, the flow through rate is already reflected in the BellSouth measure “Percent Flow-Through Service Requests” under the UNE category, batch hot cuts are simply not shown separately.
100. AT&T’s proposed measure “Average offered interval,” just as discussed with respect to the AT&T measure “Average provisioning interval” would not capture any meaningful data concerning BellSouth’s performance. This is because during the pre-ordering process the CLEC sends its request for completion dates for the batch hot cut. The only restrictions with respect to due dates is that the date is at least eight (8) days out and that the requested date is available. Otherwise, the requested due date would be accommodated.
101. With respect to the measure “Timeliness of jeopardy notices issued by the ILEC for batch hot cuts that it cannot complete” proposed by AT&T, there is very little utility in this measure. In fact, the jeopardy measure in general, not simply as it applies to batch hot cuts, is not a very useful measure. If BellSouth is able to meet the committed due date, notwithstanding the issuance of a jeopardy notice, there is no appreciable harm, if any to the CLEC. If, however, BellSouth is unable to meet the committed due date, the failure to do so would show up in the BellSouth measure “Percent Missed Installation Appointments.”

102. Finally, for the AT&T proposed measure “Percentage of orders where the due date on the FOC was the due date requested by the competitive carrier,” it is unclear what meaningful data AT&T is attempting to capture. If the due date that the CLEC requested is different from the date that is reflected on the FOC, it is either because of a mistake on BellSouth’s part, which would show up in BellSouth’s measure “Service Order Accuracy,” or BellSouth and the CLEC agreed to a different due date because the requested due date was not available. In either case, it is unclear what value would be gained by establishing a measure to capture this information.
103. AT&T contends, AT&T, ¶ 200, that “the Commission should require that the benchmarks for [the hot cut] metrics be the same as those governing the ILEC’s performance in provisioning the UNE platform.” No state commission in BellSouth’s region has adopted this position. In fact, all of the state commissions in BellSouth’s region have recognized the necessity for establishing different intervals for UNE-L and UNE-P. These products are different, which means they have inherent advantages and disadvantages when compared to each other. For example, some forms of UNE-P will have a shorter order completion interval than some forms of UNE-L, such as migration only orders. Other forms of UNE-P, such as those orders requiring the dispatch of a technician, will have longer intervals. Finally, UNE-L provides the CLEC with more direct control of some of the services provided to its customer. Particularly, a CLEC can change custom calling features itself with UNE-L. There are significant parallel processes for ordering and provisioning the UNE-P and UNE-L services, but they are not

analogous with respect to order completion interval. On page 32 of its comments, Supra claims that a consequence of the BellSouth cutover process, unlike UNE-P, is that CLEC customers incur service disruptions. It is a known fact that minor service disruptions will occur during the physical disconnect from BellSouth's switch and the connection to Supra's switch. However, service disruptions are minor as evidenced by BellSouth's hot cut performance of less than three (3) minutes of outage time for coordinated conversions. There is no evidence to support Supra's claim that BellSouth's cutover process causes problematic service disruptions for CLECs or their customers. During a five-month period, Supra converted over 18,000 UNE-P customers to UNE-L. Supra's percentage of troubles reported within 30 days of provisioning was 4.39%. In comparison, BellSouth Retail's trouble report rate within 30 days of provisioning for the same period was 7.0%.

104. Because it cannot point to any actual flaws in BellSouth's batch hot cut process, AT&T resorts to attacking, yet again, BellSouth's flow-through rates. AT&T, ¶¶ 166-172. These arguments should look familiar to the Commission in that AT&T made them in every BellSouth Section 271 state case, in every BellSouth Section 271 FCC case, and in the state hot cut cases. Each time, AT&T fails to acknowledge that BellSouth's flow-through rates are (1) Section 271-compliant; (2) reported to state commissions every single month; and (3) provide CLECs a meaningful opportunity to compete. BellSouth's flow-through performance is discussed at length in the accompanying affidavit of Ron Pate.

### **BellSouth's Batch Hot Cut Rate Is Economic**

105. AT&T complains, AT&T, ¶¶ 174-175, that it will incur costs over and above the Non-Recurring Charge ("NRC") for the hot cut, to provision a loop for an end-user. The fact that AT&T incurs costs to provide local service, however, does not justify its proposal that the ILECs should reduce the hot cut NRCs and thereby not recover their costs. AT&T's proposal puts AT&T's skewed view of the world in its most stark light --- AT&T, plain and simple, wants the ILECs to subsidize AT&T's entry into the local business. In AT&T's view, the ILECs should waive cost recovery to offset the costs AT&T incurs being a telephone company. The fallacy in this view should go without saying.
106. AT&T cites to the alleged "conclusion" in the TRO that "these costs contribute to a significant barrier to entry." AT&T, ¶ 176; TRO, ¶ 422. Of course, the Commission did not review any cost studies underlying those rates, nor did it conduct an independent analysis of the appropriate rate. Without such evidence or analysis, the Commission cannot conclude, with any factual foundation, that the rates are too high. Moreover, the rates were set by the state commissions that did conduct thorough and extensive investigations into the cost studies underlying the rates.
107. AT&T, at ¶ 183, claims that BellSouth has proposed no NRCs specific to its batch cut process. To the contrary, BellSouth offers a 10% discount off the applicable NRCs to CLECs who utilize BellSouth's batch hot cut process. The CLECs merely need to contact their Interconnection Agreement negotiator at BellSouth to have these terms added to their Interconnection Agreement.

108. There is no reason to establish new batch “hot cut” rates because the rates for the underlying hot cut have already been established by the public service commissions in generic cost proceedings. To account for the efficiencies that are realized if a batch hot cut process is utilized versus ordering on an individual loop basis, BellSouth discounts the rates by 10%.
109. Rather than attack the NRCs on the basis of underlying costs, which AT&T knows would be fruitless because the costs exist, AT&T challenges the rates because they are higher than UNE-P rates. AT&T, ¶ 184. This is a red herring. Provisioning a UNE-P does not require physical work – provisioning a UNE-L does. The cost difference is as simple as that. The rates BellSouth charges for individual hot cuts were established by the state commissions in generic UNE cost proceedings in accordance with FCC established TELRIC methodology. AT&T and other parties participated in these state proceedings and were afforded due process to challenge the approved rates. AT&T’s contention that the “vast difference between these rates and the lower rates to migrate customers to the UNE platform only illustrate the inefficiencies in BellSouth’s processes” is unsupported by the facts. As the state commissions recognized, the physical activities, and thus the costs, associated with provisioning a UNE-L to a CLEC’s collocation space differ significantly from the activities to effectuate billing record changes for conversions to UNE-P. These differences were already considered when each state commission established and approved BellSouth’s rates.
110. AT&T claims that because the hot cut rates are different across the country, that reflects a “failure of ILECs and State Commissions” to set rates that are TELRIC-

compliant. AT&T, ¶ 189. The Commission has explicitly rejected the argument that differences in rates automatically results in rates that are not TELRIC-compliant. In its order in response to BellSouth's Georgia/Louisiana Section 271 application, this Commission found: "The Act contemplates the states independently setting rates based on federally established guidelines. It is important to recognize both that costs may vary between states and that state commissions may reach different reasonable decisions on matters in dispute while correctly applying TELRIC principles." (¶ 24).

111. On April 5, 2004, Supra filed a petition for arbitration with the Florida Public Service Commission ("FPSC") concerning the commission-approved hot cut rates. The FPSC opened Docket No. 040301-TP to address Supra's complaint. One of the positions advocated by Supra in this docket is that the FPSC establish new bifurcated hot cuts rates, recognizing different rates for hot cuts requiring outside plant dispatch and for hot cuts that do not require such a dispatch ("non-dispatch"). BellSouth does not agree that bifurcating the rates is appropriate. However, in order to respond to Supra's position and to demonstrate that the bifurcated rates would disadvantage both CLECs and end users, BellSouth developed a cost estimate which separated the UNE-L portion of the hot cuts rates into "Non-dispatch currently working served via copper or UDLC" and "Dispatch currently working served via IDLC being converted to copper, UDLC or Next Generation DLC ('NGDLC') where equipment is available". First, the higher dispatch-IDLC rates could eliminate entire geographical areas from the advantages of competition. This is because CLECs may elect to forego

competing for any end user for whom a field dispatch would be required because of the higher NRC the CLEC would otherwise be assessed. Moreover, using the Florida Commission's adjustments to BellSouth's loop cost studies, and only analyzing the nonrecurring UNE-L rates because dispatch and loop technology do not impact the provisioning costs for the service order and the collocation cross connect the current rate for the Service Level 1 ("SL1"), the loop used by CLECs to serve the mass market, is \$49.57 for the first loop and \$22.83 for each additional loop. The bifurcated cost estimates for No Outside Dispatch UNE-P to UNE-L (SL1) served via copper or UDLC are \$19.32 for the first loop and \$ 4.32 for each additional loop, and the cost estimates for 100% Outside Dispatch UNE-P to UNE-L (SL1) served via IDLC are \$99.17 for the first loop and \$51.65 for each additional loop. Even bifurcated, these costs are no where near the \$6.00 Supra purports to want for the entire hot cut process.

112. MCI contends that a "vast disparity [] exists between the ILEC's proposed hot cut process and their existing retail and UNE-P process." (¶25) In an attempt to bolster its claim, MCI produces an "analysis" of the work steps and time involved in different provisioning scenarios: (1) UNE-L hot cut (coordinated), (2) UNE-L hot cut (uncoordinated), (3) Retail to UNE-P migration, (4) Retail to resale migration, and (5) Retail POTS installation (connect through). Because MCI presents its analysis as a "high level comparison," (Starkey/Morrison Exhibit 2 disclaimer) BellSouth will not respond to the validity of the inputs used to derive MCI's "service costs" of \$55.31 for scenario 1; \$41.61 for scenario 2; \$4.20 for both scenario 3 and scenario 4; and \$5.69 for scenario 5. However, it is important

to note that the public service commissions in BellSouth's region have evaluated the extensive evidence presented in the generic cost proceedings with respect to provisioning activities, probabilities, time estimates, and fall-out percentages, made modifications, and established cost-based nonrecurring rates that are, as this Commission found, TELRIC-compliant. MCI's "analysis", which is based upon "general information gleaned by QSI" cannot replace the in-depth review conducted by BellSouth's state commissions and the endorsement obtained from this Commission. As discussed above, provisioning an unbundled loop is entirely different from migrating a retail end-user to either a UNE-P arrangement or to resale and thus, the difference in cost is expected. Furthermore, in these situations, the circuit remains connected to BellSouth's switch, thus, wiring and collocation cross connect activities are not required. Additionally, because BellSouth alone controls the entire process and the service is not interrupted, coordination is not necessary to the extent it is required when a loop is unbundled and the circuit is "cut" for some period of time. Moreover, MCI has conveniently ignored the fact that in the provisioning of retail services, BellSouth (and the other ILECs) must also provide service to locations that are not "connected-through." In this sense, "connected through" means that a fully connected loop extends from the end user's premises to the incumbent's switch even in situations where service is not active over that loop. MCI has not even attempted to evaluate costs associated with this situation, which should cast doubt on MCI's claim to being "disadvantaged". In fact, BellSouth's nonrecurring rate structure associated with unbundled loops reflects an "average" loop. Thus, the loop to be unbundled could

be served via copper, UDLC, or IDLC and could be either a working or nonworking loop. This is the same rate structure BellSouth maintains for its voice grade retail services, i.e., the retail rates reflect provisioning an “average” loop. Finally, the state commissions’ adjustments have reduced BellSouth’s proposed nonrecurring costs by approximately 50%. In other words, BellSouth does not recover 50% of the legitimate costs it incurs in provisioning unbundled loops.

113. Supra, Comments at 14, discusses what it calls “price inelasticity” and its effect on Supra’s marketing efforts. Supra’s assertion is meritless.
114. The foundation of Supra’s claim is that the density of the customer population in wire centers varies. Supra asserts that the density in turn affects its per unit cost since the response rate to its advertising varies by the number of customers “who can see the advertising” (page 13). This argument, however, is irrelevant as the CLEC’s per unit advertising cost and response rate is not appropriate criteria for a determination of UNE impairment. Moreover, advertising media is rarely if ever sold on a wire center basis. Newspaper, radio, and television costs, while a cost of doing business for telecom and non-telecom players alike, generally have a much broader visibility that would approximate an MSA or LATA.
115. In addition to being irrelevant, Supra’s argument is incorrect because, in any price elasticity analysis, two variables must be examined: price and demand. Price elasticity determinations are made by examining the effect of a change in price versus the change in demand. Supra’s demonstration confuses price with its own, non- telecom costs. There is no relationship between provider’s cost and consumer demand. Consumer demand is sensitive to the provider’s price to the

consumer and then only in some circumstances. Further, given that there is apparently no change in UNE costs, Regional Bell Operating Company (“RBOC”) rate, or Supra rate (“While these adjacent wire centers are both in the same rate center and same UNE rate zone, applying a single number threshold to both wire centers may be punitive to the CLEC” [Page 14, emphasis added] then a change in demand would not be a function of price. However, if the demand change is a function of price then it would be price elastic as opposed to inelastic.

116. Supra’s real intentions are best illustrated by two of its comments on the same page; 1) “Competition occurs on a wire center by wire center basis.”, and 2) “The cost of serving a customer as well as the revenue that can be collected from each customer are two key factors that affect a CLEC’s ability to serve each group of customers and can vary significantly by wire center.” Obviously, Supra’s intention is to secure the lowest possible cost to compete for only the areas in which they choose to compete. Their choice of wire center is not customer centric, nor is it competition centric, but rather it is Supra centric and should be ignored.
117. Supra claims the \$6.00 per hot cut rate is reasonable because this reflects an average of the TELRIC rate that four (4) state commissions have determined was just and reasonable. Supra conveniently creates this arbitrary ceiling by averaging the lowest hot cut rates it could find. The state commissions in BellSouth’s region, however, have already established hot cut rates through their own “investigation into the TELRIC costs of the RBOC conducting a hot cut” and it would be arbitrary to throw out existing hot cut rates that were deemed TELRIC-

compliant not only by the specific state commission, but by this Commission as well.

118. On page 36 of its Comments, Supra claims that if UNE-P is not available, resale is not sufficient because it will not allow a CLEC to convert to UNE-L as economically or operationally as converting from UNE-P to UNE-L. Supra also claims that it is easier to cut from UNE-P to UNE-L after “the ILEC has performed a retail to UNE-P hot cut...” because much of the work is already done. Supra’s comments do not make sense. When BellSouth converts a customer from Resale or Retail to UNE-P, none of the work necessary to convert to UNE-L is performed. The customer is still served from BellSouth’s switch and there is no work performed in either BellSouth’s central office or in the field. Converting a line from Resale or Retail to UNE-L requires exactly the same work activity as converting a line from UNE-P to UNE-L. Having previously converted a line from Resale or Retail to UNE-P does not affect the work that still must be accomplished to convert the line from UNE-P to UNE-L. Further, none of the costs associated with this work are recovered when a line is converted from Resale or Retail to UNE-P.

**BellSouth’s Batch Hot Process Is Scalable**

119. On pages 28-29 of its Comments, Supra states that the ILEC processes are unproven because the ILECs have not proven the ability to cutover 1,000 loops per day per CO. BellSouth agrees that no ILEC has cutover 1000 loops per day per CO, but BellSouth has provisioned over 975 orders for Supra on a single day within multiple central offices. Additionally, BellSouth provisioned as many as

360 loops on a single day within a single central office. BellSouth's performance during these cutovers was exemplary.

120. In MCI's Comments at ¶30, MCI claims that since "ILECs have introduced no automation or mechanization into the provisioning aspect of the hot cut process" the ILECs cannot support UNE-L. MCI is incorrect. BellSouth has a proven and efficient hot cut process which can fully support large volumes of hot cuts. BellSouth's hot cut performance has been tested and proven by independent auditors for both its individual and batch hot cut processes. BellSouth's systems and processes are scalable and the capacity of those systems and processes may be readily increased as demand warrants. As was explained and exhibited in TRO testimony, BellSouth has and will make adjustments, as necessary, to handle increases in volume as soon as the need becomes apparent. Further, BellSouth's performance measurements demonstrate that BellSouth is sufficiently staffed to handle current volumes and resources have been scaled as necessary to handle changes in volumes over the years. Performance results during steady growth, as well as spikes in demand, make clear that BellSouth will continue to staff and handle reasonably foreseeable demand for hot cut conversions. As referenced in TRO testimony, BellSouth has developed a 'worst case' scenario using maximum volumes that could be expected to occur if the Commission finds that CLECS are not impaired without unbundled switching. This scenario includes the anticipated volumes if the CLECs decided to convert the totality of their UNE-P base to unbundled loops attached to the CLEC switch rather than the BellSouth switch. It further considers that the UNE-P growth and UNE-L growth is maintained

throughout the period for the highest volumes of each that have occurred. Further, the scenario takes into account a high percentage for churn and a possibility of increased trouble reports. Using this scenario, which again is an extreme worst case assumption, BellSouth would still be able to adjust its force models and adequately staff its resources to handle the expected volumes of embedded base conversion during the transition period.

121. MCI (Comments at ¶34) theorizes that hot cuts will not meet acceptable standards if performed by new employees with limited training and experience and “will undoubtedly lead to a higher error rate.” The facts, however, are these: (1) hot cuts are not difficult; and (2) simple, repetitious work is required for a hot cut. Consequently BellSouth’s basic training will permit employees to perform the hot cut functions. BellSouth trains new employees through its region-wide training program. Technical training is developed and delivered by a centralized BellSouth Training organization that operates training facilities in five (5) locations scattered throughout the nine-state region. Because the training is identical, it is irrelevant which location is selected. Training is divided by subject matter, not by state. Consequently, BellSouth has more than enough training facilities to train these new network employees.
122. The training necessary to perform hot cuts typically requires from 15 to 35 days of mandatory training. In addition, employees receive on-the-job training related to their work assignments. BellSouth would require four (4) to five (5) months to hire, train and place job applicants on the job and have them performing high quality hot cuts.

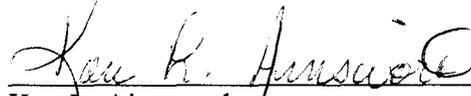
123. BellSouth has successfully increased force in the past to handle large conversions or workloads such as;

- 1996 Summer Olympic Games
- Addition of 1,000 Service technicians in 1999 to handle Service order volumes and reduce overtime
- Addition of 3,300 employees from 1998 to 2001 related to wholesale operations
- Addition of 800 Service technicians in 2001/2002 to handle increased ADSL demand.

124. MCI claims, in its Comments at ¶ 36, that “BellSouth’s current work force, if efficiently sized for existing orders, would not be able to handle the work necessary in an environment without UNE-P.” MCI is wrong. It is true that BellSouth does not have employees report to work daily at each and every central office simply for the reason that there are some central offices in which there would be no work required to be performed even if BellSouth were to assign its employees daily to those central offices. Instead, for those offices with a low volume of work, technicians are dispatched as needed to work the pending load, daily if required. BellSouth’s force model includes hours for working hot cuts at all BellSouth wire centers. Further in MCI’s Comments at ¶ 36, MCI’s assertion that “hither and yon” dispatching of central office technicians is required is simply incorrect. Work can be scheduled in each central office to minimize the number of driving trips required to reach smaller offices and to minimize the number of offices any one technician supports.

125. MCI (Comments at ¶ 37) discusses the number of technicians that can work effectively on a distributing frame at the same time and implies that BellSouth would not be able to effectively meet increases in hot cut demand. Here again, MCI is wrong. Depending on the workload and lay out of the central office, anywhere from two (2) to ten (10) (or even more) central office technicians may be at work simultaneously on the same Main Distributing Frame (“MDF”) with no negative impact on productivity. The BellSouth Force Model takes into account the number of employees that can work simultaneously, safely and productively on each MDF in every office. Cable pairs are deployed on the MDF as cables are brought into the central office. When multiple loop conversions are scheduled in a single day, for a single central office, the pre-wiring work may be done over several shifts in the days leading up to the due date. Because the access lines for these conversions are generally spread throughout across the MDF rather than being concentrated in particular sections, the actual cutovers are accomplished without technicians interfering in each other’s workspace. While BellSouth’s technicians are trained to work safely together, too many working in a tight location could become cumbersome. BellSouth routinely prevents such a situation by working the appropriate number of technicians on different shifts. This may require 24-hour scheduling but BellSouth is willing to do such scheduling. Finally, such as is used in the batch process, one of the benefits of project-management is to schedule the central office forces such that both the pre-wiring and the due date work can be accomplished without space constraints.
126. This concludes our Affidavit.

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



Ken L. Ainsworth  
Director  
Interconnection Operations

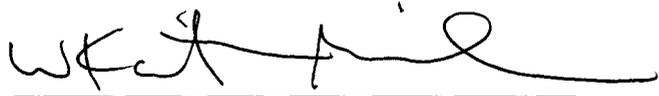
Subscribed and sworn to before me

This 18<sup>th</sup> day of October, 2004

  
Notary Public

Gay P. Diz  
Notary Public, DeKalb County  
Georgia  
My Commission Expires  
February 09, 2007

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



W. Keith Milner  
Assistant Vice President  
Interconnection Operations

Subscribed and sworn to before me

This 18<sup>th</sup> day of October, 2004

  
Notary Public

Gay P. Ditz  
Notary Public, DeKalb County  
Georgia  
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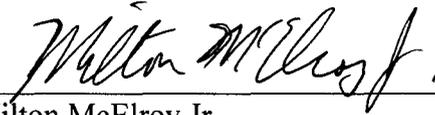
  
\_\_\_\_\_  
Alphonso J. Varner  
Assistant Vice President  
Interconnection Services

Subscribed and sworn to before me

This 18<sup>th</sup> day of October, 2004

  
\_\_\_\_\_  
Notary Public

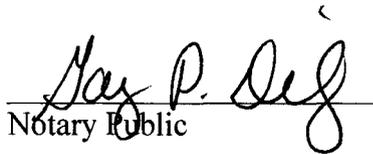
I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.



Milton McElroy Jr.  
Director  
Interconnection Services

Subscribed and sworn to before me

This 18<sup>th</sup> day of October, 2004



Notary Public

**Gay P. Ditz**  
**Notary Public, DeKalb County**  
**Georgia**  
**My Commission Expires**  
**February 09, 2007**

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



\_\_\_\_\_  
Gary Tennyson  
Principal Member – Technical Staff

Subscribed and sworn to before me

This 18<sup>th</sup> day of October, 2004



\_\_\_\_\_  
Notary Public

**Gay P. Ditz**  
**Notary Public, DeKalb County**  
**Georgia**  
**My Commission Expires**  
**February 09, 2007**

**WC Docket No. 04-313**  
**CC Docket No. 01-338**

**Reply Affidavit Of Ainsworth, Milner, Varner,  
McElroy and Tennyson**

**Exhibit BLS – 14**

**DRAFT 21 March 2003**

## **Overview**

This paper documents the lessons learned in a trial with ITC/DeltaCom. The trial attempted to unbundle a loop delivered via Integrated Digital Loop Carrier (IDLC) without incurring an additional Analog to Digital conversion. The trial was not successful.

## **Analog to Digital Conversions**

Analog to Digital (A/D) conversions occur at analog interfaces to digital transport and digital switching. The latest dial-up modem protocol (as documented in ITU Recommendations V.90 and V.92) requires that there be only one A/D conversion, between the server modem pool (usually designated as a Remote Access Server) and the end-user. In the case of a digital switch serving metallic loops, with a digital trunk to a RAS, there is one A/D conversion in the line interface card in the digital switch. The V.90 protocol can be supported.

In the case of a digital switch serving Universal Digital Loop Carrier (UDLC), there is another A/D conversion in the channel unit at the DLC Remote Terminal (RT). The V.90 protocol cannot be accommodated, and the modems 'fall back' to the previous generation protocol, documented in ITU Recommendation V.34.

When IDLC to an ILEC switch is employed, there is no A/D conversion at the switch. The V.90 protocol can be supported.

## **Conversion to a UNE Loop**

All three loop-types described above, i.e., metallic, UDLC, and IDLC, can be unbundled. Conversion of a metallic loop is straightforward. The A/D conversion point moves to the CLEC. Similarly, when a UDLC loop is unbundled, there are no additional A/D conversions. There were two A/D conversions when the end-user was served by the ILEC and there are two conversions when the end-user is served by the CLEC.

It is when the end-user is served via IDLC that the problem gets interesting. In different places, we have documented the various alternatives that are available when making such a conversion. They are as follows:

- Transfer the loop to copper feeder, if available
- Transfer the loop to a UDLC channel, if available
- Route the T1 lines serving the IDLC through a Digital Cross-Connect System. Subsequently, digitally cross-connect the channel to either a UDLC COT or a DS1 interface to the CLEC
- Use the switch-based 'hairpin' capability to route the channel back out of the switch, for connection to either a UDLC COT or a Digital Cross-Connect System, for further grooming to a DS1 interface toward the CLEC
- Convert the IDLC system to UDLC

If the IDLC system is an NGDLC system, it is — at least theoretically — possible to use the time-slot interchanger to connect the channel to either a UDLC COT, or a Digital Cross-Connect System, for further grooming to a DS1 interface toward the CLEC. We do not, however, have the OAM&P systems in place to utilize this capability.

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Note that some of these alternatives add an A/D Conversion. Those alternatives that do not add an A/D conversion are as follows:

- Transfer the loop to copper feeder, if available
- Route the T1 lines serving the IDLC through a Digital Cross-Connect System. Subsequently, digitally cross-connect the channel to either a DS1 interface to the CLEC
- Use the switch-based 'hairpin' capability to route the channel back out of the switch, for connection to a Digital Cross-Connect System, for further grooming to a DS1 interface toward the CLEC

### Multiple Robbed-Bit Signaling Links

The fact that the V.90 protocol cannot be supported across multiple A/D conversions is well known in the industry. It's less well known, though, that the presence of only 1 A/D conversion does not — in itself — guarantee that the V.90 protocol can be supported. Another limiting factor is multiple links of robbed-bit signaling.

DLC systems employ robbed-bit signaling, where the least-significant bit of the 8 bit encoded sample is overwritten with signaling information every 6<sup>th</sup> frame. The V.90 protocol is designed to recognize the robbed bit every 6<sup>th</sup> frame, so this isn't a problem with IDLC (into an ILEC switch).

When a DS0 with robbed-bit signaling traverses multiple DS1 links without intermediate conversions to analog, using a Digital Cross-Connect System (DCS) for instance, it's necessary that the signaling bits be written to multiple frames. This is necessary because the DS1's are not aligned on these six-frame groups (denoted superframes), or even frames, for that matter). The 6<sup>th</sup> frame in the first link, for instance, may be the 3<sup>rd</sup> frame in the next link. To overcome this problem, the product connecting the links (the DCS, to use the above example) must find the incoming superframe boundaries, detect the incoming signaling state, find the outgoing superframe boundaries, and repeat the signaling bits. It can be seen that 5/6 of the time, this will involve overwriting of a bit that was valid data.

As one might expect, multiple links of robbed-bit signaling impair the performance of V.90 modems. *This is a very important point that wasn't fully appreciated at the onset of the trial.* This problem is described in more detail in Annex A of ANSI T1.403.02a-2001, **Network and Customer Installation Interfaces — DS1 Robbed-bit Signaling State Definitions**. While the problem is well documented in the reference, the impact, i.e., that percentage of modems that can run V.90 across a specific number of robbed-bit links, isn't documented in the public domain. Discussions with vendors, though, indicate that most V.90 modems cannot employ the V.90 protocol when exposed to 3 such links. They 'fall back' to the V.34 protocol at 33.6 kbps or less.

### ITC/DeltaCom

ITC/DeltaCom initiated discussions with BellSouth regarding the unbundling of IDLC loops without incurring additional A/D conversions. After initial discussions, a decision was made to conduct a trial.

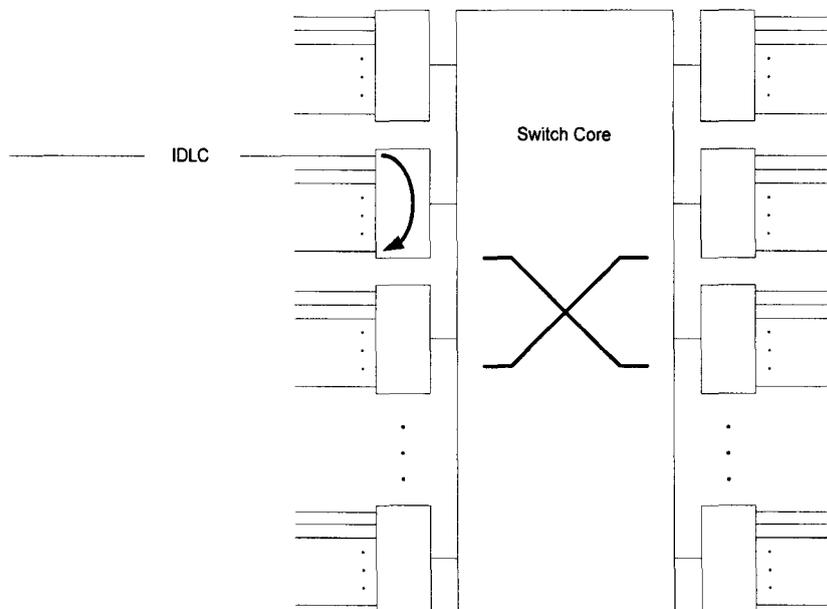
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Although both parties recognized that the alternative of transferring a loop to copper feeder (if the copper is available) was a means of unbundling a loop without incurring an additional A/D conversion, such a conversion was not part of the trial. Early in the discussion, ITC/DeltaCom indicated that they has tried such conversions in the past, and had experienced various voicegrade transmission impairments. This avenue was not further pursued.

The second alternative, i.e., grooming of IDLC Channels in a Digital Cross-Connect System (DCS) was discussed. This alternative has a number of shortcomings. For one thing, a DCS not available in all CO's. For another, the DS1 circuits serving the DLC system must be routed through the DCS. This activity has a long lead time, and cannot be accommodated on a service-order basis. There is also a significant cost associated with the required DCS ports, and the associated maintenance activity. It should also be noted that any service outages during these rearrangements would affect all users served by the DLC system, not just those users converting to the CLEC. For these reasons, this alternative was not pursued.

The remaining alternative, i.e., using the switch-based 'hairpin' capability was the focus of the trial. We recognized at that time that, in a DMS100, the 'nail-up' could only be made within the switch peripheral, as illustrated in Figure 1, below:



**DMS-100  
Nail-Up only in Peripheral**

**Figure 1**

We also recognized that lines served via GR-303 IDLC and via Nortel DMS-1 Urban could not be 'nailed-up.'

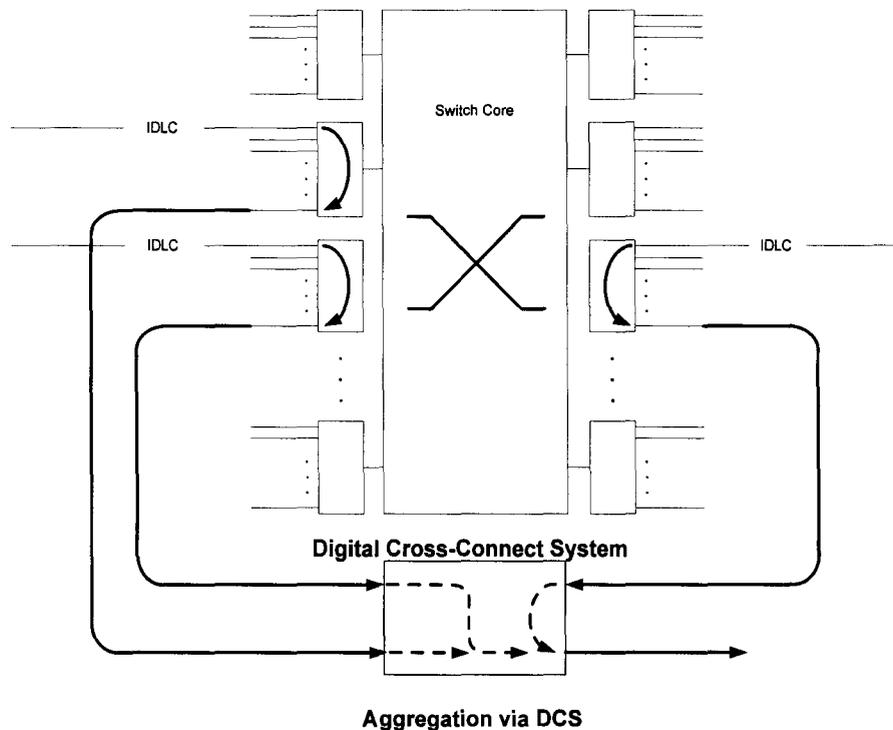
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We thought that the 5ESS and the EWSD did not suffer from the first limitation. The documentation on those switches suggested that they offered the ability to 'nail-up' a connection across an office, i.e., from one peripheral to another. Subsequent testing in the BellSouth technology Assessment Center proved that not to be the case. Only connections within the same switch peripheral can be 'nailed-up.'

The issue of multiple links of robbed-bit signaling (arising from chaining together these DS1's), and its effect on V.90 performance, was not discussed.

We recognized other limitations. We knew, for instance, that there are a limited number of ports per peripheral. We also recognized that this arrangement would have a very low DS1 fill unless a DCS were added, as illustrated in Figure 2, below.



**Figure 2**

For the trial, ITC/DeltaCom furnished a list of telephone numbers of 'friendly customers' who has BST service. From this list, two lines were selected. These customers were served via a DMS100 office, and a DCS was in the building.

DMS100 switch peripheral (SMS) assignments were obtained for the loops in question. The availability of vacant DS1 terminations on the associated SMS was verified. DS1 terminations in the DCS were obtained, and circuits were built from the DCS to the SMS's. The DS1 between DeltaCom's collocation and the DCS was also built.

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## **Lessons Learned**

Unfortunately, two unforeseen issues arose. It turns out that the loops to be converted were working in Mode II, i.e., concentrated mode. In the DMS100 switch, a Mode II channel must be in the four right-most slots, i.e., channels 17-24, of a digroup in order to be 'hairpinned'<sup>1</sup>.

We also found that only one customer may be assigned to the RT card (which normally accommodates two lines) serving the loop to be unbundled. This limitation arises due to the fact that the DMS100 'nails up' both channels on the card. Because it's extremely unlikely that both end-users would be converting simultaneously to the same CLEC, this effectively means that the other channel must be vacant.

To overcome these limitations, the end-users to be converted would have to be re-assigned. This would involve, among other things, a transfer at the crossbox.

## **Conclusion**

We recognized, going into this trial, that it would be expensive. Anticipated costs included the following:

- Determining the availability of spare switch peripheral ports,
- Determining the availability of a Digital Cross-Connect System and spare ports
- The provisioning of DS1 links between the switch peripherals and the Digital Cross-Connect ports
- The use of the Digital Cross-Connect system

When the unanticipated cost of the line rearrangements (necessary to 'hairpin' a mode II IDLC channel in a DMS100 office) became known, the process was viewed to be even less viable. No effort was made to transfer the end-users or continue the trial.

When we better understood the effect of concatenated links of robbed-bit signaling on V.90 modem performance, there was simply no point in continuing the work.

Gary Tennyson  
(205) 985-6087

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<sup>1</sup> These slots were the only ones available for services requiring full-period assignment, i.e., coin and special services, in a SLC-96 system. A Series 5 system has no such slot restrictions, but it appears that the DMS100 retains the limitation even with the Series 5.

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**WC Docket No. 04-313**  
**CC Docket No. 01-338**

**Reply Affidavit Of Ainsworth, Milner, Varner,  
McElroy and Tennyson**

**Exhibit BLS - 15**



# **Concerns with the Hot Cut Process**

**Florida Competitive Carrier's  
Association  
(FCCA)**

**October 28, 2003**

# Structure of Presentation

- **FCC concerns with current “individual” process**
- **CLEC concerns with current “individual” process**
- **FCC concerns with current “batch” process**
- **CLEC concerns with current “batch” process**
- **Other critical concerns to be considered**
- **Standard for review of hot cuts process**
  - ◆ **FCC**
  - ◆ **CLEC**
- **Summary and Recommendation**

## *FCC Concerns with current “individual” process*

### What did FCC say was wrong with the hot cut process?

- There is a practical limitation on how many manual hot cuts an ILEC can perform
- Hot cuts often result in provisioning delays
- Hot cuts can cause significant service outages
- Poor hot cut performance causes customer dissatisfaction with individual competitors and the competitive process in general
- Hot cuts generally impose prohibitively high external and internal costs on competitors
  - Hot cuts are labor intensive
  - Hot cuts require the expenditure of substantial ILEC and CLEC resources

## *FCC Concerns with current “individual” process*

### What is the customer impact regarding these deficiencies?

Coordinated cutovers “**prevent[]** the competitive LEC from providing service in a way that mass market customers have come to expect. Para. 466.

**Service disruptions** also will influence customer perceptions of competitive LECs’ ability to provide quality service, and thus affect competitive LECs’ ability to attract customers.” Para. 466.

“Most importantly, mass market customers generally demand reliable, easy-to- operate service and trouble-free installation. . . . Accordingly, we find the evidence in the record persuasive that the hot cut problem would be particularly great for transferring existing mass market customers in a **cost-effective and operationally seamless manner.**” Para. 467.

“[T]here is a significant amount of **churn**, or movement, among mass market customers. **Mass market customers move freely** from carrier to carrier when they desire, and **have come to expect the ability to change local service providers in a seamless and rapid manner.** The evidence in the record demonstrates that customer **churn exacerbates the operational and economic barriers** to serving mass market customers.” Para. 471.

“...we find that it is **unlikely** that incumbent LECs will be able to provision hot cuts in sufficient volumes absent unbundled local circuit switching in all markets.” Para. 468.

*FCC Concerns with current process*

What was FCC response to ILEC arguments?

<u>ILEC Position</u>	<u>FCC Response--</u>
Current performance	<p>“[W]e find that the issue is <b>not</b> how well the process works currently with <b>limited</b> hot cut volumes, rather the issue identified by the record identified is an <b>inherent limitation in the number of manual cut overs that can be performed</b>, which poses a barrier to entry that is likely to make entry into a market uneconomic.” Para. 469</p>
C Promises performance	<p>“We find . . . incumbent LECs’ <b>promises</b> of future hot cut performance <b>insufficient</b> to support a Commission finding that the hot cut process does not impair the ability of a requesting carrier to provide the service it seeks to offer without at least some sort of unbundled circuit switching. While incumbent LECs state that they have the capacity to meet any reasonable foreseeable increase in demand for stand-alone loops that might result from increased competitive LEC reliance on self-provisioned switching, <b>there is little other evidence in the record to show that the incumbent LECs could efficiently and seamlessly perform hot cuts on a going-forward basis</b> for competitors who submit large volumes of orders to switch residential subscribers.” n. 1437</p>
Approval	<p>“[T]he Commission’s prior findings in section 271 orders do not support a finding here that competitive carriers would not be impaired if they were required to rely on the hot cut process to serve all mass market customers. . . . [T]hese orders examined the adequacy of hot cuts at a time when competitive LECs were principally using unbundled local circuit switching to compete for mass market customers. . . . Here, we must consider the adequacy of current hot cut practices for handling the volumes that would be expected <b>if competitive LECs were denied unbundled access to unbundled local circuit switching</b> - something that was by no means “reasonably foreseeable” in the context of the section 271 orders. The section 271 orders thus tell us very little about a BOC’s ability to provision large batches of cut overs in a timely and reliable manner under these circumstances.” n.1435</p>

*FCC Concerns with current process*

What was FCC response to ILEC arguments?

<u>ILEC Position</u>	<u>FCC Response--</u>
Current standards and penalties will ensure performance.	“[In addition], because there generally are no <b>performance intervals</b> associated with these approaches, incumbent LECs are not subject to <b>financial penalties</b> for inadequate performance.” Para. 474
PSCs set TELRIC hot cut prices	The FCC’s finding of national impairment is based on evidence regarding the economic and operational barriers caused by the cut over process, including the associated non-recurring costs. Para. 459.  “Competitors seeking to use their own switches must incur the costs associated with a hot cut, <b>including both the charges assessed by the incumbent LEC and their own costs</b> of managing and participating in the hot cut process. . . . [T]he record evidence [also] indicates that the <b>non-recurring costs associated with cutting over large volumes of loops would likely be prohibitively expensive</b> for a competitive carrier seeking to provide service without the use of unbundled local circuit switching.” Para. 470

***CLEC concerns with current hot cut process***

- Same as identified by FCC
- Additionally, CLECs are gravely concerned that ***any manual*** hot cut process, individual or batch, is inadequate for wide-scale mass market use:
  - Does not provide a seamless experience for the customer
  - Manual nature causes lack of scalability
  - Manual nature keeps costs prohibitively high
  - BellSouth's substandard performance in returning timely firm order confirmations.
  - BellSouth's failure to provide a reliable schedule for performance of hot cuts.
  - Erroneous disconnection and undue delay in reconnection.
  - BellSouth's failure to notify consistently and timely that the loop has been transferred to the CLEC (and is not measured.)
  - The absence of performance measures that adequately reflected the customer's experience.
  - Cost
  - OSS problems

***FCC concerns with current batch hot cut process***

“Incumbent LECS argue that Frame Due Time and project managed approaches offer sufficient efficiency...Project managed cut overs involve the conversion of a number of lines at one time, pursuant to provisioning requirements and intervals negotiated by the incumbent and competitive LEC. We find that these approaches are not sufficiently developed or widespread enough to adequately address the impairment created by the loop cut-over process.” Para. 474.

***CLEC concerns with current batch hot cut process***

- What batch hot cut process?
  - More restrictive than individual hot cuts
  - It does not allow time specific cuts.
  - No reduction in costs
  - It does not allow after-business-hours cuts, which are necessary to meet customers need to have uninterrupted telephone service during business hours.
  - There is no assurance that services requested to be migrated on the same bulk order will in fact be worked on the same day.
  - There is no assurance that all of an individual customer's lines will be cut on the same day, creating customer satisfaction issues.
  - BellSouth is unwilling to commit to the number of lines or customers it will provision per day.
  - BellSouth's process does not provide sufficient safeguards, such as real-time communication between the two companies during the conversion process, or a process for timely service restoration in the event of a problem.

### ***CLEC concerns with current batch hot cut process***

According to BellSouth the difference between its hot cut process and its batch hot cut process---

- Difference is that a larger number of lines are being moved from the ILEC's switch to CLEC's switch.
- Processes are the same, except that a Project Manager works the CLEC prior to the orders being issued to negotiate due dates for the cuts and ensure that all the necessary information is provided.

*Presentation to South Carolina Commission  
Lisa Brooks-BellSouth  
October 23, 2003*

***Other concerns crucial to hot cuts***

- Access to DSL providers
- Elimination of UNE-P eliminates current method of line-splitting
- Loop splitting creates operational and economic impairment, is undefined, is likely to be manual, and has no method of ordering cross connects on the MDF.
- OSS Issues (examples)
  - BellSouth cannot electronically process (and threatens not to process at all) orders in which one entity orders the loop and directs that it be delivered to another entity's collocation.
  - CLEC to CLEC ordering processes are manual, have no or inefficient processes for interaction, and are not "batchable".
  - UNE-L orders do not flow-through BellSouth's OSS, creating more delay and risk of error than that incurred for UNE-P.
  - Negative impacts on E911, NPAC, provisioning, repair, billing, and DL databases.
  - Handling of IDLC, DSL, and CLEC to CLEC migration scenarios.

**Other concerns crucial to hot cuts**

**Capacity Issues**

Order Volume/a.k.a. capacity	125K Orders (62.5K or 50% migrations?)	1.6K Orders (.7K or 45% migrations?)
Net Increase in Lines (Impact of Churn)	8K—August 18K—July (Last 12 months net increase of approx. 12.5K per month)	1.7K---August -2.1K-----July (Last 9 months net decrease of approximately 1K per month)

What is the impact on--quality--capacity--cost to the CLEC---

Of eliminating an *electronic* process that handles 62.K plus (churn) per month and moving that work to a *manual* process that currently handles less than 1K plus (churn) migrations per month?

*Other Crucial Issues*

**BellSouth non-recurring migration costs**

Type of Charge	UNE-P	SL-1	SL-1 with Coordination	SL-1 with Coord. Time Specific	SL-2 with Coordination	SL-2 with Coord. Time Specific
		\$49.57	\$49.57	\$49.57	\$135.75	\$135.75
	\$1.52	\$1.52	\$1.52	\$1.52	\$1.52	\$1.52
er"	\$0.10					
			\$9.00	\$9.00	N/A	N/A
				\$23.02		\$23.02
	\$1.62	\$51.09	\$60.09	\$83.11	\$137.27	\$160.29

*Standards for review of hot cut process*

FCC

**“This review is necessary to ensure that customer loops can be transferred from the incumbent LEC main distribution frame to a competitive LEC collocation as promptly and efficiently as incumbent LECs can transfer customers using unbundled local circuit switching. N. 1574.**

**“We have found that a seamless, low cost batch cut process for switching mass market customers from one carrier to another, at a minimum for carriers to compete effectively in the mass market.”**

**Para. 487.**

*Standard for review of process*

FCC

Did the FCC conclude that a batch hot cut process would solve hot cut problems?

“loop access barriers contained in the record may be mitigated through the creation of a batch cut process Para. 487

After a batch cut process has been put into place, we expect state commissions in subsequent reviews to reevaluate the circumstances surrounding self provisioning, and expect states will begin to find requesting carriers are not impaired. Para. 512.

Even after such processes are implemented, competitive carriers may still face barriers associated with loop provisioning – even problems arising from newly improved hot cut processes – that may continue to be a significant barrier to competitive entry into the mass market. Para. ¶ 512.

*Standard for review of process*

CLEC

UNE-L migrations must be as quick, easy, cost effective, and able to be implemented in the same volumes as UNE-P migrations and PIC changes in order to adequately serve the mass market.

## *Summary of Situation and Recommendation*

### Summary

The FCC found that deficiencies in the hot cut process result in operational and economic impairment

The FCC also directed State Commissions to determine whether loop provisioning, collocation, and CLEC to CLEC cross connects cause operational and economic impairment.

To address the hot cut deficiencies, the FCC directed State Commissions to approve and implement a batch cut process, and consider the implementation of rolling access to UNE-P.

CLECs have experienced significant problems using BellSouth's individual hot cut process.

AT&T tried twice, unsuccessfully, to develop a satisfactory batch hot cut process with BellSouth.

BellSouth's currently offered "batch" process is inadequate.

New and changed performance measures are required.

Both the batch and individual hot cut processes will remain intensely manual, therefore are too expensive and not sufficiently scalable to overcome impairment issues.

Elimination of bundled switching also raises other issues directly related operational impairment:

- Ordering and provisioning of loops that is inferior to UNE-P.
- BellSouth specific problems with using wholesale switching.
- Impairment in ability to provide DSL

## *Summary of Situation and Recommendation*

### **CLEC Recommendation**

- Approve, test and implement the best manual batch hot cut process that can be devised by the PSC and the industry for use in those limited circumstances that would otherwise warrant the use of CLEC switching.
- Order the development of a plan to move to a non-discriminatory electronic ordering and provisioning process to eliminate operational and economic impairment.
- Continue to make UNE-P available until electronic processes resulting from Commission approved plan are available.