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EXECUTIVE SECRETARY

July 16, 2001

Mr. David Waddell  
Executive Director  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, Tennessee 37243

Re: *Docket to Establish Generic Performance Measurements, Benchmarks and Enforcement Mechanisms for BellSouth Telecommunications, Inc.*  
Docket No. 01-00193

Dear Mr. Waddell:

Enclosed please find an original and thirteen (13) copies of the testimony of Karen Kinard, along with Exhibits KK-A through KK-F which we would appreciate your filing on behalf of WorldCom, Inc. in the above-referenced docket.

Thank you for your assistance in this matter.

Very truly yours,

BOULT, CUMMINGS, CONNERS & BERRY, PLC

By:

Jon E. Hastings

JEH/th

Enclosures

cc: All Parties of Record  
Susan Berlin, Esq.  
David Adelman, Esq.

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## CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing has been forwarded via U.S. Mail, postage prepaid, to the following on this the 16<sup>th</sup> day of July, 2001.

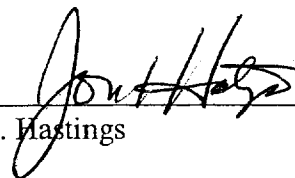
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\_\_\_\_\_  
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**BEFORE THE  
TENNESSEE REGULATORY AUTHORITY  
DOCKET NO. 01-00193**

**TESTIMONY  
OF KAREN KINARD  
ON BEHALF OF WORLDCOM, INC.**

**July 16, 2001**

## I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME.**

2 A. My name is Karen Kinard. My business address is 8521 Leesburg Pike, Vienna,  
3 Virginia 22182. I am employed by WorldCom, Inc. ("WorldCom") as a Senior  
4 Staff Member within the ILEC Performance Advocacy group of WorldCom's  
5 National Carrier Management and Initiatives organization.

6 **Q. PLEASE PROVIDE INFORMATION ON YOUR RESPONSIBILITIES,**  
7 **BACKGROUND AND EXPERIENCE WHILE AT WORLDCOM.**

8  
9 A. I am responsible for performance measurement and remedy plan policy  
10 development and advocacy for WorldCom, and I was a key developer of the  
11 Local Competition Users' Group's ("LCUG's") version 7 Service Quality  
12 Measurement document. I have held various positions since joining WorldCom's  
13 (then MCI's) Local Initiatives group in June 1996, including leading a team that  
14 provided subject matter expertise during the first round of interconnection  
15 agreement negotiations.

16 **Q. PLEASE PROVIDE INFORMATION ON YOUR BACKGROUND AND**  
17 **EXPERIENCE PRIOR TO JOINING WORLDCOM.**

18 A. Before joining WorldCom, I was an editor for eleven years at  
19 Telecommunications Reports ("TR"), covering technology, state regulation,  
20 access charge issues, and jurisdictional cost separations policy. I also held the  
21 position of chief technology editor and other top editorial positions, including  
22 serving as the principal editor of TR's Communications Business and Finance and  
23 Cable-Telco Competition Report newsletters. I initiated TR's Communications

1 Billing Report newsletter before joining Phillips Business International's  
2 Communications Today daily electronic newsletter in 1995 as its chief Federal  
3 Communications Commission ("FCC") correspondent. From 1976 to 1984, I  
4 served in various positions as an aide to the Congressman for the Seventh District  
5 of Pennsylvania, including Press Secretary and Legislative Assistant for  
6 telecommunications policy and banking.

7 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

8 I received my Masters of Science degree in Telecommunications Policy and  
9 Management from George Washington University in 1984. I received a  
10 Bachelors of Science degree in Communications from West Chester University in  
11 1975. I also hold a paralegal certificate in Corporate Law from Widener  
12 University.

13 **Q. WHAT IS YOUR EXPERIENCE RELATING TO PERFORMANCE**  
14 **MEASUREMENTS WORK IN OTHER JURISDICTIONS?**  
15

16 **A.** I have been WorldCom's lead representative in carrier-to-carrier performance  
17 measurement and remedy collaboratives, have made metric presentations, and  
18 have testified or filed comments in many state arbitration, 271 and generic  
19 performance measurements proceedings since 1998. State proceedings in which I  
20 have participated include those held in Florida, Louisiana, North Carolina,  
21 Tennessee, Mississippi, Kentucky, South Carolina, Alabama, New York,  
22 Pennsylvania, Massachusetts, New Jersey, Virginia, Maryland, Illinois, Michigan,  
23 Ohio, Indiana, Colorado and Arizona. I also have filed declarations with the FCC  
24 on metric and remedy issues in the New York, Massachusetts and Pennsylvania

1 271 proceedings, and I have made presentations and informally discussed metrics  
2 and remedy issues with FCC and Department of Justice staff at their request and  
3 in ex partes, either done jointly with other LCUG members or solely for  
4 WorldCom.

5  
6 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

7 A. The purpose of my testimony is to provide to the Tennessee Regulatory Authority  
8 (“Authority” or “TRA”) evidence in support of a procompetitive set of  
9 performance standards, metrics and measures. I intend for this testimony to be  
10 considered jointly with comments previously filed on April 6, 2001 by an *ad hoc*  
11 coalition of CLECs of which MCImetro was one. I also intend for this testimony  
12 to be used by the Authority to build on its decisions in Docket No. 99-00430, the  
13 ITC^DeltaCom/BellSouth Arbitration.

14 My testimony will recommend certain modifications to the performance measures  
15 that were ordered by the Authority on February 21, 2000 in Docket No. 99-00430.  
16 These modifications reflect lessons learned as we participate in the nascent  
17 competitive local exchange markets, experience from other regulatory  
18 proceedings and, the requirements of the Telecommunications Act of 1996  
19 (“Act”). My recommendations reflect what is needed to ensure fair and effective  
20 competition in the Tennessee local exchange markets. My testimony will also  
21 address some of the deficiencies in BellSouth’s March 12, 2001 SQM which it  
22 attached to its Comments filed in this docket on April 6, 2001.

## II. BACKGROUND

**Q. IS THE CONTEXT OF THIS CASE IMPORTANT?**

**A.** Yes. The context in which this case arises is important because BellSouth would have the Authority ignore or back away from the good work the TRA has done and the resources already expended by the TRA and various parties.

**Q. PLEASE BRIEFLY DESCRIBE SOME OF THE SIGNIFICANT DECISIONS OF THE TRA RELATING TO YOUR TESTIMONY**

**A.** By Order dated April 4, 2000, after hearing a great deal of argument and considering the testimony of various experts, the Authority, acting as arbitrators under the Act directed ITC^DeltaCom Communications, Inc. ("ITC^DeltaCom") and BellSouth to submit Final Best Offers on the issue of performance measures in the ITC^DeltaCom arbitration. On August 31, 2000, the TRA released its *Second Interim Order of Arbitration Award* and ordered BellSouth and ITC^DeltaCom to resubmit a final best offer for Issue 1(a).<sup>1</sup>

In the ITC^DeltaCom Arbitration, the TRA asked ITC^DeltaCom and BellSouth to address (1) the electronic medium to be used in providing ITC^DeltaCom access to the performance report and underlying data; (2) the process to be utilized to determine BellSouth's compliance or non-compliance with the

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<sup>1</sup> It is noteworthy that during this time, WorldCom joined many other CLECs in an expedited proceeding in Georgia regarding performance measures and remedies. WorldCom, along with AT&T of the Southern States ("AT&T"), ICG Telecom Group, Inc. ("ICG"), Intermedia Communications, Inc. ("Intermedia"), Southeastern Competitive Carriers Association ("SECCA"), ITC^DeltaCom Communications, Inc. ("ITC^DeltaCom"), Birch Telecom, Inc. ("Birch"), Dieca Communications, Inc. d/b/a COVAD Communications Company ("COVAD"), e.spire Communications, Inc. ("e.spire"), Broad Slate Networks, Inc. ("Broad Slate"), Media One Telecommunications of Georgia LLC ("Media One"), Z-Tel Communications, Inc. ("Z-Tel"), and Rhythms Link, Inc. ("Rhythms") sponsored one performance remedy

1 standard or benchmark; (3) standards/benchmarks for each measurement;<sup>2</sup> (4)  
2 enforcement mechanisms; and (5) circumstances that would warrant a waiver  
3 request from BellSouth and the time frame for submitting such waiver request.  
4

5 The TRA ordered that the Parties use BellSouth's SQMs with associated  
6 definitions and business rules for the purpose of measurement along with certain  
7 specified additions, deletions, and revisions from the "Texas Plan."<sup>4</sup> Specifically,  
8 the TRA ordered that the parties use the Texas Plan definitions and business rules  
9 for the following items:

- 10 (a) Remove the SQM on firm order confirmation timeliness  
11 (b) Add percent firm order confirmation returned within specified time frame  
12 (c) Add percent mechanized rejects returned within one hour of receipt of reject in  
13 LASR  
14 (d) Add percent of accurate and complete formatted mechanized bills  
15 (e) Add billing completeness  
16 (f) Add unbillable usage  
17 (g) Add percent busy in the local service center (LSC)  
18 (h) Add percent busy in the local operations center (LOC)

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plan before the Georgia Public Service Commission on July 5-7, 2000. I understand the TRA has acknowledged some of the work done in Georgia especially as it relates to Third Party Testing.

<sup>2</sup> I strongly agree that Standards must be specific and measurable. Parity or retail analog should include the specific service to which parity will be measured or the retail analog companion. Additionally, a methodology should be provided for defining or calculating the performance standard and/or benchmark, for each measure, such as the method contained in the SEEM for each measure.

<sup>4</sup> *Investigation of Southwestern Bell Telephone Company's Entry Into The Texas InterLATA Telecommunications Market*, Project No. 16251, Public Utility of Texas, (Oct. 13, 1999).



- 1 (i) Add percent installations completed within industry guidelines for LNP with
- 2 loop
- 3 (j) Add average response time for loop makeup information
- 4 (k) Add directory assistance average speed of answer
- 5 (l) Add operator services speed of answer
- 6 (m) Add percentage of LNP only due dates within industry guidelines
- 7 (n) Add percentage of time the old service provider releases the subscription prior
- 8 to the expiration of the second nine-hour (T2) timer
- 9 (o) Add percentage of customer account restructured prior to LNP due date
- 10 (p) Add percentage premature disconnect for LNP order
- 11 (q) Add average days required to process request
- 12 (r) Add cageless collocation to the level of disaggregation on BST's SQM
- 13 "collocation/average arrangement time."
- 14 (s) Add cageless collocation to the level of disaggregation on BST's SQM
- 15 collocation/percent of due dates missed
- 16 (t) Add percentage of updates completed into the DA database within 72 hours for
- 17 facility based CLECs
- 18 (u) Add average update interval for DA database for facility based CLECs
- 19 (v) Add percentage DAT database accuracy for manual update (w) Add
- 20 percentage of premature disconnects (coordinated cutovers)
- 21 (x) Add percentage of missed Mechanized INP conversions
- 22 (y) Add percent NXXs loaded and tested prior to the LERG effective date
- 23 (z) Add average delay days for NXX loading and testing

1 (aa) Add mean time to repair

2 (bb) Add percentage of requests processed within 30 days

3 (cc) Add percentage of quotes provided for authorized BFRs/special requests

4 within X days (10, 30, 90) days

5  
6 **Q. DID BELLSOUTH TRY TO AVOID THE RESULTS OF THE**  
7 **ITC^DELTA COM ARBITRATION?**

8 A. Yes. In the face of a strong decision supporting performance measures and  
9 remedies in the context of particular arbitrations, BellSouth attempted a  
10 procedural end run. On May 17, 2000, BellSouth asked the Authority to open a  
11 generic proceeding rather than grant relief to any petitioning CLECs in the  
12 context of their arbitrations. The Authority did not reward BellSouth's procedural  
13 scheme, but rather, proceeded with the ITC^DeltaCom arbitration and now looks  
14 to build on that decision. Indeed, BellSouth continues to try to avoid the TRA's  
15 mandates. The proposal it attached to its April 6, 2001 Comments in this docket  
16 ignores much of what the TRA has ordered.

17 **Q. WHY IS THE ITC^DELTA COM DOCKET IMPORTANT?**

18 A. The ITC^DeltaCom docket is crucial because on May 15, 2001, the Prehearing  
19 Officer issued his *Order Consolidating Docket Nos. 99-00347 and 00-00392 into*  
20 *Docket No. 01-00193 and Opening Docket No. 01-00362*. That Order clearly  
21 establishes the ITC^DeltaCom arbitration decisions as the "starting point" for the  
22 measures and standards which will ultimately be adopted in this docket.

1 On June 26, 2001, the Authority unanimously affirmed that the  
2 ITC^DeltaCom/BellSouth arbitration orders would serve as the “starting point”  
3 for its conclusions in this docket. *See Orders on Reconsideration and Denying*  
4 *Joint Motion, Docket No. 99-0430, p.7.* Put simply, the TRA has declared  
5 unambiguously that it does not intend to back away from its decision in the  
6 ITC^DeltaCom arbitration.

7  
8 **Q. WHY IS IT IMPORTANT FOR THE METRICS IN A PERFORMANCE**  
9 **MEASUREMENT PLAN TO BE COMPREHENSIVE?**

10 A. A performance measurement plan needs to be comprehensive because significant  
11 gaps in coverage can make it extraordinarily difficult and time-consuming to  
12 detect and deter below-parity performance. When an area of BellSouth’s  
13 performance is not covered by a metric, the primary tool available to a CLEC to  
14 remedy poor performance is an action to enforce the parties’ interconnection  
15 agreement. Enforcement actions based on disparate treatment can be uphill  
16 battles because the CLEC must prove that BellSouth is providing better service to  
17 itself, its customers or its affiliates than to the CLEC. To make its case, the  
18 CLEC must somehow obtain accurate internal BellSouth information concerning  
19 the service it provides to itself, its customers or its affiliates. Even if this can be  
20 done, an enforcement case can take a year or more to complete (at least without  
21 the availability of expedited dispute resolution), which typically is far too long for  
22 a CLEC attempting to solve an immediate problem affecting its business.  
23 Comprehensive performance metrics therefore go hand in hand with the potential  
24 for broad scale entry into the local market.

1 This is exactly the view provided by the U.S. Department of Justice ("DOJ") in  
2 opposing approval of BellSouth's Louisiana 271 application:  
3

4 We find no evidence in the record that BellSouth has committed  
5 itself in any significant way to specific levels of performance or  
6 to any enforcement provisions to remedy inadequate  
7 performance. Rather, it appears that, as a general matter, CLECs  
8 who feel that BellSouth's performance is inadequate would  
9 need to file complaints with the [state] PSC and then, in the  
10 course of the resulting regulatory proceedings, establish the  
11 appropriate level of performance, whether BellSouth had failed  
12 to meet that performance level, and finally, establish the  
13 remedy. To be most effective in preventing backsliding, such  
14 issues should be resolved in advance, either in contracts  
15 between BellSouth and its competitors or through regulatory  
16 proceedings.

17  
18 Evaluation of the DOJ at 39, filed in In re Application of BellSouth Corporation  
19 Pursuant to Section 271 of the Communications Act of 1934, as amended, to  
20 Provide In-Region, InterLATA Services in Louisiana, CC Docket No. 97-231.  
21

22 Thus measurements should cover all problems that can and have arisen through  
23 real market experience with:

24 (A) Service delivery methods such as resale and individual unbundled  
25 network elements (UNEs) (such as loops or transport); UNE  
26 combinations (such as enhanced extended loops and platform); and  
27 facilities interconnection.

28 (B) Products and processes such as coordinated conversions, various  
29 flavors of xDSL and line sharing and splitting services, local number  
30 portability, loop acceptance testing and loop conditioning.

1 (C) Retail-wholesale relationships management such as operational  
2 support systems (OSS) speed and connectivity, help desk  
3 responsiveness, database update accuracy and timeliness, and change  
4 management processes and software error correction timeliness.

5 (D) Provisioning status notices such as acknowledgements, confirmations,  
6 rejections, completion notices, jeopardy notices and loss notices.

7 (E) Maintenance responsiveness and capability in resolving customer  
8 trouble reports.

9 (F) Billing accuracy and completeness for the end user customer and the  
10 CLEC.

11 **Q. PLEASE COMMENT ON BELL SOUTH'S SQMs AS THEY HAVE BEEN**  
12 **PROPOSED REGION-WIDE.**

13 A. BellSouth has long standing business rules problems with its SQM and new  
14 problems in its metrics ordered added by the Georgia Commission. I describe the  
15 former in my attachment KK-A and the latter in my attachment KK-B.  
16 BellSouth also is missing various metrics important to CLECs (my attachment  
17 KK-C), including as pertain to disaggregation (my attachments KK-D and KK-E)  
18 and sufficient benchmarks to provide CLECs with a meaningful opportunity to  
19 compete (my attachment KK-F).

### III. IMPACT ON WORLDCOM

**Q. HOW WILL INADEQUACIES IN BELL SOUTH'S METRICS AFFECT WORLD COM?**

A. In mid-May 2001, the MCI division of WorldCom launched its first residential service offering in BellSouth territory, using the UNE-platform ("UNE-P") mode of delivery in Georgia. MCI UNE-P customers have experienced an alarmingly high number of dialtone losses shortly after conversion. For conversion of an existing BellSouth customer line to MCI using the UNE-P, the loss of dialtone should be considered unacceptable, if not unfathomable.

**Q. DOESN'T BELL SOUTH'S PLAN MEASURE THESE PROBLEMS?**

A. Even though BellSouth's plan has a Trouble After Service Order Completion metric, MCI is concerned that it will understate the problem. First, MCI has found that a high number of these problems are being wrongly classified as CPE (Customers Premises Equipment) or TNF (Trouble Not Found) designations, which exclude them from the metric. Moreover, unlike Verizon and SBC, BellSouth does not report on the number of exclusions for maintenance or provisioning metrics so CLECs can monitor whether they seem unusually high, thus requiring an examination of the raw data. Further, even if the lost dialtone problems do get recorded as troubles, BellSouth judges parity by combining retail residential and business services. By combining these services, more dispatch orders that should be more likely than a UNE-P migration to result in dialtone losses are involved. This will mask a problem that can and already has caused new MCI customers to revert to BellSouth--a process BellSouth has made easier through it improper branding. Also, MCI suspects that there is an unnecessary

1 two-part order process in which the “N” (New) and “D” (Disconnect) orders get  
2 out of sequence and the line is physically disconnected before the CLEC is  
3 designated as the new carrier for the customer. The problem is very similar to one  
4 MCI faced in Texas, where such dialtone losses were understated in SBC-SWBT  
5 reporting by the hundreds, due to this same exclusion process. Most importantly,  
6 BellSouth’s trouble closure reports provide narratives only and do not include the  
7 trouble disposition and cause codes that drive these exclusions.

8 **Q. HOW CAN THIS PROBLEM BE RESOLVED?**

9 A. While the retail analog needs fixing and coding of CPE/TNF dispositions need to  
10 be reported and double-checked, MCI would like to see the process fixed so this  
11 problem will not put customers at risk of losing dialtone. A one-order process  
12 will keep both the problem from recurring and BellSouth from paying any  
13 remedies for Troubles within 30 Days of Service Order Activity for what should  
14 be simple UNE-P migrations. This is only one example of how a poorly  
15 constructed metric can affect WorldCom’s local market entry. The absence of  
16 metrics, low standards, exclusions creating big loopholes also can harm  
17 WorldCom and other CLEC coalition members in competing with BellSouth

18  
19 **IV. PERFORMANCE MEASURES RECOMMENDATIONS**

20  
21  
22 **Q WHAT MUST THE TRA DO TO COMPLETE ITS WORK ON**  
23 **PERFORMANCE MEASUREMENTS?**

1     A.     The TRA’s February 21, 2001 Order in Docket No.99-00430 (the “February  
2           Order”) put in place many, but not all, of the requirements necessary for an  
3           effective performance measurement methodology. While the TRA Order contains  
4           many of the performance measurements, performance standards and  
5           disaggregation requirements needed by CLECs, they require some modifications  
6           based on the collective input of the CLEC community. The work of the Georgia  
7           Commission can be instructive on some of these issues.

8     **Q.     PLEASE ELABORATE ON THE GEORGIA COMMISSION’S ACTIONS**  
9           **ON THIS ISSUE?**

10    A.     The Georgia Commission also recognized the inadequacy of the BellSouth  
11           measures to provide essential information needed to make compliance  
12           determinations. I understand the TRA has acknowledged some of the good work  
13           done by the Georgia Commission. On January 16, 2001, the Georgia  
14           Commission issued an Order in its generic performance measurement docket that  
15           added the following seventeen metrics to BellSouth’s recommended Service  
16           Quality Measures: Response Time for Manual Loop Make-Up (LMU) Queries  
17           Response Time for Electronic LMU Queries Acknowledgement Timeliness

- 18       • Acknowledgement Completeness
- 19       • FOC/Reject Response Completeness
- 20       • % Completions/Attempts w/o Notice or < 24 hours notice
- 21       • Average Recovery Time for Coordinated Cuts
- 22       • Cooperative Acceptance Testing Attempts vs. Requested by CLECs
- 23       • Recurring Charge Completeness



- 1       • Non-recurring Charge Completeness
- 2       • Mean Time to Notify CLECS of Network Outages
- 3       • Mean Time to Notify CLECS of Interface Outages
- 4       • Average Database Update Interval
- 5       • Percent Database Update Accuracy
- 6       • NXX and LRNs loaded and tested by LERG date
- 7       • BFRs processed in 30 business days
- 8       • BFR Quotes provided in X days

9       **Q. DOES BST's SQM ISSUED IN COMPLIANCE WITH THE GEORGIA**  
10       **ORDER INCLUDE MEASURES SIMILAR TO THOSE ORDERED BY**  
11       **THE TRA?**

12      A. Yes. Listening to the CLECs as the TRA did in the ITC^DeltaCom arbitration, the  
13       Georgia Commission ordered BellSouth to add new metrics and improve old ones,  
14       which results in this SQM resulting order coming much closer to that which the  
15       TRA has ordered. The TRA should build on the Georgia experience.

16

17      **Q. ARE THERE ANY METRICS OR BENCHMARKS APPROVED BY THE**  
18       **TRA THAT GEORGIA DID NOT ORDER?**

19      A. Yes. The Georgia Commission did not require BellSouth to add metrics covering  
20       Average Delay Days for NXX Loading, Average Time to Repair NXX Loading  
21       Errors, Percentage of Time the Old Service Provider Releases the Subscription  
22       Prior to the Expiration of the Second Nine-Hour (T2) Timer; Percentage of Missed

1 Mechanized INP conversions; Percent Busy in LOC, Percent Busy in LSC; and  
2 Percentage of Customer Account Restructured Prior to LNP Due Date.

3  
4 **Q. SHOULD THE TRA CONTINUE TO REQUIRE THESE ADDITION**  
5 **METRICS?.**

6 A. Yes. Some like the NXX loading delay days and Mean Time to Restore can be  
7 disaggregations of existing BellSouth Average Delay Day and Mean Time to  
8 Restore metrics. Others address LNP provisioning issues that need to be covered to  
9 avoid errors that can harm customers (Percent Release of Old Service Provider. . . )  
10 and delays (Account Restructure). Only the ILNP conversion metric may not be  
11 necessary at this point, depending on status of LNP implementation in the state,  
12 which is likely nearly complete at this point. However, a measurement of ILNP to  
13 LNP conversions, as a disaggregation of Order Completion Intervals and Missed  
14 Appointments would be beneficial to competition.

15  
16 **Q. DOES THE GEORGIA COMPLIANCE SQM CONTAIN ADDITIONAL**  
17 **METRICS SOUGHT BY OTHER CLECS THAT ITC^DELTACOM DID**  
18 **NOT SEEK IN TN?**

19 A. Yes. The Georgia Commission has long required a Percent Order Accuracy Metric,  
20 albeit with suspect sampling procedures. The Georgia order also includes some  
21 additional Billing metrics, such as Recurring and Non-Recurring Charge  
22 Completeness metrics and a metric covering Percent Completions/Attempts without

1 Notice or with Less Than 24 Hours Notice; It also added several measurements of  
2 BellSouth's OSS Change Control Notice and Document provisioning intervals.  
3

4 **Q. SHOULD THE GEORGIA COMPLIANCE FILING BE THE STARTING**  
5 **POINT FOR THIS PROCEEDING?**

6 A. Yes. In addition to the TRA's previous orders, the Georgia compliance filing, would  
7 serve as an excellent point of reference which can be found at [www.psc.state.ga.us](http://www.psc.state.ga.us)  
8 at Docket No. 7892-U. To this document the TRA should add the non-included  
9 metrics from the ITC^DeltaCom arbitration mentioned above as well as the new  
10 metrics, business rule and standards changes mentioned below. This document  
11 contains the closest to a comprehensive plan filed by BellSouth to date and brings  
12 this proceeding to discussion of the same impasse issues already under  
13 consideration in other generic metric proceedings.  
14

15 **Q. IS THE SQM FILED BY BELL SOUTH WITH ITS APRIL 6, 2001**  
16 **COMMENTS THE SAME AS THE GEORGIA SQM DOCUMENT?**

17 A. No. While similar, it is missing several of the metrics ordered by Georgia, including  
18 Percent Order Accuracy, Percent Completions/Attempts without Notice or with  
19 Less Than 24 Hours Notice, and the two Bona Fide Request Measurements that  
20 were similar to those the TRA ordered. (BFRs processed in 30 business days  
21 BFR Quotes provided in X days.) The SQM filed with BellSouth's comments  
22 should be disregarded and the commission focus on improving on the metric  
23 business rules implemented in the Georgia SQM.

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**Q. WHY HAS BELL SOUTH ELIMINATED SOME OF THE METRICS  
ORDERED BY GEORGIA, INCLUDING SEVERAL THAT OVERLAP  
WITH THOSE ORDERED BY THE TRA?**

A. I would call it a disregard for what its CLEC customers want. Certainly the metrics it has eliminated are needed by the CLEC Coalition to highlight business impediments likely or existing in the BellSouth region. For example, BellSouth's proposal to do away with the Percent Completions/Attempts w/o Notice or Less than 24 Hours notice is of great concern to me. I personally added this metric to the 1998 release of the LCUG SQM Version.7 after meeting with MCI service delivery and sales representatives that deal with BellSouth. They noted that in many circumstances BellSouth delivers service with no or little notice and this results in Customer Not Ready designations. CNRs are not counted as missed appointments and are used as the end time for Order Completion Intervals.

The two Bona Fide Request metrics have been targeted by BellSouth for deletion in various permanent metric proposals submitted in 271 proceedings. WorldCom finds it challenging enough to gain off-the-shelf wholesale products without negotiating delivery and prices of new products. Nevertheless, this is where the rubber will meet the road on CLECs distinguishing their local products from what BellSouth currently offers or in obtaining greater efficiencies in delivering current

1 products. BellSouth should not be allowed to slow the early efforts of CLECs  
2 trying to differentiate their local products and provide them efficiently.

3  
4 Of great concern to CLECs are BellSouth's efforts to rid itself of the Georgia  
5 Order Accuracy metric, which needs improvements as mentioned below, not  
6 elimination. The development of the Order Accuracy metric was critical in  
7 gaining New York endorsement of Verizon's 271 application. Through the New  
8 York Carrier-to-Carrier monthly meetings, CLECs also have continuing input to  
9 the areas to the final CSR (Customer Service Record) to compare to the original  
10 LSR (Local Service Request) to ensure that manual handling has not introduced  
11 errors. Discussions are even underway to move from a manual sampling to an  
12 automated 100% comparison to detect errors. Here once again BellSouth goes  
13 backwards before 271 approval when other ILECs move forward in improving  
14 metrics post-271 approval. These are just a few of the problems with BellSouth's  
15 proposed permanent SQM.

16  
17 BellSouth also has proposed permanent metric rules that reduce many of the  
18 benchmarks that already were too low compared to Texas and NY standards. The  
19 TRA should adopt the benchmarks and analogs proposed by the CLECs, many  
20 such as FOC intervals are based on the Texas benchmarks it original approved. It  
21 should push BellSouth forward, rather than allow BellSouth to backtread on what  
22 the TRA and Georgia PSC have ordered before it is barely implemented.

1   **Q.    KEEPING IN MIND THE GEORGIA PROCEEDING, PLEASE DISCUSS**  
2       **IN DETAIL MODIFICATIONS THAT SHOULD BE MADE BY THE TRA**  
3       **IN THIS DOCKET?**

4   **A.**   Additional metrics, including those ordered by the Georgia Commission, should  
5       be included in the measures set adopted by the TRA in this docket. The rationale  
6       for this preliminary set of additional measures is discussed below:

7   **1.    Additional Ordering Measures**

8       OP-Acknowledgement Timeliness

9       OP-Acknowledgement Completeness

10       CLECs need to know their orders are being received by BellSouth's operational  
11       systems. These acknowledgements are received before a confirmation or  
12       rejection of the order can be established. The lack of such an acknowledgement  
13       message (known as a 997 message on EDI interfaces) is the first indication that an  
14       order submitted by a CLEC is jammed somewhere in BellSouth's systems and  
15       will not be processed without human intervention. This can mean that service to  
16       the customer will be delayed well beyond the requested interval. CLECs need  
17       metrics to monitor how quickly an order is acknowledged by BellSouth's systems  
18       and how many notices are missing once the acknowledgement interval has passed.  
19       These measures have been ordered by the Georgia Commission.

1

2 OP-Firm Order Confirmation and Reject Response Completeness

3 This measure flags problems with orders trapped in BellSouth's systems. This  
4 can occur even after an acknowledgement notice is sent to the CLEC. The current  
5 confirmation and rejection metrics only capture information on Local Service  
6 Requests (LSRs) received by BellSouth; however, the LSRs could be lost in  
7 BellSouth's systems and therefore not "received" so they would never be  
8 measured. The current metrics could show on-time performance because missing  
9 LSRs are never captured. Equally important, missing rejections and  
10 confirmations, needed by the CLECs to complete service delivery, would go  
11 undetected. In New York, Verizon's metrics had the same deficiency and as a  
12 result Verizon reported excellent performance even though tens of thousands of  
13 orders were lost or mishandled. Ultimately, the FCC and New York Public  
14 Service Commission took action, which led to Verizon paying \$10 million to  
15 CLECs and \$3 million to the U.S. Treasury for its poor performance. This  
16 measure also was ordered by the Georgia Commission.

17 OP-Mean Time to Provide Response to Request for BellSouth-to-CLEC Trunks  
18 OP-Percent Responses to Requests for BellSouth-to-CLEC Trunks Provided  
19 within 7 Days  
20 OP-Percent Negative Responses to Requests for BellSouth-to-CLEC Trunks

21  
22 CLECs cannot expand without adequate trunk capacity inbound from the ILEC as  
23 well as outbound to the ILEC. ILEC delays in providing reciprocal trunks or  
24 delays in providing CLECs a due date for such trunks forces CLECs to delay  
25 installing new customers. CLECs would rather manage a single customer's  
26 expectation for a due date than install a customer that will cause further blocking

1 on inbound calls to all CLEC local customers in the area. ILEC delays on trunk  
2 resizing keep CLECs from growing market share. The proposed measures in this  
3 area should apply regardless of how a CLEC sends its request, whether via fax,  
4 email or as an Access Service Request (ASR).

5  
6 The Mean Time to Provide Response measurements is key when comparing  
7 service to affiliates for response to trunk requests. The Percent Responses to  
8 Requests for BellSouth-to-CLEC Trunks Provided Within 7 Days metric  
9 measures the response standard proposed by CLECs to be achieved 95% of the  
10 time. Finally, the Percent Negative Responses to Requests for BellSouth-to-  
11 CLEC Trunks metric would allow tracking of BellSouth rejections of CLEC  
12 requests for more capacity. These are not rejections for CLEC errors but cases  
13 where BellSouth argues that additional trunks are not needed. BellSouth's policy  
14 is that it is appropriate to begin trunk augmentation of a final trunk group when  
15 utilization reaches 75-85%. CLEC growth is more dynamic than BellSouth's and  
16 a 50% fill can quickly move blocking levels with the addition of one large  
17 customer. Thus, when utilization reaches 50%, it is prudent to plan for trunk  
18 augmentation because merely adding one large customer can easily bump up  
19 blockage levels to 85% or higher. The addition of customers with high inbound  
20 calling volumes can bump even lower fill rates than 50% up to blocking levels.  
21 These overall utilization rates also do not reflect blocking that would occur during  
22 busy hours but not other times of day.



1     **2.     Additional Provisioning Measures**

2             OP- Order Accuracy

3             Tennessee CLECs also need to ensure that BellSouth provisions an order the way  
4             it was entered or faxed by the CLECs. An Order Accuracy metric would capture  
5             whether orders are changed through BellSouth's manual handling of partially  
6             mechanized or faxed orders and thus provisioned inaccurately in great annoyance  
7             to the customer.

8             OP-Percent Completions/Attempts without Notice or with Less Than 24 Hours  
9             Notice

10            Missed or late confirmations make CLECs look disorganized since they have to  
11            scramble to meet the due date or are caught off guard by a service delivery to their  
12            customer. Such absent or late notices can lead to "customer not ready" situations  
13            where late service delivery is wrongly blamed on the CLEC and excluded from  
14            the interval metrics. This metric was ordered by the Georgia Commission.  
15

16  
17            OP-Percent On-Time Hot Cut Performance

18            CLEC customers often suffer from degraded or lost service through ILEC  
19            mistakes or failure to adhere to established cutover procedures. An early cut of  
20            facilities can cause the customer to lose service. A late cut translation often  
21            means the customer cannot receive all or certain incoming calls. Either is harmful  
22            to a CLEC's reputations and can lead to costly lawsuits if service is lost  
23            unexpectedly during business hours. Moreover, if the cut time is during business  
24            hours, this can be devastating to the customer who relies on the telephone.  
25            Therefore, it is crucial that BellSouth's performance in this area be monitored.

1  
2 OP-Percent of Orders Cancelled or Supplemented at the Request of the ILEC

3  
4 This metric, adopted in the New York Carrier-to-Carrier proceeding, captures  
5 incidents where CLECs do not voluntarily extend the due date but rather do so at  
6 the request of BellSouth in order to adjust for BellSouth-caused failures to  
7 complete the order. When a CLEC agrees to supplement the order at BellSouth's  
8 request, what would have been a missed due date gets a new due date in the  
9 future. Therefore, without this metric, BellSouth would meet the measure even  
10 though the customer and CLEC are frustrated with the later date.

11  
12 OP-Percent of Coordinated Cuts Not Working as Initially Provisioned

13 This metric captures when loops are provisioned on time but are not working.  
14 Often CLECs cannot log a trouble report until the order is completed in the  
15 ILEC's billing system, and that may take many hours or days. Consequently,  
16 these provisioning troubles are undetected by BellSouth's current performance  
17 measures.

18  
19 OP-Average Recovery Time

20 When early or late cuts occur, if there has been an outage, it is important to get  
21 the customer's service promptly restored and switched over to the CLEC. This  
22 metric measures how quickly service is restored to the CLEC. Both New York  
23 and Texas have similar measures. The Georgia Commission also adopted this  
24 measure.

1 OP-Mean Time to Restore a Customer to the ILEC

2 OP-Percent of Customers Restored to the ILEC

3  
4 These metrics measures the speed of restoring service to BellSouth when a  
5 customer conversion fails and the percent of accurate port-backs to BellSouth  
6 when necessary. Customers need to have service and may not be able to wait for  
7 the conversion to work. Therefore, the customer would be ported back to  
8 BellSouth. Restorations due to CLEC errors would need to be excluded from this  
9 metric.

10 OP-Call Abandonment Rate – Ordering and Provisioning

11 MR-Call Abandonment Rate -Maintenance

12 BellSouth only captures the call center response time for customers who wait for  
13 their calls to be completed. The number of customers who abandon the call  
14 because of long waits in queue are not captured. That causes any problem in the  
15 call center answer time metrics to be understated. This measure will allow for a  
16 more complete and accurate indication of BellSouth's performance in this area.

17 OP-Percent xDSL Lines Cooperatively Tested

18 OP-Percent Successful xDSL Service Testing

19  
20 CLECs need to have cooperative testing done on xDSL loops to determine if  
21 BellSouth has done all the appropriate work to provide connectivity. This  
22 measure goes beyond that and reports on how many loops BellSouth actually did  
23 test. Cooperative testing saves both the ILEC and CLEC time and effort in  
24 resolving problems that should have been identified during the initial provisioning  
25 process.  
26

1 Along the same lines, BellSouth should measure the percent of successful xDSL  
2 cooperative testing. Similar to the defective loop metric for coordinated cuts, this  
3 measure would pick up how often an xDSL loop that is not working is delivered  
4 to the CLEC. This metric could be disaggregated by reason codes for the loop not  
5 working and while one remedy would apply for missing the standard for  
6 delivering working xDSL loops, the disaggregation would aid BellSouth in root  
7 cause analysis to address the problem area. Georgia ordered the Percent Tested  
8 metric proposed above.

9  
10 OP- (disaggregation or new metric) - Percent Completion of Timely Loop  
11 Modification/Conditioning on xDSL loops

12  
13 Some loops require modification or conditioning before they can be used to  
14 provide a customer with xDSL service. This metric measures BellSouth's  
15 timeliness in making the needed modifications or performing the necessary de-  
16 conditioning. Since xDSL is a growing area of service for CLEC's and  
17 BellSouth, it is important that BellSouth modify and condition loops in a timely  
18 manner.

19 **3. Additional Billing Measures**

20 **BL-Percent Billing Errors Correct in X Days**

21 BellSouth delays in providing adjustments to carrier bills or correct daily usage  
22 feed errors can harm the CLEC and its customer in several ways. Errors that do  
23 not get corrected promptly in the daily usage file lead to CLEC's either holding  
24 up charges or passing on incorrect charges on to the customer. The CLEC must  
25 then expend its resources to later adjust customer invoices. BellSouth's invoice

1 accuracy measure does not capture whether errors are corrected within a  
2 reasonable time.

### 3 BL- Usage Timeliness

4 BellSouth measures the percentage of recorded usage data that is delivered to the  
5 CLEC within six calendar days from the receipt of the original recording. CLECs  
6 also need to know how timely the usage records on average are delivered to  
7 CLECs, and therefore request the TRA adopt this additional measure.

### 8 BL- Percent On-Time Mechanized Local Service Invoice Delivery

9 Not only do the charges on the bills need to be correct and complete but also the  
10 formatting must follow appropriate industry standards so that they can be  
11 electronically processed in the CLEC systems. Without properly mechanized  
12 bills, CLECs may be forced to reconcile boxes of paper bills for charges that  
13 cannot be accepted or audited by their electronic systems.

## 14 **4. Other Additional Measures**

### 15 MI- Percent Response Commitments Met On Time

16 Even more important than how quickly BellSouth representatives answer the  
17 phone is how quickly they answer questions or resolve problems. CLECs should  
18 not have to wait days for BellSouth to respond to a problem that has stalled  
19 production of orders for the CLEC. Help Desk responsiveness on missing  
20 notifier (confirmations, rejection, completion) problems is also crucial to CLECs.  
21 Verizon's problems in this area led to the introduction of a three-day standard for  
22 resolving such requests in the New York metrics. The TRA should adopt a  
23 measurement and standard for responsiveness to all help desk questions that

1       impede an CLEC's ability to place orders or respond to a customer's status  
2       questions about their order.

3       MI- Mean Time To Notify CLEC of Network Outages

4       Knowing about an outage promptly as well as the estimated time of resolution can  
5       help CLECs address customer calls and concerns about disrupted service. If a  
6       CLEC's maintenance team must wait longer to learn of a network outage than  
7       Bellsouth's maintenance team, the CLEC is placed at a disadvantage because it  
8       has less time to devise alternatives for customers. When service to its customers  
9       has been affected, it is critical that CLECs be able to address those concerns in a  
10      timely manner and possess as much information as possible. BellSouth's  
11      performance in this area is crucial to CLEC customer satisfaction. Consequently,  
12      this measure should be ordered by the TRA. This metric was among those  
13      ordered by the Georgia Commission.

14      MI-Average Update Interval

15      MI-Percentage Database Update Accuracy

16  
17      The life line of any business depends on the ability of potential customers to  
18      contact the business. Consequently, CLEC customers are rightfully concerned if  
19      after obtaining service from their new CLEC, their information is not placed in  
20      BellSouth's directory assistance and directory listings database promptly and  
21      accurately. The Georgia Commission ordered this metric.

22  
23      OSS-Notification of Interface Outages

24      CLECs need to be informed promptly when BellSouth's systems are down so that  
25      they can make alternative work plans. Failure to timely inform CLECs of

1 BellSouth outages can cause them to waste time troubleshooting their own  
2 interfaces. Timely notification also prevents BellSouth's help centers from being  
3 inundated with calls about an already known outage. This is also among the  
4 newly ordered Georgia metrics.

5 CM- Percent Change Management Notices Sent On Time

6 CM- Average Delay Days for Notices

7 CM- Percent Change Management Final Documentation Sent on Time

8 CM-Average Delay Days for Documentation

9 CM- Percent ILEC vs. CLEC Changes Made

10  
11 BellSouth must measure its adherence to its change management notice  
12 commitments and definitions of emergency notices. This is necessary to avoid  
13 BellSouth's OSS software changes from harming competitors. Often ILEC  
14 failures to adhere to change management notice requirements have caused delays  
15 in the building, or have stopped the functioning, of CLEC OSS interfaces.  
16 CLECs must have timely notices of changes in order to plan and determine what  
17 changes are required on their side of the interface. At best, late notices require  
18 CLECs to pull information technology personnel from other projects to keep the  
19 existing interface from going down. At worst, the CLEC cannot act quickly  
20 enough to stop the changes from harming its production. Thus, simply having a  
21 change management process is not enough. Reported data and enforcement of the  
22 process is needed to ensure the process is effective and being followed.

23  
24 In addition, final documentation, to the change management notice, must be sent  
25 on time so CLECs can begin implementing necessary changes to their interfaces  
26 in order to be ready to conduct business on the date the change becomes effective.

1 Without the documentation to support the changes, CLECs cannot begin the  
2 necessary work.

3  
4 BellSouth has not yet included a metric in its SQM that tracks whether it responds  
5 fairly to CLEC requests for changes and new functionalities on its interfaces.

6 Although CLECs prioritize their change requests, BellSouth ignores the  
7 prioritization and implements these changes whenever it chooses. Therefore, the  
8 TRA needs to order BellSouth to measure the percentage of BellSouth changes  
9 made versus the number of CLEC changes made to determine whether CLEC  
10 requests for interface changes are being implemented in a fair and equitable  
11 manner. It also needs to measure the time it takes to review a CLEC's request for  
12 a change versus performance on its change requests, as well as how long before  
13 approved changes for the CLEC versus itself are implemented. The TRA should  
14 require BellSouth to work out an appropriate metric for this process in  
15 collaboratives with CLEC Change Control Process participants.

16  
17 OSS- Percent Software Certification Failures

18 CLECs need to be sure that their existing systems still will be able to function  
19 when BellSouth introduces software upgrades. This measurement provides some  
20 assurance that BellSouth will sufficiently test before a system is rolled out.

21 Knowing that software upgrades will not negatively impact CLEC systems will  
22 eliminate potentially costly delays to CLECs and BellSouth. Therefore, this  
23 metric should be adopted by the TRA.



1 OSS- Software Problem Resolution Timeliness  
2 OSS- Software Problem Resolution Average Delay Days  
3

4 This metric examines how quickly BellSouth fixes software errors caused by  
5 changes to an existing interface, establishment of a new query type or other  
6 changes. Different standards are set based on whether there is a work-around for  
7 the problem. If a CLEC is prevented from entering orders, extremely prompt  
8 responses are required. The delay day measure captures the degree to which the  
9 problem is allowed to continue by BellSouth.

## 10 V. BUSINESS RULES

11 **Q. PLEASE EXPLAIN THE SIGNIFICANCE OF BUSINESS RULES.**

12 A. Business rules are the heart of every measure. Business rules state the start and  
13 stop time of each metric. They also provide the details necessary to describe  
14 processes that occur in between start and stop times. The rules regarding the  
15 collection of data for CLECs and for BellSouth also are included. Business rules  
16 must be detailed enough to allow a third party can use them to recreate  
17 BellSouth's performance measurement reports using BellSouth's raw data. They  
18 must also be structured to ensure that discrimination by BellSouth is not being  
19 masked. Many business rules associated with the BellSouth measures that were  
20 adopted by the TRA require changes to meet these criteria. As an example, the  
21 business rule for OSS Response Interval is inadequate. The BellSouth SQM  
22 business rule states that the interval starts when the client application submits a  
23 request to the legacy system and ends when the appropriate response is returned  
24 to the client application. The measurement time should begin when BellSouth  
25 receives the query from the CLEC and should end when BellSouth returns a

1 response to the CLEC interface. Business rule language from the Texas measures  
2 also need some modifications to reflect BellSouth's systems.

3  
4 **Q. PLEASE COMMENT ON BUSINESS RULE PROBLEMS WITH THE**  
5 **GEORGIA SQM?**

6  
7 A. I have detailed problems with BellSouth's business rules and some additional  
8 inadequacies in attachments KK-A and KK-B. The former discusses problems  
9 with the metric rules BellSouth has long proposed and the latter cover problems  
10 with the business rules for new metrics ordered by the Georgia Commission. An  
11 example of a major business rule problem is how BellSouth measures the start  
12 time for the Order Completion Interval metric. BellSouth's Order Completion  
13 Interval is measured from the receipt of the confirmation and not from receipt of  
14 an error-free order. It surprisingly hangs on to this flawed business rule, which is  
15 at odds with how Verizon or SBC measures order completion intervals, and is  
16 notwithstanding that the FCC objected to it in denying BellSouth's South  
17 Carolina and Louisiana 271 petitions. The FCC did not agree with BellSouth's  
18 measurement of average intervals from the start time of confirmation issuance.

19  
20 We find here, as in the BellSouth South Carolina Order, that a far  
21 more meaningful measure of parity is one that measures the  
22 interval from when BellSouth first receives an order to when  
23 service is installed. From a customer's perspective, what is  
24 important is the average length of time it takes from when the  
25 customer first contacts the carrier for service to when that service  
26 is provided. This period of time is a crucial point of comparison  
27 between the incumbent's performance and the competing carrier's  
28 performance. Therefore, the most meaningful data would measure  
29 the interval from when BellSouth first receives an order to when  
30 service is actually installed, regardless of whether or not the order  
31 electronically flows through BellSouth's operational support  
32 systems. This interval can then be compared with the average time

1 from when BellSouth's own service representatives first submit an  
2 order for service to when BellSouth completes provision of the  
3 service for its retail customers. Unlike the data BellSouth  
4 provides, which measure intervals that begin when orders are  
5 processed by SOCS, such a measure would expose any delays in  
6 the processing of orders. As we stated in the BellSouth South  
7 Carolina Order, we expect BellSouth to provide such a measure in  
8 future applications.

9  
10 In the Matter of Application by BellSouth Corporation, et al., Pursuant to  
11 Section 271 of the Communications Act of 1934, as amended, To Provide  
12 In-Region, InterLATA Services In Louisiana, CC Docket No. 97-231,  
13 Memorandum Opinion and Order, released February 4, 1998, ¶ 44.

14 **Q. PLEASE DISCUSS THE CIRCUMSTANCES UNDER WHICH AN ITEM**  
15 **SHOULD BE EXCLUDED FROM A MEASURE.**

16 A. There may be several legitimate reasons to exclude certain circumstances from a  
17 measure. These need to be agreed upon by the CLECs and BellSouth in advance  
18 so that everyone understands what is included and excluded from a particular  
19 measure. Failure or delay caused by the CLEC or the CLEC's customer is an  
20 example of a reason for excluding a transaction from the data to be reported, at  
21 least for remedy purposes. Exclusion of orders that fallout for manual processing  
22 from the Percent Flow Through Service Requests measure is illustrative of an  
23 inappropriate exclusions modification that are required. BellSouth's SQM should  
24 not exclude from the metric orders that, through no fault of the CLEC, fall out to  
25 manual processing. The purpose of this measure should be to measure the percent  
26 flow-through capability of BellSouth's ordering systems. Thus, while  
27 BellSouth's Percent Flow Through Service Requests metric may measure whether  
28 the orders BellSouth has designed to flow through actually do, it should also

1 provide a clear picture of those orders BellSouth has not designed to flow  
2 through. Only BellSouth, no CLECs, can improve the flow-through of error free  
3 orders. Therefore, BellSouth should be held accountable for its decision not to  
4 provide flow-through. Further, BellSouth is obligated to provide parity service.  
5 As it has provided no evidence that such orders fall out for manual processing for  
6 its retail operation, it should not be allowed to exclude such orders from its flow-  
7 through calculation for CLECs.

8  
9 Another illustration of inappropriate exclusions in the BellSouth's metrics is the  
10 exclusion of non-mechanized orders from the Average Completion Notice  
11 Interval. Information regarding completion of non-mechanized orders is just as  
12 critical to the CLEC and its customers as it is for fully mechanized orders.  
13 Further, in some cases, for example, enhanced extended loops (EELs), CLECs  
14 have no choice but to use non-mechanized ordering. This measure should be  
15 modified to require that completion notices be provided, regardless of the means  
16 of ordering.

## 17 18 VI. DISAGGREGATION

19 **Q. PLEASE EXPLAIN THE IMPORTANCE OF DISAGGREGATION.**

20  
21 A. Disaggregation involves breaking down performance data into sufficiently  
22 specific categories so that like-to-like comparisons can be made. Proper  
23 disaggregation prevents the masking of discrimination by ensuring that poor  
24 performance in one area (such as xDSL) from being obscured by being lumped

1 together with other superior performance data in an unrelated area. Just as it is  
2 important for performance metrics to be comprehensive in scope, it is critical that  
3 performance reporting be required at a sufficiently detailed level to provide  
4 meaningful results. Disaggregation should be required by geography, interface  
5 type, pre-order query type, product, service order activity, volume category,  
6 trouble type, trunk design and type (for trunk blockage measurements),  
7 maintenance and repair query type and collocation category.

8  
9 The disaggregation adopted by the TRA in its Order demonstrates the Authority's  
10 acknowledgement of the value of product specific disaggregation. Given the  
11 dynamic nature of the local market, the product specific disaggregation needs to  
12 be further expanded. As an example, Line Splitting should be included as a level  
13 of disaggregation for Provisioning and Maintenance measures.

14  
15 Disaggregation should be by interface type. One interface may react quicker or  
16 slower than another. The only way to determine, for example, whether  
17 BellSouth's TAG interface meets the applicable standards is to review data  
18 specifically for that interface. If TAG data is lumped together with EDI data, the  
19 performance of the TAG interface will be obscured.

20  
21 Disaggregation by Pre-order query type disaggregation is important because a  
22 request for something simple like a phone number may require less response time  
23 than a request for something more complex like a due date reservation or loop

1 makeup information. Disaggregation for response time for error messages and  
2 percent time outs also need to be included.

3 Product disaggregation is key because different performance can be expected  
4 based on the type of product being ordered. Lumping together one type of order  
5 that has a two day interval with another type of order that has a ten day interval  
6 and producing a report showing that on average the orders are provisioned in  
7 seven days tells one nothing about whether either type of order was provided at  
8 parity or met the benchmark. Such aggregate treatment masks disparities in  
9 service and should not be permitted. The basic principle of product  
10 disaggregation is that like products and processes product should be tracked  
11 separately.

12 Examples of product disaggregation include resale, UNEs and trunks, broken  
13 down by residential and business customer, where appropriate. Further  
14 disaggregation for resale and UNEs include DS1s and DS3s. DS1s and DS3s  
15 have differing provisioning and repair intervals and complexities that require  
16 separate reporting. Similar to what is specified in the February Order, different  
17 unbundled loop types, such as analog voice-grade loops, digital loops, ADSL  
18 loops, HDSL loops, UCLs and xDSL loops, also should be disaggregated because  
19 BellSouth's performance will vary for each loop type. Additionally, UNE-  
20 Platform needs to be reported separately because this product combines a loop  
21 with switching and transport and is different from just ordering a port without the  
22 switching and transport. Simply stated, CLECs require products disaggregated to

1 the level where relatively few dissimilarities as possible exist to be able to  
2 appropriately monitor BellSouth's performance.

3  
4 Volume category disaggregation captures differences that may arise based on the  
5 number of lines being ordered. CLECs recognize that the appropriate interval for  
6 a particular metric may depend on whether, say, five or fifty lines are being  
7 ordered. CLECs recommend that BellSouth disaggregate by volume in  
8 accordance with the differing intervals it requires for various volumes. For  
9 example, if the interval is different for 1-5 lines, than it is for 6-10 lines, then  
10 BellSouth should have to disaggregate its performance based on those volumes.  
11 To do otherwise adds together short and long intervals, masking how long it  
12 actually takes to provide service, and makes meaningful comparisons to  
13 BellSouth's service provision to its retail customers meaningless.

14 Aggregating trunks designed at different blocking thresholds could hide serious  
15 blocking problems by averaging trunks designed to block at 2%, 1%, or 0.5%  
16 together. Disaggregation by type is also important so that blocking on crucial  
17 OS/DA or 911 trunks can be monitored by CLECs. BellSouth should at least  
18 disaggregate final dedicated trunks by the following trunk types and industry  
19 blocking standards:

20 Trunk Type

- 21 • OS/DA
- 22 • 911

1       Trunk Performance

- 2               • 2% Local and IntraLATA Toll Trunk Groups
- 3               • 1% Local Tandem, Local Direct Office Final, IntraLATA interexchange,
- 4               911, DA, DA Call Complete,
- 5               • 0.5% OS, IntraLATA Tandem Meet Point

6

7       Maintenance and repair query type disaggregation is important for the same

8       reasons as pre-order query type disaggregation. Different types of queries can be

9       expected to take different lengths of time to process.

10

11       Different types of collocations and augments take different amounts of time to

12       provision. For example, provisioning a cageless collocation space should require

13       substantially less time than provisioning a caged collocation space. Augments of

14       collocation space also should generally take less time than installing the original

15       collocation space.

16

17       **Q.    ARE THE CLECs' DISSAGGREGATION REQUESTS**

18       **REASONABLE IN JUDGING WHETHER PARITY SERVICE HAS**

19       **BEEN PROVIDED?**

20

21       A.    Yes. WorldCom requests sufficient disaggregation to make the metrics

22       useful, accurate measurements of whether discrimination in performance

23       exists.

24

25       **Q.    SHOULD DSL PRODUCTS BE DISSAGGREGATED?**

26

27       A.    BellSouth needs to disaggregate its various xDSL products, since they cover

28       different service lengths and different provisioning processes. Data carriers need



1 to ensure that they are receiving the same treatment as BellSouth's data services  
2 affiliate, and to do that they need to have their performance compared to that  
3 provided by the affiliate on a product by product basis. Disaggregation for line  
4 splitting also is required in addition to line sharing to ensure that BellSouth is not  
5 favoring those data providers that use its voice services over those who use other  
6 voice providers.

7 **Q. WHAT OTHER PROBLEMS EXIST REGARDING BELL SOUTH'S**  
8 **DISAGGREGATION LEVELS AND RETAIL ANALOGS?**

9  
10 A. There are a few areas that I would like to highlight for the Authority.

11  
12 Dispatch/Non-Dispatch  
13

14 For many of its provisioning and maintenance and repair measures, BellSouth  
15 inappropriately compares UNE Loops to retail dispatch services. Physical work  
16 done in a central office, which is all that is required of many UNE migration  
17 orders, should not be compared to work done in the field, including at the  
18 customer premises. If the provisioning of a UNE loop required field work as well  
19 as central office work, then of course it would be classified as a dispatch out.  
20 Provisioning and repair measures should be divided into three categories: 1)  
21 Switch-based orders, 2) central office or "dispatch in," and 3) field work or  
22 "dispatch out." Please note that these are the relevant major categories of  
23 disposition codes, in addition to those related to excluded data such as  
24 FOK/TOK/CPE, for which CLECs seek disaggregation (not all 145 disposition  
25 codes as BellSouth misinterpreted our proposal to be in Florida).  
26

1       Loop Disaggregation

2  
3       DS1 loops should not be included with DS3 loops because BellSouth has different  
4       intervals for DS1 and DS3 loops. And in maintenance, DS-3's usually have a  
5       higher priority restoral target because of the larger number of customers involved.

6  
7       EEL Migration Benchmarks

8  
9  
10      Various CLECs have become concerned about the time it takes BellSouth to  
11      convert special access circuits to enhanced extended loops ("EELs"). The  
12      standard interval for migrations from special access to EELs should be 95%  
13      within 10 days from receipt of an error-free request for conversion. The  
14      benchmark for firm order confirmation timeliness and completion notices should  
15      be 95% in 5 hours for electronic and 24 hours for manual for each metric. CLECs  
16      also seek measurement of how quickly BellSouth would change billing rates from  
17      special access to EELs, proposing a standard of 95% within 30 days from receipt  
18      of an error-free order. At the very least, a level of disaggregation to monitor  
19      EELs conversions should be measured in Tennessee as well.

20  
21  
22  
23   **Q.    WHAT LEVEL OF GEOGRAPHIC DISAGGREGATION DO CLECS**  
24   **SEEK?**

25   **A.**    CLECs only seek the metrics needed to protect their business plans and  
26    meaningful disaggregation to determine if discrimination exists. The geographic

1 disaggregation being sought is at the MSA (metropolitan statistical area) level  
2 because CLECs are concerned that if rural and urban, competitive and non-  
3 competitive areas of the state are combined, real disparities in performance will  
4 be hidden. CLECs do not have the retail data to determine when geographical  
5 disaggregation makes a difference and when it does not. If BellSouth believes  
6 that disaggregation by MSA is meaningless, it should supply the data for a period  
7 of time to show this, or it should have an unbiased third-party analyze the  
8 relationship of performance to geographic location.

9  
10 In the New York Third Party OSS test, KPMG recommended the disaggregation  
11 for Special Services for metropolitan New York City from upstate New York  
12 because KPMG's study of the data showed differences in performance between  
13 Manhattan's highly competitive market and the rest of the state.<sup>5</sup> POTs services  
14 already were disaggregated into five areas in New York for retail performance  
15 reporting and the same areas were adopted for wholesale POTS (resale and UNE-  
16 Platform) reporting. Such disaggregation is vital for provisioning and  
17 maintenance metrics. The Commission should focus on whether the  
18 disaggregation requested serves a purpose in making apples-to-apples  
19 comparisons of services that compete with each other or products with similar  
20 standard intervals.

21  

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<sup>5</sup> "In general, the metrics may be too aggregated, especially with regard to geography. The New York City area appears to get a different level of service than other parts of the state, and CLECs have their business concentrated in this area. The result can be that BA-NY is in parity overall, but out of parity region by region or vice versa." KPMG Consulting's New York final report released August 6, 1999, p. POP8 IV-20.

1 There is another consideration: The CLECS do not want to have BellSouth use excessive  
2 aggregation against them in a 271 proceeding by explaining that it is missing average  
3 interval metrics repeatedly because of differences in order mix as compared to CLECs.  
4 This concern is not conjecture on the CLECs' part, but is a fact learned from Verizon's  
5 two successful applications for 271 approval, where that ILEC claimed that failures of its  
6 average interval metrics were due to differences in (1) order mix (CLECs were ordering  
7 more four-day interval products and features and Verizon more one and two-day products  
8 and features) and (2) geography. Verizon provided independent studies of samples of its  
9 retail and wholesale service requests that the CLECs did not have time to analyze and  
10 offer counter studies.<sup>6</sup> Disaggregation will protect BellSouth from wrongly being  
11 wrongly accused of discrimination just as much as it will help CLECs detect real  
12 discrimination.

---

<sup>6</sup> Bell Atlantic had claimed that statistically significant failures in its Average Interval metric were the result of three issues. One of the issues concerned errors in excluding longer than standard interval requests. That issue now has been automated and eliminated, but the other two issues remain because of insufficient disaggregation. These issues are (1) for dispatch orders, CLECs are ordering a relatively larger share of services and UNEs that have long standard intervals (the "order mix" problem), and (2) for dispatch orders, CLECs are ordering a relatively larger share of services in certain geographic areas and, as a result, reflect later available due date (the "geographic mix" problem). In its CC DOCKET NO. 99-295 order approving Bell Atlantic New York's 271 application, released December 22, 1999, the FCC said: "In conjunction with its Average Completed Interval data, Bell Atlantic submits a study by Dr. Gertner and Dr. Bamberger (Gertner/Bamberger study) to support its claim that its Average Completed Interval data is flawed for these reasons. We note that although AT&T criticized some aspects of the Gertner/Bamberger study, no commenter disagrees with Bell Atlantic's assertions that its Average Completed Interval data is flawed. By submitting a study to substantiate its claims that the Average Completed Interval data is flawed, we note that Bell Atlantic's application is quite different from BellSouth's Louisiana II application. In that application, although BellSouth's data on its face consistently supported a general conclusion that BellSouth provided services to competing carriers' customers in twice the amount of time that it provided services to its retail customers, BellSouth offered no analysis or other evidence that purported to explain why these data might be flawed or to supplement BellSouth's showing on OSS provisioning." The Tennessee CLECs want to avoid this war of studies, and instead achieve like-to-like comparisons of geographic and order mix intervals in this proceeding.

1 The CLECs cannot believe that the disaggregation they request can be more demanding  
2 on computer processing and capacity<sup>7</sup> than the statistical testing down to the end office  
3 that BellSouth has elected to do. There must be multiple, possibly dozens of end offices  
4 in each MSA to examine. With the conduct of permutation testing on small sample sizes,  
5 BellSouth must be using way more capacity than the CLECs' further disaggregation  
6 proposals require. Perhaps if BellSouth only did its testing down to the MSA level it  
7 could accommodate CLECs' real needs for disaggregation and save computer costs.  
8 Further, in the Georgia Third Party OSS Test, KPMG found that BellSouth has the tools  
9 in place that enable it to store data in an adequate fashion and scale its data collection  
10 appropriately:

11 BLS has established procedures for monitoring its available  
12 storage capacity for online systems, including the  
13 legacy/source systems and the PMAP Systems as well as  
14 procedures for monitoring back up capacity for all systems.  
15 BLS has also established policies and procedures for  
16 acquiring additional capacity. BLS monitors available  
17 space on PMAP and can add additional within four weeks.  
18

19 *KPMG Consulting's Final Report issued March 20, 2001, VIII-A-7.* KPMG also noted  
20 that some of the databases that are part of the PMAP contain data that are not required for  
21 current reporting, which could be causing the problems that the CLECs have noted with  
22 the responsiveness of the PMAP website. In section VIII-A-5 of its report, KPMG said:

23 BLS populates the tables in Staging with snapshots of  
24 Barney data. These snapshots contain more data than is  
25 required for production of the current SQMs. The PMAP  
26 production team has been experiencing difficulty in  
27 creating these snapshots due to space limitations in Barney  
28 and is working on loading data directly into Staging  
29 without using Barney.

---

<sup>7</sup> BellSouth claims of excessive costs at a time when computer processing and database storage costs are declining dramatically.

1  
2 **VI. RETAIL ANALOGS**  
3

4 **Q. WHAT ARE THE SIGNIFICANCE OF RETAIL ANALOGS?**

5  
6 A. A retail analog is a service or function that BellSouth provides for itself, its  
7 customers or its affiliates that is analogous to a service or function that BellSouth  
8 provides to CLECs. When a BellSouth retail analog exists, BellSouth's  
9 performance for itself, its customers and its affiliates should be compared to its  
10 performance for CLECs to determine if BellSouth is meeting the Act's parity  
11 requirement. It is appropriate to choose a retail analog that is similar to the service  
12 or product being measured.

13 **Q. WHAT SHOULD THE AUTHORITY DO WHEN NO RETAIL ANALOG**  
14 **EXISTS?**

15 A. If no retail analog exists, BellSouth's performance must be gauged by a  
16 performance standard, known as a benchmark. A benchmark is a set level of  
17 performance, such as provisioning a particular UNE 95% of the time within three  
18 days.

19  
20 Benchmarks should be based on the level of performance that can be expected to  
21 offer an efficient carrier a meaningful opportunity to compete. Benchmarks  
22 cannot be based simply on BellSouth's historical performance. The fact that  
23 BellSouth has provided a certain level of service to CLECs in the past does not  
24 mean that level of service provides CLECs a meaningful opportunity to compete  
25 or to even meet Tennessee's end user standard. It is appropriate to choose a retail  
26 analog that is similar to the service or product being measured.

1           **VI. CONTINUING WORK**

2   **Q. HOW CAN THE TRA FINISH THE WORK IN THIS DOCKET?**

3   A.   In addition to ruling on whether the proposed new metrics, standards and business  
4       rule changes proposed by the CLECs, the TRA should establish a process for  
5       working out business rules between BellSouth and CLECs to provide the detailed  
6       give and take needed to propose a metric that addresses the CLECs needs and  
7       BellSouth's systems and processes. The metrics on Percent CLEC vs. BellSouth  
8       Changes Made and Response Commitments Met metrics are examples of those  
9       that could be better constructed if the TRA orders BellSouth to implement them  
10      but work out the business rules collaboratively with CLECs. The Authority  
11      needs to establish a forum going forward that will continue to review and refine  
12      the metrics based on competitive experiences in the BellSouth region. New York  
13      and Texas have put a lot of effort into improving metrics, adding new ones and  
14      deleting ineffective ones post-271 approval. They also had administrative law  
15      judges sitting in on their pre-271 metric collaboratives to ensure that the ILEC

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<sup>8</sup> In the FCC's December 22, 1999, order approving Verizon-NY's 271 application, the FCC said: "A number of state commissions, including New York, have established a collaborative process through which they have developed, in conjunction with the incumbent and competing carriers, a set of measures, or metrics, for reporting of performance in various areas. Through such collaborative processes, New York has also adopted performance standards for certain functions, typically where there can be no comparable measure based on the incumbent LEC's retail performance. We strongly encourage this type of process, because it allows the technical details that determine how the metrics are defined and measured to be worked out with the participation of all concerned parties. We also strongly support the efforts of state commissions to build and oversee a process that ensures the development of local competition that Congress intended. An extensive and rigorous evaluation of the BOC's performance by the states provides greater certainty that barriers to competition have been eliminated and the local markets in a state are open to competition." *In re: Application by Bell Atlantic New York for Authorization Under Section 271 of the Communication Act to Provide In-Region, InterLATA Service in New York*, CC Docket No. 99-295, Memorandum Opinion and Order ¶ 54 (released Dec. 22, 1999).

1 made an effort toward satisfying CLEC requests. The TRA must acknowledge  
2 that monitoring and adjusting is crucial to ensuring compliance with the Act.  
3

4 **Q. FROM TIME TO TIME, SHOULD THE AUTHORITY REVIEW THE**  
5 **METRICS IT ADOPTS?**  
6

7 A. Yes. It is fair to say that the area of performance measurements still is evolving.  
8 In some cases, for example, BellSouth may (and should) develop new  
9 functionalities that will need to be measured. For instance, CLECs need timely  
10 billing completion notices, which notify an CLEC that BellSouth's billing system  
11 has been adjusted to account for the customer migrating to the CLEC, so the  
12 CLEC may begin billing its customers, sending fulfillment information and  
13 addressing any problems or issues its customer encounters. If the orders  
14 BellSouth to provide billing completion notices, then a metric should be adopted  
15 (or an existing metric expanded) to measure BellSouth's performance in this area.  
16 This is different from annual audits, which focus on whether the metric is being  
17 reported properly with accurate coding of exclusions and adherence to reporting  
18 guidelines. Metric and remedies plan review is designed to determine if metrics  
19 and remedies are sufficient as they are or require additions, deletions or  
20 modifications to promote competition. The scope of the review should include all  
21 existing metrics.

---

<sup>9</sup> In its Docket No. 7892-U order on reconsideration and clarification of its performance measurements and remedy decision, the Georgia Commission found said: "The Commission Staff has reviewed the Pre-Ordering data from the Third-Party Test and a January 16<sup>th</sup> filing by KPMG on this issue and agrees that additional time for security measures and computer translations needed to process pre-order inquiries from CLECs are appropriate. Therefore the Commission orders Parity + 2 Seconds as the Retail Analog for Pre-Order responses."



1  
2 **Q. SHOULD AUDITS BE REQUIRED?**

3  
4 A. Yes. Comprehensive annual audits of reporting methodology and accuracy of  
5 data (particularly employee use of codes that could lead to exclusion of data from  
6 metrics) are required. In addition, BellSouth's adherence to metric change control  
7 policies should be reviewed as the lack of follow-through on such policies would  
8 thwart the replication of past metric reports. The audit would cover all reporting  
9 procedures and reportable data. It would include all systems, processes and  
10 procedures associated with the production and reporting of performance  
11 measurement results.  
12

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<sup>10</sup> "In general, the metrics may be too aggregated, especially with regard to geography. The New York City area appears to get a different level of service than other parts of the state, and CLECs have their business concentrated in this area. The result can be that BA-NY is in parity overall, but out of parity region by region or vice versa." KPMG Consulting's New York final report released August 6, 1999, p. POP8 IV-20.

<sup>11</sup> Bell Atlantic had claimed that statistically significant failures in its Average Interval metrics were the result of three issues. One of the issues concerned errors in excluding longer than standard interval requests. That issue now has been automated and eliminated, but the other two issues remain because of insufficient disaggregation. These issues are (1) for dispatch orders, CLECs are ordering a relatively larger share of services and UNEs that have long standard intervals (the "order mix" problem), and (2) for dispatch orders, CLECs are ordering a relatively larger share of services in certain geographic areas and, as a result, reflect later available due date (the "geographic mix" problem). In its CC DOCKET NO. 99-295 order approving Bell Atlantic New York's 271 application, released December 22, 1999, the FCC said: "In conjunction with its Average Completed Interval data, Bell Atlantic submits a study by Dr. Gertner and Dr. Bamberger (Gertner/Bamberger study) to support its claim that its Average Completed Interval data is flawed for these reasons. We note that although AT&T criticized some aspects of the Gertner/Bamberger study, no commenter disagrees with Bell Atlantic's assertions that its Average Completed Interval data is flawed. By submitting a study to substantiate its claims that the Average Completed Interval data is flawed, we note that Bell Atlantic's application is quite different from BellSouth's Louisiana II application. In that application, although BellSouth's data on its face consistently supported a general conclusion that BellSouth provided services to competing carriers' customers in twice the amount of time that it provided services to its retail customers, BellSouth offered no analysis or other evidence that purported to explain why these data might be flawed or to supplement BellSouth's showing on OSS provisioning." The Kentucky CLECs want to avoid this war of studies, and instead achieve like-to-like comparisons of geographic and order mix intervals in this proceeding.

<sup>12</sup> BellSouth claims of excessive costs at a time when computer processing and database storage costs are declining dramatically. See Oracle press release attached

1 It is fair to say that the area of performance measurements still is evolving. In  
2 some cases, for example, BellSouth may (and should) develop new functionalities  
3 that will need to be measured. For instance, CLECs need timely billing  
4 completion notices, which notify a CLEC that BellSouth's billing system has been  
5 adjusted to account for the customer migrating to the CLEC, so the CLEC may  
6 begin billing its customers, sending fulfillment information and addressing any  
7 problems or issues its customer encounters. If the Commission orders BellSouth  
8 to provide billing completion notices, then a metric should be adopted (or an  
9 existing metric expanded) to measure BellSouth's performance in this area. This  
10 is different from annual audits, which focus on whether the metric is being  
11 reported properly with accurate coding of exclusions and adherence to reporting  
12 guidelines. The metric and remedies plan review is designed to determine if  
13 metrics and remedies are sufficient as they are or require additions, deletions or  
14 modifications to promote competition. The scope of the review should include all  
15 existing metrics, rules, calculations, disaggregation and standards; the need for  
16 new metrics; the need to eliminate or revise useless metrics; and the adequacy of  
17 the current remedy plan. CLEC market experience will continue to grow and  
18 indicate whether adjustments to the remedy plan and metrics are needed.

19  
20 Other states have set six-month reviews of metrics. The New York Carrier-to-  
21 Carrier Working Group continues to meet monthly, developing a report on  
22 consensus and non-consensus items to be referred to the commission,  
23 accompanied by an Administrative Law Judge recommendation, for a vote.

1 Although ILECs often dispute new measures or changes, claiming that Verizon-  
2 NY and SBC-Texas received 271 approval without them, both Texas and New  
3 York have added new metrics, modified standards, and taken other actions post-  
4 271 approval. Vigilance is required to ensure that metric and remedy systems are  
5 appropriate to open local markets in the first place as well as prevent backsliding  
6 after 271 approval when the TRA and FCC get to that point for Tennessee.

7  
8 **Q: HOW OFTEN SHOULD SUCH AUDITS BE CONDUCTED, AND HOW**  
9 **SHOULD THE AUDIT SCOPE BE DETERMINED?**

10  
11 A. A comprehensive audit should be conducted every twelve months, with the first  
12 such audit commencing twelve months after the conclusion of the KPMG OSS  
13 Test's metric replication. The audit scope should be determined in an audit  
14 process that is open to CLECs.

15  
16 **Q. WHO SHOULD BE REQUIRED TO PAY AUDIT COSTS?**

17  
18 A. Costs for these annual audits should be borne by BellSouth. BellSouth is the  
19 dominant market provider with the incentive and ability to discriminate. To  
20 ensure that BellSouth's reporting is accurate and trigger remedies designed to  
21 curb its incentives to discriminate, comprehensive annual audits are critical. The  
22 FCC's order approving Verizon's 271 application to enter the New York long-  
23 distance market noted that an important characteristic of Verizon's Amended  
24 Performance Assurance Plan was "reasonable assurances that the reported data is  
25 accurate." *In re: Application by Bell Atlantic New York for Authorization Under*  
26 *Section 271 of the Communication Act to Provide In-Region, InterLATA Service*

1        *in New York*, CC Docket No. 99-295, Memorandum Opinion and Order ¶ 433  
2        (rel. Dec. 22, 1999). This assurance should come at the incumbent's expense.

3  
4        **Q.     WHO SHOULD SELECT THE THIRD-PARTY AUDITOR?**

5  
6        A.     The third-party auditor should be jointly selected by BellSouth and the CLECs. If  
7        the parties cannot agree on the auditor, the Commission should determine the  
8        auditor.

9  
10       **Q.     SHOULD A CLP HAVE THE RIGHT TO REQUEST AN INTERIM OR**  
11       **MINI-AUDIT?**

12  
13       A.     Yes. In addition to an annual audit, CLECs should have the right to mini-audits of  
14       individual performance measures/submeasures during the year. When a CLEC has  
15       reason to believe the data collected for a measure is flawed or the reporting criteria  
16       for the measure is not being adhered to, it should have the right to have a mini-  
17       audit performed on the specific measure/sub-measure upon written request  
18       (including e-mail), which will include the designation of a CLEC representative to  
19       engage in discussions with BellSouth about the requested mini-audit. If, thirty  
20       days after the CLEC's written request, the CLEC believes that the issue has not  
21       been resolved to its satisfaction, the CLEC should be able to commence the mini-  
22       audit upon providing BellSouth with five business days advance written notice.  
23       Each CLEC would be limited to auditing three single measures/sub-measures or  
24       one domain area (preorder, ordering, provisioning, maintenance or billing) during  
25       the audit year. The audit year would begin with the start of the OSS test (or an  
26       annual audit). Mini-audits could be requested for months including and  
27       subsequent to the month in which the KPMG OSS or an annual audit was initiated.

1 Mini-audits could not be requested by a CLEC while the OSS third party test or an  
2 annual audit was being conducted (that is, before completion).

3  
4 Mini-audits would include all systems, processes and procedures associated with  
5 the production and reporting of performance measurement results for the audited  
6 measure/sub-measure. Mini-audits would include two months of data. All parties  
7 agree that raw data supporting the performance measurement results will be  
8 available monthly to CLECs.

9  
10 No more than three mini-audits would be conducted simultaneously unless more  
11 than one CLEC wanted the same measure/sub-measure audited at the same time,  
12 in which case mini-audits of the same measure/sub-measure should count as one  
13 mini-audit for this purpose. Mini-audits would be conducted by a third-party  
14 auditor, selected by the same method as described above. BellSouth would pay  
15 for fifty percent of the costs of the mini-audits. The other fifty percent of the  
16 costs will be divided among the CLEC(s) requesting the mini-audit unless  
17 BellSouth is found to be “materially” misreporting or misrepresenting data or to  
18 have non-compliant procedures, in which case, BellSouth would pay for the entire  
19 cost of the third party auditor. BellSouth would be “materially” at fault if a  
20 reported successful measure changed as a consequence of the audit to a missed  
21 measure, or if there was a change from an ordinary missed measure to  
22 intermediate or severe. Each party to the mini-audit should bear its own internal

1 costs, regardless of which party ultimately bears the costs of the third party  
2 auditor.

3  
4 If, during a mini-audit, it was found that for more than thirty percent of the  
5 measures in a major service category BellSouth was “materially” at fault (that is,  
6 a reported successful measure changes as a consequence of the audit to a missed  
7 measure, or there was a change from an ordinary missed measure to intermediate  
8 or severe), the entire service category would be re-audited at BellSouth’s expense.

9 The major service categories for this purpose would be:

- 10 • Pre-Ordering/Ordering
- 11 • Billing
- 12 • Provisioning - POTS and UNE Loop and Port Combinations
- 13 • Provisioning - Resale Specials and UNE Loop and Port
- 14 Combinations
- 15 • Provisioning - Unbundled Network Elements
- 16 • Maintenance - POTS and UNE Loop and Port Combinations
- 17 • Maintenance - Resale Specials and UNE Loop and Port
- 18 Combinations
- 19 • Maintenance - Unbundled Network Elements
- 20 • Interconnection Trunks
- 21 • Local Number Portability
- 22 • Database - 911
- 23 • Database - Directory Assistance
- 24 • Database - NXX
- 25 • Collocation
- 26 • Coordinated Conversions

27  
28 Each mini-audit should be submitted to the CLEC involved and to the Commission  
29 as a proprietary document. BellSouth should provide notification to all CLECs of  
30 any mini-audit requested when the request for the audit is made.

1 **Q. SHOULD BELLSOUTH BE REQUIRED TO PROVIDE THE RAW DATA**  
2 **UPON WHICH ITS PERFORMANCE REPORTS ARE BASED ?**  
3

4 A. Yes. Although BellSouth provides raw data for several measures today, in  
5 other cases, such as LNP measures, it does not. Further, in other cases  
6 BellSouth provides raw data, but not in a manner that allows its meaningful  
7 use by the CLEC. For example, while BellSouth provides raw data for its  
8 hot cut timeliness measure, it does not provide the Purchase Order Number  
9 so that a CLEC can compare its own data to that reported by BellSouth to  
10 validate the accuracy of BellSouth's reports. Finally, other raw data is  
11 flawed and thus cannot be used for its intended purposes of validating  
12 BellSouth's performance reports. For example, the raw data for the FOC and  
13 rejection measures includes null values and calculated duration intervals.

14 **VIII. BELLSOUTH'S PMAP**

15  
16 **Q. DO CLECS HAVE PROBLEMS OPERATING PMAP TO OBTAIN**  
17 **REPORTS?**  
18

19 A. Yes. BellSouth only allows one metric report to be pulled at a time. To pull all  
20 the metrics related to WorldCom's UNE-P launch in Georgia took hours of  
21 attention as a CLEC cannot even check off the multiple metrics the CLEC wants  
22 in a report and then go away to let a full report download. This process is slow  
23 and tedious, as the data analyst must type in instructions for each metrics as  
24 reports are downloaded. A CLEC cannot get anything remotely near the FCC  
25 format filed with BellSouth's application that has all the metrics together and  
26 what standards of performance apply.  
27

1           **IX.     HOT CUTS**

2   **Q.     IS BELLSOUTH’S HOT CUT METRIC APPROPRIATE?**

3   A.     No. Also, BellSouth’s hot cut timeliness metric for hot cuts, unlike  
4           Verizon and SBC, does not determine whether the cut ended on time. It  
5           only measures whether the cutover started on time. Also, it only reports  
6           an average time per loop, not cut-specific information on the cutover.

7  
8           BellSouth’s Order Accuracy metric also does not describe the sampling  
9           number or process involved. CLECs cannot make a determination  
10          whether their types of orders are being sampled at levels that provide  
11          statistically valid results. This is a metric BellSouth often tries to eliminate  
12          when proposing permanent metrics, which leads to suspicions order  
13          accuracy is a problem area for BellSouth. It claims that billing accuracy  
14          does the same job, but the billing accuracy does not pick up all errors, only  
15          those that require a reduction in charges on the bill. And because  
16          BellSouth can delay adjustments to make billing performance look better  
17          than it really is, the billing metric needs to be augmented by the Billing  
18          Errors Corrected in X Days as proposed by the CLECs.

19  
20          BellSouth’s flow through metric only covers orders *designed* to flow  
21          through and has benchmarks different than those designated by Verizon  
22          and SBC for Designed Flow-Through metrics. A total flow through  
23          metric also is required, and BellSouth’s proposed Achieved Flow Through



1 benchmarks are more appropriate for total flow through. The New York  
2 Performance Assurance Plan applies a remedy if Verizon does not meet  
3 either an 80% flow through rate or a 95% Achieved Flow-Through Rate.<sup>4</sup>  
4 In fact, BellSouth's overall performance standards are low. While only a  
5 couple of metrics in the New York or Texas plans have benchmarks below  
6 95%, about 50% of the metrics imported from the Georgia decision—  
7 albeit much more than as originally proposed by BellSouth—have  
8 benchmarks lower than 95%.

9  
10 BellSouth's Change Control Notes and Documentation Timeliness metrics  
11 have unbelievably short intervals of 30 days, particularly compared to  
12 Verizon's 93 day (for business rule changes) and 66 days (for technical  
13 documentation) notice and documentation intervals.

#### 14 **X. AFFILIATES**

15  
16 **Q. UNDER WHAT CIRCUMSTANCES WOULD IT BE APPROPRIATE TO**  
17 **COMPARE BELL SOUTH'S PERFORMANCE TO ITS AFFILIATES WITH**  
18 **BELL SOUTH'S PERFORMANCE TO CLECs?**

19  
20 **A.** Any time BellSouth's affiliates resell BellSouth's retail services or buy the same  
21 types of interconnection services or UNEs, it is appropriate to compare the  
22 affiliate's treatment to the way BellSouth's competitors are treated. The Act  
23 requires BellSouth to provide interconnection with its network "that is at least  
24 equal in quality to that provided by [BellSouth] to itself or to any subsidiary,  
25 affiliate, or any other party to which [BellSouth] provides interconnection." Act, §  
26 251(c)(2)(C). The Act also requires BellSouth to provide nondiscriminatory

1 access to network elements. Act, § 251(c)(3). The FCC has interpreted this  
2 requirement to mean that the quality of a UNE and the quality of access to the  
3 UNE that an incumbent local exchange carrier provides to a requesting carrier  
4 must be the same for all requesting carriers. *See* 47 C.F.R. § 51.311(a).

5  
6 The FCC has confirmed that for Section 271 purposes, a Bell Operating  
7 Company must establish that for functions that it provides CLECs that are  
8 analogous to the functions it provides itself, the BOC must provide access that is  
9 substantially the same as the level of access the BOC provides to itself, its  
10 customers or its affiliates. *In re: Application by Bell Atlantic New York for*  
11 *Authorization Under Section 271 of the Communication Act to Provide In-Region,*  
12 *InterLATA Service in New York*, CC Docket No. 99-295, Memorandum Opinion  
13 and Order (rel Dec. 22, 1999), ¶ 44 (“Bell Atlantic New York Order”).

14  
15 **Q. HAVE OTHER STATES ADDRESSED THE ISSUE OF AFFILIATE**  
16 **REPORTING?**

17  
18 A. Yes. The Michigan Public Service Commission recently required SBC Ameritech to  
19 include comparisons to affiliate performance in its remedy plan.

20  
21 The Commission concludes that the comparison to service provided to  
22 Ameritech Michigan’s affiliates as well as service to its own retail  
23 customers should be part of the performance remedy plan. Section 251 of  
24 the FTA requires that Ameritech not provide inferior service to the CLECs  
25 as compared to its affiliates. It may be true that the matter could be  
26 addressed in another manner, but the Commission finds no persuasive  
27 reason for doing so. A comparison to the performance it provides its

1 affiliates or retail customers, whichever is better, shall therefore be part of  
2 the remedy plan approved by this order.<sup>13</sup>

3  
4 Earlier the Pennsylvania commission required such affiliate reporting and turned  
5 down Bell Atlantic's claim that such reporting should only be applied to CLP-like  
6 affiliates, which it did not even have:

7  
8 As noted by the ALJs, BA-PA does not have any affiliates  
9 operating under interconnection agreements; therefore, we find  
10 that BA-PA's definition actually provides for no reporting at all.  
11 This proceeding must provide this Commission, BA-PA, and the  
12 CLEC community with sufficient information upon which to  
13 objectively measure the delivery of non-discriminatory access to  
14 CLECs. In order for this metric to provide any meaningful  
15 measurement, it must include a broader definition than that  
16 proposed by BA-PA. We agree with the ALJs that it is essential  
17 that BA-PA report on the level of service it provides to its  
18 affiliates, and we shall adopt the recommendation of the ALJs on  
19 this issue. BA-PA shall report the service quality delivered to all  
20 BA-PA affiliates and subsidiaries (CLEC and non-CLEC) which  
21 order services, UNEs, or interconnection from BA-PA.<sup>14</sup>

22  
23 Pacific Bell and Verizon California (legacy GTE) have been voluntarily reporting  
24 all affiliate data for some time. The metric report structure for the California Joint  
25 Partial Settlement metrics lists under reporting structure for the various metrics  
26 "Individual CLECS, CLECs in the aggregate, By ILEC (if analog applies) and  
27 *ILEC affiliates*." (Emphasis added).

28  
29 BellSouth should include in its reporting all affiliates that buy interconnection or  
30 unbundled elements or that resell BellSouth's services. Such affiliates would

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<sup>13</sup> Case No. U-11830, In the matter of Ameritech Michigan's submission on performance measures, reporting and benchmarks, pursuant to the October 2, 1998 order in Case No. U-11654, pp. 12-13.

<sup>14</sup> P-00991643, Joint petition of NEXTLINK Pennsylvania, Inc., RCN Telecommunications Services of Pennsylvania, Inc., Hyperion Telecommunication, Inc., ATX Telecommunications, Focal Communications Corporation of Pennsylvania, Inc., CTSI, Inc., MCI WorldCom, e.Spire Communications, and AT&T Communications of Pennsylvania, Inc., for an Order Establishing a Formal Investigation of Performance Standards, Remedies, and Operations Support Systems Testing for Bell Atlantic-Pennsylvania, p. 21.

1 include any future BellSouth long distance affiliate, to ensure it is not being given  
2 more favorable treatment than BellSouth's combined local and long distance  
3 competitors. Any affiliate, as affiliate is defined by the Communications Act,  
4 which buys services similar to those purchased by CLECs should be included.

5  
6  
7 **Q. IS IT REASONABLE FOR BELL SOUTH TO COMBINE ITS**  
8 **AFFILIATES' DATA WITH OTHER CLECs ?**  
9

10 A. Absolutely not. If the affiliate were receiving unlawfully preferred service, this  
11 would only serve as a thumb on the scale to make the treatment of the competitors  
12 look better as a whole than it actually is. See the quote from the New York PSC  
13 above. Further, in its response to the CLEC Coalition's motion for Clarification and  
14 Reconsideration in Georgia in Docket 7892-U, the Commission found that  
15 "BellSouth shall not include its Affiliate data in the remedy calculation as it applies  
16 to industry-level remedies."

17  
18  
19 **Q. ARE COMPARISONS OF PERFORMANCE TOWARD CLECS AND**  
20 **AFFILIATES IRRELEVANT FOR BENCHMARKS?**

21  
22 A. No. When an affiliate is created and starts ordering through the same systems and  
23 processes as the CLECs, this creates a retail analog where none existed before.  
24 While the ILEC itself never ordered collocations, or received FOCs or Rejects, its  
25 affiliate will order collocations and receive the same order status notices as the  
26 CLECs. Thus, where the affiliate is ordering the same types of services as the

1 CLECs, its activities can either be used for parity comparisons or to reset a  
2 benchmark to what might be more favorable intervals received by the affiliate.

3 **XI. AUDITS**

4 **IX. REMEDIES**

5 **Q. DOES THE TRA HAVE THE AUTHORITY TO ORDER A SELF-**  
6 **EXECUTING REMEDY PLAN?**

7 A. Yes. I am not a lawyer and I understand the question of legal authority was  
8 extensively briefed in the ITC^DeltaCom arbitration at the request of Director Malone. It  
9 seems clear to me that the Authority has the legal authority to order the implementation  
10 of a self-executing remedy plan under Section 251 of the Act, with or without  
11 BellSouth's consent. The TRA also has found that the Act gives it the authority to  
12 arbitrate and to consider performance measurements, standards and remedies in a generic  
13 proceeding. In moving (among other things) to adopt enforcement mechanisms in the  
14 ITC^DeltaCom arbitration, Director Greer explained at length why the TRA had the  
15 authority to do so. He noted that (i) BellSouth tariffs approved by the TRA contain self-  
16 effectuating performance measures and guarantees; (ii) the Department of Justice has  
17 concluded that the issue of performance guarantees should be resolved through contracts  
18 or regulatory proceedings; (iii) numerous courts have held that public service  
19 commissions may impose performance guarantees in interconnection agreements<sup>15</sup>; and  
20 (iv) the Act requires the TRA to arbitrate those issues brought before it. *In re Petition for*  
21 *Arbitration of ITC DeltaCom Communications, Inc. with BellSouth Telecommunications,*  
22 *Inc. Pursuant to the Telecommunications Act of 1996*, Docket No. 99-00430, Transcript  
23 at 7, 10-11 (April 4, 2000).

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As Director Greer stated, “[t]he Act, the FCC, and the DOJ have concluded that state commissions have the authority where the parties have not agreed to the terms of agreement to impose enforcement mechanisms as a vehicle to ensure that the telecommunications market is irreversibly open to competition in accordance with congress’s intent.” Transcript at 11-12. The TRA approved the motion unanimously.

Although the decision was issued in an arbitration proceeding, a public service commission’s authority to require self-executing remedies is not limited to that context. As Director Greer stated: “Performance measures provide the necessary information to determine if BellSouth is complying with these requirements [of Section 251(c) of the Act], and enforcement mechanisms encourage BellSouth to meet the requirements of Section 251.” Transcript at 14. He continued: “I find the Arbitrators should adopt performance measures with standards and benchmarks and enforcement mechanisms. These measurement mechanisms should remain in effect until this Authority conducts a generic proceeding to adopt permanent performance measurements with standards and enforcement mechanisms applicable to all CLECs.” *Id.*

The Commission has the legal authority to order the implementation of a self-executing remedy plan under the Act, with or without BellSouth’s consent. By enacting the Federal Telecommunications Act of 1996, Congress mandated the

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<sup>15</sup> See, e.g., *U S West Communications, Inc. v. TCG Oregon*, 31 F. Supp.2d 828 (D. Ore. 1998).

1 opening of local telecommunications markets to competition. Specifically, ILECs  
2 like BellSouth are obligated, among other things, “to provide, to any requesting  
3 telecommunications carrier for the provision of a telecommunications service,  
4 nondiscriminatory access to network elements on an unbundled basis. . .” (47  
5 U.S.C. §251(c)(3)). The Commission has oversight authority to ensure that ILECs,  
6 including BellSouth, provide nondiscriminatory access to their OSS pursuant to  
7 Section 251. As the Pennsylvania Commission found “[t]his Commission’s  
8 implementation of performance measures and standards is a legitimate exercise of  
9 the Commission’s authority to ensure that BA-PA fulfills its Section 251  
10 obligations.” *Joint Petition of NEXTLINK Pennsylvania, Inc., RCN*  
11 *Telecommunications Services of Pennsylvania, Inc., Hyperion*  
12 *Telecommunications, Inc., ATX Telecommunications, Focal Communications*  
13 *Corporation of Pennsylvania, Inc., CTSI, Inc., MCI WorldCom, e.spire*  
14 *Communications, and AT&T Communications of Pennsylvania, Inc., for an Order*  
15 *Establishing Performance Standards, Remedies, and Operations Support Systems*  
16 *Testing for Bell Atlantic-Pennsylvania, Inc., Opinion and Order, Docket No. P-*  
17 *00991643, December 31, 1999. (Pennsylvania Order) The South Carolina*  
18 *Commission has the authority to enforce Section 251 and adoption of a self-*  
19 *executing remedies plan is simply an enforcement technique.*

20 **Q. IS BELLSOUTH’S REMEDY PLAN ADEQUATE?**

21 **A.** No. BellSouth’s per occurrence remedy plan and proposed parameter delta of 1

1 will ensure that remedies remain low even as competition is deterred. WorldCom  
2 supports AT&T witness Cheryl Bursh's objections as expressed in her pre-filed  
3 testimony to the plan and alternative proposal.

4 **Q. DO YO HAVE ANY COMMENTS ABOUT THE BELL SOUTH REMEDY**  
5 **PLAN IN ADDITION TO YOUR SUPPORT OF MS. BURSH'S**  
6 **TESTIMONY?**

7 A. BellSouth's proposal is markedly different from the New York, Texas and  
8 California plans that have a fixed critical value for determining whether parity  
9 exists for all sample sizes. While these plans have forgiveness tables for random  
10 variation, the delta proposed by BellSouth would go beyond those forgivenesses  
11 for a set number of metric failures and provide a wide range of discrimination to  
12 continue without requiring even its minimum per occurrence payments. The = .25  
13 delta adopted by the TRA in the ITC^DeltaCom arbitration provides adequate  
14 forgiveness to BellSouth for performance variations that might not be  
15 competitively significant without setting a high degree of allowed discrimination.

17

18 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

19 A. Yes.

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<sup>16</sup> In addition, the data supplied by BellSouth only contained three modes of entry, yet BellSouth proposes to pay remedies on five modes of entry.

<sup>17</sup> In an ex parte filed with the FCC on June 7, 2000 AT&T proposed a formula for the development of a parameter value for proportions:  $\text{delta} = 2(\arcsin(\sqrt{p\text{CLEC}})) = \arcsin(\sqrt{p\text{ILEC}}))$ .



BellSouth Measurement	Business Rules, Exclusions, Calculations and Standards in Need of Immediate Change <sup>1</sup>
OSS-1. Average Response Time and Response Interval (Pre-Ordering)	<p>Definition: The measurement time should begin when BellSouth receives the query from the CLEC and should end when BellSouth returns a response to the CLEC interface. BellSouth should be accountable for the period of time in which the query and its response are in its possession. Measuring a part of the process, as BellSouth does currently, provides inadequate and misleading information that does not reflect the CLEC experience or BellSouth's performance. The Commission should adopt a definition like that in the Texas plan, which states: "The clock starts on the date/time when the request is received by SWBT, and the clock stops on the date/time when SWBT has completed the transmission of the response to the CLEC."</p> <p>Business Rules: (1) BellSouth should exclude syntactically incorrect queries from the measure. The query type measurements should show how long it takes to return valid query information that is useful to the CLEC. Responses to invalid queries could come more quickly than a response to a valid query, thus diluting the results in terms of how quickly CLECs receive the information sought through a syntactically correct query. (2) BellSouth should not be allowed to drag its feet in measuring new query types and new interfaces. It should agree to report on such new queries and interfaces within six to eight weeks after they go into production. BellSouth will be well aware of a new query or interface coming on line long before that interface or query type goes into production for CLECs, so the timeline proposed is more than generous.</p> <p>Disaggregation: BellSouth must capture all interfaces used, including PSIMS, and it must measure the speed of rejected queries and the number of queries receiving time outs to capture all preorder response time issues of concern to CLECs. Numerous time outs and slow rejects, as well as the speed of other query responses, can add up and cause a customers to become frustrated while the CLEC is trying to sign them up to new service.</p>
OSS-2. Interface Availability (Pre-Ordering)	<p>Data Retained: BellSouth should be required to post its own scheduled hours of OSS availability on its web-site as it currently does for CLEC OSS availability. Parity of scheduled availability cannot be determined without this information. If CLECs do not know the starting point of this measure, the usefulness of the % schedule met is limited.</p>
OSS-3. Interface Availability (Maintenance & Repair)	<p>Disaggregation: BellSouth needs to disaggregate by all its OSS Systems, including those proposed by CLECs in the task force report. If any route to that OSS varies, then each interface route should be reported separately.</p>

<sup>1</sup> Although some specific concerns about disaggregation and benchmarks are raised here, the full level of disaggregation and detailed information on analogs and benchmarks are described in other of my exhibits.

	<p>Data Retention: BellSouth should be required to post its own scheduled hours of OSS availability on its web-site as it currently does for CLEC OSS availability. Parity of scheduled availability cannot be determined without this information. Without such understanding of the starting point of this measure, the usefulness of the % schedule met is limited. BST also must not do system maintenance more often in CLEC prime operational hours: 5 to 9 p.m. versus its own prime hours: 9 to 5 p.m.</p>
<p>OP-1. Percent Flow-through Service Requests (Summary)  OP-2. Percent Flow-through Service Requests (Detail)  OP-3. Flow-through Error Analysis</p>	<p>Exclusions: BellSouth's SQM should not exclude orders that fall to manual, through no fault of the CLEC, from the metric. It may measure whether the orders it has designed to flow through actually do, but it should also show the whole story on what orders have not yet been designed to flow through. The purpose of this measure should be to measure the percent flow-through capability of BellSouth's ordering systems. CLECs cannot improve the flow-through of error free orders, only BellSouth can. Therefore, it should be held accountable for its decision not to provide flow-through. Further, BellSouth is obligated to provide parity service. As it has provided no evidence that such orders fall out for manual processing for its retail operation, it should not be allowed to exclude such orders from its flow-through calculation for CLECs.</p> <p>In addition to the current level of discrimination, another consequence of allowing this exclusion is that BellSouth has no incentive, perhaps even a disincentive to improve its performance. Yet it is clear that the lack of flow-through causes additional delays, errors and costs. For example, FOC intervals are much longer for partially mechanized orders. It is also undisputed that having to re-key an order delays it and re-keying or otherwise manually handling an order increases the risk of error, which either causes the order to reject, creating more delay, or perhaps even to be provisioned incorrectly. CLECs request that the Commission reject this unjustified and discriminatory exclusion. At a minimum, the Commission should establish a timely sunset provision<sup>2</sup> on this exclusion to cause BellSouth to improve its flow-through performance. Fall out from errors occurring in SOCS should be included in the metrics, as should all fall out resulting from BST system issues. See Birch testimony.</p> <p>Additionally, BellSouth does not provide this report for LNP LSRs.</p> <p>Benchmark: BellSouth's benchmarks may be appropriate if total flow through is being measured, but if only orders designed to flow through as BellSouth currently proposes are counted then the benchmark should be a strict 98%. CLECs propose that both total and achieved/designed flow through performance should be measured.</p>

<sup>2</sup> See Appendix H of the New York Inter-Carrier Service Quality Guidelines which sets forth a schedule of activities required to improve flow-through.

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<p>OP-4 Percent Rejected Service Requests</p>	<p>Business Rules: BellSouth must identify all errors in orders in parallel, rather than catching and sending back each error one at a time. BellSouth's current serial process of rejecting orders extends the time for CLECs finally getting an order accepted. With BellSouth's long intervals for partially mechanized orders, repeated rejects can easily push out the due date for an order beyond the customer's toleration level. With numerous business rule changes and system update changes to learn, CLECs are apt to make mistakes. For them to quickly learn new rules a rapid rejection response catching all errors at once can speed up the CLEC's learning to avoid such errors in the future.</p>
<p>OP-5. Reject Interval</p>	<p>Business Rules: BellSouth's business rules and formula should be changed to require BellSouth to calculate this measure as follows. The measured interval should end upon delivery by BellSouth of a response to the CLEC interface. BellSouth should measure the entire interval up to the point that it returns the rejected LSR to the CLEC. BellSouth should be accountable for the time in which the rejection is in its possession. The Texas plan states as the end of its interval "the time the reject notice is <i>provided to EDI</i> (or LEX) and is <i>available</i> to the CLEC."</p> <p>BellSouth's SQM indicates that it uses the date/time stamp in LEO for mechanized orders. CLECs request that it be required to use the date/time stamp from the interface (LENs/TAG/EDI) as it does for the beginning of the interval. There is no justification for stopping short of delivery to the CLEC. For non-mechanized orders, BellSouth indicates that it is using LON, its order tracking system for non-mechanized orders. Again, BellSouth provides no justification and the CLECs request that BellSouth be required to use the actual stop time from the fax server as it uses the date/time stamp from the fax for the receipt of the order.</p> <p>Further, when a CLEC uses multiple OSS interfaces the reject interval should be measured for each one. Different interfaces can produce different rejection intervals, and disaggregated monitoring of such differences are needed.</p> <p>Standard: BellSouth's intervals for partially mechanized orders are too long. Such rejections should be received in 5 hours not 48. Totally manual orders may have a longer, 24 hour, intervals. These intervals should include trunks. BellSouth's proposed trunk rejection intervals—4 days—are too long to wait to learn that its order had not even been initiated yet.</p>
<p>OP-6. Firm Order Confirmation Timeliness</p>	<p>Business Rules: BellSouth's business rules and formula should be changed to require BellSouth to calculate this measure as follows: The measured interval should end upon delivery by BellSouth of a response to the CLEC interface. BellSouth should be accountable for the time in which the FOC is in its possession, and should be required to measure its performance as described in the Texas performance measures plan, which states "the end date and time is <b>recorded by</b> (both LEX and) <b>EDI</b> and reflect the actual date and time the FOC is <b>available</b> to</p>

the CLEC.”

BellSouth's SQM indicates that it uses the date/time stamp in LEO for mechanized orders. CLECs request that it be required to use the date/time stamp from the interface (LENs/TAG/EDI) as it does for the beginning of the interval. There is no justification for stopping short of delivery to the CLEC. For non-mechanized orders, BellSouth indicates that it is using LON, its order tracking system for non-mechanized orders. Again, BellSouth provides no justification and the CLECs request that BellSouth be required to use the actual stop time from the fax server as it uses the date/time stamp from the fax for the receipt of the order.

Also, if CLECs order inbound BellSouth to CLEC trunks through ASRs, the confirmation of those ASRs should be included in this metric. CLECs also have proposed a separate measure to capture how quickly BellSouth responds to inbound trunk requests whether made through ASRs to which BellSouth sends a confirmation or by a Trunk Group Service Request to which BellSouth responds by sending an ASR. Either as part of the confirmation or a separate metric, measurement of the time it takes BellSouth to respond is critical to monitor. CLECs often wait long times for ILECs to send the ASRs when capacity is inadequate to carry calls from ILEC customers to CLEC customers. CLECs seek to have adequate inbound trunk capacity in place before adding new customers that would cause blocking for new and existing customers. Current trunking measurements do not capture this missing response time on inbound trunks.

BellSouth also should confirm facilities availability for all orders, not just trunks, before issuing a confirmation. If CLECs cannot depend on the due date given them then confirmations are useless. Too often in BellSouth territory CLECs receive confirmations immediately followed by notice that the order is being held for facilities. Facilities checks should be a standard requirement for all orders.

Disaggregation: BellSouth needs to disaggregate reporting by electronic, partially electronic and manual and by volume category if confirmation times differ by the size of the order. It also should disaggregate by any order activity (dispatch and non-dispatch, for example) that would be subject to different standard intervals for confirmations.

Standards: While BellSouth and CLECs agree the interval for confirmation of fully mechanized or flow through orders, BellSouth has proposed extremely long intervals for confirming partially mechanized and trunk orders. BellSouth should establish intervals of five hours for partially mechanized orders, similar to the intervals agreed to by SBC's Pacific Bell and Ameritech affiliates. SWBT has a five hour confirmation interval for all electronic orders. Manual orders, including trunk orders should be confirmed in 24 hours.

<p>OP-7 Speed of Answer (Ordering Center)</p>	<p>Disaggregation: The reports should be by each help desk center the CLECs call into as each may have different answering times.</p> <p>Benchmark: The CLEC recommend a response time of 95% in 20 seconds and 100% in 30 seconds. In no case should the standard be worse than the state's end user standard of 90% in 20 seconds for BellSouth's business and residence centers. These standards would require conversion of the metric to % in X seconds metric. If the Commission retains the measurement as an average, then the standards would need to be adjusted accordingly. CLECs need to get assistance from a representative quickly when calling with an ordering, provisioning or maintenance problem. Often a single call will be about a problem holding up numerous, not just a single order from being completed..</p>
<p>OP-8 Mean Held Order Interval and Distribution Intervals</p>	<p>Exclusions: BellSouth must not be allowed to exclude cancelled orders from these metrics. Often this will make performance look better than it is as CLECs cancel orders when it appears that BellSouth will not have the facilities to fill those orders for months. Further, customers may request cancellations themselves if the CLEC cannot tell them how long they have to wait for their order to be completed. If cancelled orders are excluded, the metric will not show the real story of how often CLEC orders are held for facilities or other reasons.</p> <p>Disaggregation: CLECs need to see how many orders are held by all products, including the various xDSL-capable loops with and without conditioning, line-sharing and splitting requests, etc. The results should also be disaggregated by the reason for the hold: "facilities," "load," and "other" at the very least.</p>
<p>OP-9 Average Jeopardy Notice Interval</p> <p>Percentage of Orders Given Jeopardy Notices</p>	<p>Exclusions: Cancelled orders should not be excluded from the measure. CLECs need to see all the orders receiving jeopardies, particularly those that may lead to a cancellation if the delivery date is going to be missed.</p> <p>BellSouth should be required to remove its exclusion of orders submitted to BellSouth through non-mechanized methods. The Commission should not allow BellSouth to discriminate against CLECs who place orders via non-mechanized means.</p> <p>Information regarding jeopardy situations for non-mechanized orders is just as critical to the CLEC and its customers as it is for mechanized orders. Further, in some cases, for example, xDSL services and enhanced extended loops (EELs), CLECs have no choice but to use non-mechanized ordering. Finally, BellSouth provides this information for other status measures such as FOCs and rejection notices. The Commission should require BellSouth to provide jeopardy notices, regardless of the means of ordering, and to report its performance accordingly.</p> <p>Business Rules: The elapsed time should continue through weekends and holidays to capture the full length of the notice interval.</p>

	<p>CLECs need to have an equivalent opportunity to plan with customers for situations where an order appears to be in jeopardy as does BellSouth. Therefore, if any BellSouth representative can check on the status of the order, then CLECs need access to that same information sent through electronic or manual notices as requested.</p> <p>Calculation: The calculation should be based on the orders placed in jeopardy not just those orders sent jeopardy notices. To calculate the metric as proposed by BellSouth would understate any problem in CLECs not receiving notices on orders that are going to be missed.</p>
OP-10 Percent Missed Installation Appointments	<p>Business Rules: Disconnect and From orders should be disaggregated and reported separately, rather than be excluded as BellSouth proposes. CLECs need to see that their requests to disconnect customers from service are timely as well. This will help avoid billing disputes with the terminated customer.</p> <p>This measure should be changed to include time, when time specific appointments are ordered by the CLEC. This measure should evaluate the level of service CLECs are paying for and to which BST is committing, i.e. if the appointment is time specific, the measurement should be time specific. The end time for xDSL orders should include successful continuity testing with the CLEC, particularly if the CLECs' proposed measure on acceptance testing is not adopted.</p> <p>For CLECs, the interval should end with the issuance of the completion notice. This is when the CLEC knows that the order is complete and fulfillment information can be sent to the customer and billing started. For BellSouth, the completion time is the time entered into BellSouth's OSS Systems or any other database from which representatives can obtain completion information.</p> <p>Disaggregation: CLECs need to see how many orders are held by all products, including the various xDSL-capable loops with and without conditioning, line-sharing and splitting requests, etc. BellSouth's July 2000 SQM seems to make some movement in this direction but only for Louisiana.</p>
OP-11. Average Completion Interval (OCI) Interval Distribution	<p>Business Rules: Disconnect and From as well as expedite orders should be disaggregated and reported separately, rather than be excluded as BellSouth proposes. These usually are very short intervals that can skew total results, but CLECs need to know the speed at which disconnect and expedite orders are being met.</p> <p>BellSouth should be required to modify its business rules and calculation to reflect the appropriate interval. The appropriate starting point for this measure is when BellSouth receives a valid LSR and the appropriate ending point is when a completion notice is sent to the CLEC. Both the New York and</p>

	<p>Texas performance measures plans begins this interval with the date that a valid service request is received, not when the order is entered into the SOC system as proposed by BellSouth. This would eliminate what could be considerable time from the interval, particularly for non-flow through orders.</p> <p>Disaggregation: Orders designated "pending facilities" should be a level of disaggregation, as well as the other proposed levels of disaggregation as described in my other exhibits. CLECs need to see if BellSouth's orders designated as pending facilities get completed at a faster pace than CLEC orders that were pending facilities.</p> <p>CLECs need to see disaggregation by the various xDSL-capable loops, line-sharing and splitting requests, etc. As mentioned above, information on whether these products also include conditioning should be a level of disaggregation. CLECs need to see if they are receiving line conditioning on orders in a non-discriminatory fashion.</p>
<p>OP-12. Average Completion Notice Interval</p>	<p>Exclusions: BellSouth should be required to remove its exclusion of non-mechanized orders. The Commission should not allow BellSouth to discriminate against CLECs who place orders via non-mechanized means. Information regarding completion of service orders for non-mechanized orders is just as critical to the CLEC and its customers as it is for mechanized orders. Further, in some cases, for example, xDSL services and enhanced extended loops (EELs), CLECs have no choice but to use non-mechanized ordering. Finally, BellSouth provides this information for other status measures such as confirmation and rejection notices. The Commission should require BellSouth to provide completion notices, regardless of the means of ordering, and to report its performance accordingly.</p> <p>Disconnections and From orders should be included in the measurement but reported separately to track performance,</p> <p>BellSouth should be required to modify its business rules and calculation formula to indicate the measured interval ends upon delivery by BellSouth of a notice of completion to the CLEC interface (LENS, EDI, or TAG) or, if manual, the date/time stamp from the fax machine or server. BellSouth should be accountable for the time in which the completion information is in its possession.</p> <p>BellSouth's current business rules have the ambiguous statement that "the end time is the time stamp the notice was submitted to the CLEC/BST system. CLECs request that the exact CLEC (not BST) system be identified as described above, so that, as in the Texas plan, the end interval measured is "the actual time (LEX) or <i>EDI received</i> the (SOC) notification and it is <i>available</i> to the client."</p> <p>Benchmark: Completion notices need to be delivered promptly after actual physical work completion so CLECs know when</p>

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	<p>they own new customers and must respond to their needs. If the retail analog selected operates at the interval stated by BellSouth in collaboratives (an hour to an hour and a half) that is acceptable but most completion notices need to be delivered at least one hour after work completion.</p>
<p>OP-13 Coordinated Customer Conversions Hot Cut Timeliness % within Interval and Average Interval</p>	<p>Exclusions: Cancelled orders should be included to capture all the hot cut activity (even those attempts that prompt the customer to cancel the order) in the metric.</p> <p>Business Rules: The CLECs request that this measurement be modified to include the entire hot cut interval or replaced with the early and late cuts measures requested by the CLECs in my direct testimony. It is important that not only the start time of the cut, but the entire interval, including acceptance testing with the CLEC be included in this measure. The loop should not be considered delivered until BellSouth and the CLEC have checked whether electrical continuity exists. Customers will not tolerate timely delivery of non-working loops.</p> <p>Disaggregation: Particularly with the advent of line sharing and splitting, disaggregation by all the types of digital and xDSL loops offered by BellSouth is critical to detect problem areas with hot cuts.</p> <p>Benchmarks: The interval for 1-10 lines should be 1 hour and for 11 or more lines 2 hours. BellSouth's interval represents a flawed calculation that does not depict the actual performance on each individual cut. In any event, BellSouth's 15 minutes per loop is excessive and even the CLEC's standard above is generous considering it should not take more than 5 minutes per loop for conversion.</p>
<p>OP-14 Percent Provisioning Troubles</p>	<p>Business Rules: The metric should include all trouble reports arising from the same order. A customer may experience several service disruptions related to provisioning problems and each should count as a provisioning trouble.</p> <p>Disaggregation: Disaggregation by trouble type and service type will help pick up problems described in Access Integrated Network's testimony regarding coordination of D &amp; N orders.</p>
<p>OP-15 Total Service Order Cycle Time (TSOCT)</p>	<p>I did not analyze this measure.</p>
<p>MR-1 Missed Repair Appointments</p>	<p>Exclusions: BellSouth may exclude customer provided or CLEC equipment troubles from the metric but it should report the number of exclusions monthly. This will enable the CLEC to monitor whether the exclusions seem high and perhaps were wrongly coded. In New York and Pennsylvania, such exclusions are reported separately by Verizon.</p> <p>Business Rules: The end time should be when the CLEC receives notice that the service is restored. This will enable the CLEC to notify BellSouth promptly if it disagrees that the service has been restored.</p>
<p>MR-2 Customer Trouble Report Rate</p>	<p>See MR-1.</p> <p>Standard: The standard should be parity or no worse than the</p>



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	end user standard in N.C. Otherwise CLECs will not be able to meet the end user standard.
MR-3 Maintenance Average Duration	<p>Exclusions: Customer and CLEC equipment troubles may be excluded but should be reported separately for the reasons stated in MR-1. BellSouth also should not exclude troubles that have lasted more than 10 days. There is no reason to exclude the longest or the shortest duration from this metric. Doing so only provides an inaccurate metric report.</p> <p>Business Rules: The trouble report should not be considered closed or service restored until the CLEC is given notice. "Restore" means to return to the normally expected operating parameters for the service and verification by the CLEC that the service has been restored. CLECs must be able to verify when informed that the trouble is closed that service has been restored to the customer. This will reduce the number of repeat trouble reports for services that were prematurely closed by BellSouth, but the CLEC customer's service is still impaired.</p> <p>Disaggregation: All maintenance metrics should be disaggregated by trouble type so CLECs can ascertain the specific types of problems (Central Office, Loop, etc.) where they may not be receiving parity service. This also protects BellSouth as dispatch troubles generally take longer than central office troubles and could make the metric look out of parity only because the CLEC had more dispatch troubles. So such disaggregation is particularly crucial for trouble duration.</p>
MR-4 Percent Repeat Troubles in 30 Days	<p>Business Rules: Customer and CLEC equipment trouble exclusions should be reported separately (See MR-1). Calculation: The denominator for the metric should be all repeat troubles received in the month, rather than all troubles closed. Using BellSouth's calculation could understate the problem for a month in which numerous troubles have not been closed by the end of the month.</p> <p>Standard: The standard should be parity or no worse than the state's end user standard. Otherwise the CLEC could not meet that standard.</p>
MR-5 Out of Service (OOS) > 24 hrs.	CLECs have no changes for this metric.
MR-6 Average Answer Time (Repair Center)	<p>Disaggregation: If there is more than one maintenance center, then the results of both centers should be shown separately to monitor each center's performance.</p> <p>Standard: 95% calls should be answered in 20 seconds, and 100% in 30 seconds to ensure prompt taking of trouble reports. In no case, should the answer time be worse than the end user requirement.</p>
BL-1. Invoice Accuracy	<p>Invoice accuracy should not be based on adjustment dollars, as BellSouth is in control of whether or not it grants an adjustment, and is therefore in control of the outcomes of this measurement.</p> <p>CLECs request that the Commission order the additional billing measures in my direct testimony to address wholesale bill performance.</p>
BL-2. Mean Time to Deliver Invoices	This measure should be modified to be based on percent

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	invoices received on time, or the Commission should adopt the Percent On-Time Mechanized Local Service Invoice Delivery measure recommended by the CLECs.
BL-3 Usage Data Delivery Accuracy	Calculation: CLECs believe the metric should reflect the number of records not data packs delivered accurately. This is more in line with how accuracy has been calculated in the past for usage data.
BL-4 Usage Data Delivery Completeness	No changes for this measure.
BL-5 Usage Data Delivery Timeliness	No changes for this measure.
BL-6 Mean Time to Deliver Usage	Business Rule: CLECs believe that the measurement should begin with the generation of data by the CLEC retail customer or CLEC access customer (by the AMA recording equipment associated with the CLEC switch.). This will ensure that all usage (local and associated access) are covered by this metric.
OD-1 OS/DA Speed to Answer Performance/ Average Speed to Answer	<p>Exclusions: BellSouth should not exclude call abandonment times. The customers likely abandoned the call because of lengthy waits for a response and such time should be included in the metric calculation. If the Commission adopts the CLEC's proposed new measure on call abandonment then this issue is moot.</p> <p>Standard: CLECs propose that 95% of calls be answered in 10 seconds. The metric would have to be changed from an average measure to a Percent in 10 Seconds to suit this benchmark. Otherwise the benchmark needs to be restates as an acceptable average. In no case, should the standard be worse than the end user standard for answering such calls, as the CLECs need to meet the end user standard.</p>
OD-2 OS/DA Speed to Answer Performance/Percent Answered in X Seconds	CLECs propose that OS/DA performance be measured with a single metric, but disaggregated for OS and DA.
E-1 E911 Timeliness E-2 E911 Accuracy E-3 E911 Mean Interval	CLECs have no changes to these measures but want third-parity verification of BellSouth's claims that its E911 update processes are parity by design.
TG-1 Trunk Group Performance - Aggregate	<p>Business Rules: CLECs are seeking the inclusion of 911 trunks in this measure along with the OS/DA trunks that BellSouth has agreed to add.</p> <p>Disaggregation: BellSouth must disaggregate reporting by trunk type and design type. Combining trunks built to different blocking standards can hide blocking problems.</p> <p>Calculations: BellSouth's SQM appears to make some changes in the calculation of this metric that CLECs will need to obtain further clarification. These clarifications may raise additional issues regarding this metric.</p> <p>Standards: BellSouth's 0.5% buffer is not acceptable. The measure should be based on parity in not exceeding the various blocking design levels.</p>
TG-2 Trunk Group Performance – CLEC Specific	See TG-1.
TG-3 Trunk Group Service Report	No comment.
TG-4 Trunk Group Service Detail	No comment.
CO-1 Collocation Average Response Time	Business Rules: Augments of existing collocations should be

	<p>included in this metric. CLECs require timely responses when seeking to augment existing collocations as well to initiating new collocation construction. BellSouth's SQM appears to be making some movement toward better collocation disaggregation, but it still is missing some key areas such as remote and adjunct collocations.</p> <p>Standards: CLECs agree to accept the intervals established in the Commission's separate collocation proceeding, including a definition of what CLEC changes would and would not stop the clock on measuring time intervals.</p>
C-2. Collocation Average Arrangement Time	<p>Business Rules: BellSouth should not be permitted to remove permit time. BellSouth should be accountable for the intervals for which it is responsible for having work completed. Removing permit time removes any incentive for BellSouth to conduct parallel work activities or work with government agencies for expeditious issuance of permits. Neither the performance plan of New York or Texas provides for such exclusions.</p> <p>Further, a collocation should not be considered complete until the CLEC accepts the collocation and associated cable assignment information is provided. This definition has been adopted in New York and other states in the Verizon region.</p> <p>Disaggregation: Disaggregation should be by each collocation type and by augment type (additions with intervals of 30 day, 45 day, 60 day etc.). BellSouth's SQM appears to be making some movement toward better collocation disaggregation, but it still is missing some key areas such as remote and adjunct collocations</p> <p>Standards: See CO-1.</p>
C-3 Collocation Percent Due Dates Missed	See CO-1 and C0-2.

LNP ISSUES SUBMITTED REGARDING BellSouth SQM

OP-9. LNP-Percent Rejected Service Request	Exclusions: BellSouth should be required to remove the exclusion of non-mechanized LSRs. It provides this information for other types of services and should not be allowed to discriminate.
OP-10. LNP-Reject Interval Distribution & Average Reject Internal	See OP-9 above.
O-11. LNP-Firm Order Confirmation Timeliness Interval Distribution & Firm Order confirmation Average	See OP-9. BellSouth's SQM does not specifically exclude, but it also does not specifically exclude non-mechanized LSRs.

## ARGUMENTS FOR CLEC BUSINESS RULE CHANGES

<p>OP-10. LNP –Percent Missed Installation Appointments</p>	<p>Exclusions: The measure should be modified to include non-mechanized orders. The Commission should not allow BellSouth to discriminate against CLECs who place orders via non-mechanized means. Further, while some loop ordering is available to LENS users, LNP is not. BellSouth's performance for services ordered via non-mechanized means is obviously just as critical to the CLEC and its customers as it is for mechanized orders. Further, it is inconceivable that BellSouth can defend the exclusion of orders from a provisioning measure, such as missed appointments, simply based on how the service was ordered.</p> <p>The Commission should require BellSouth to capture performance data for all its measures, regardless of the means of ordering, and to report its performance accordingly</p>
<p>OP-11. LNP-Average Disconnect Timeliness Interval &amp; Disconnect Timeliness Interval Distribution</p>	<p>Business Rules: BellSouth should be required to actually perform the disconnect activity before completing the service order in SOC's.</p> <p>Exclusions: BellSouth should be required to include non-mechanized orders. See OP-9 above.</p>
<p>OP-12. LNP-Total Service Order Cycle Time</p>	<p>Business Rules: See OP-11 above.</p> <p>Exclusions: See OP-9.</p>

## Exhibit KK-B

Revised measure	Comments
PO-1 Loop: Loop Makeup – Response Time - Manual	BellSouth does not disaggregate by type of loop, and its proposed benchmark of 3 business days is more lenient than the CLEC proposed 72 hour interval.
PO-2: Loop Makeup - Response Time - Electronic	<p>BellSouth proposes a benchmark of 90% in 5 minutes for now, with reassessment after 6 months. The Georgia Commission ordered a short-term benchmark of 90% within 5 minutes, and a benchmark after six months of 95% within 1 minute. At the least, this approach should be adopted. Better yet, the benchmark of 95% within 1 minute should be adopted immediately.</p> <p>Moreover, BellSouth should be required to provide this information (and meet this standard) via EDI as well as TAG.</p>
O-1: Acknowledgement Message Timeliness	<p>The following BellSouth business rule needs to be clarified: “If more than one CLEC uses the same ordering center, an Acknowledgement Message will be returned to the ‘Aggregator’, however, BellSouth will not be able to determine which specific CLEC this message represented.” Obtaining individual results is vital to CLECs. This issue is especially critical as this measure is a proposed Tier 1 measure in BellSouth’s remedy plan.</p> <p>BellSouth proposes a benchmark of 90% within 30 minutes at first for EDI (moving to 95% within 30 minutes after six months) and 95% within 30 minutes for TAG. The benchmark should be 98% within 15 minutes for both EDI and TAG immediately. The CLEC intervals are generous in that the acknowledgement response is part of the transmission “handshake” and should normally be returned in seconds from receipt of an order.</p>
O-3 to O-6: Flow-Through Measures	<p>Total flow-through and flow-through for orders designed to flow through should be measured separately.</p> <p>For orders designed to flow through, the benchmark for O-3 should be 98%.</p>
O-8: Reject Interval	BellSouth’s proposed benchmarks remain inadequate for partially mechanized and non-mechanized orders.

**Exhibit KK-B**  
**Additional Proposed Business Rule Changes**

O-9: Firm Order Confirmation Timeliness	<p>Benchmarks should be at least 95% in 5 hours for partially mechanized orders and 24 hours for non-mechanized orders.</p> <p>BellSouth should be required to do electronic facilities checks to ensure that the due dates delivered in FOCs can be relied upon.</p>
O-10: Service Inquiry With LSR Firm Order Confirmation (FOC) Response Time Manual	The benchmark for this metric should combine the interval for Manual Loop Qualification with the appropriate FOC interval. At most, the benchmark should be 95% in 3 days for electronic orders and 4 days for manual orders.
O-11: Firm Order Confirmation and Reject Response Completeness	BellSouth should include partially and non-mechanized orders.
O-12: Speed of Answer in Ordering Center	This metric should not be diagnostic. The benchmark should be 95% in 20 seconds and 100% in 30 seconds.
O-13: LNP-Percent Rejected Service Requests	BellSouth has added manual LNP orders to its metric, which resolves one of the outstanding issues.
O-14: LNP-Reject Interval Distribution & Average Reject Interval	BellSouth has added manual LNP orders to its metric, which resolves one of the outstanding issues.
O-15: LNP – Firm Order Confirmation Timeliness Interval Distribution & Firm Order Confirmation Average Interval	Non-mechanized should be developed quickly and CLECs' proposed intervals for FOCs should be applied.
P-4: Average Completion Interval	BellSouth's proposed intervals for xDSL with and without conditioning are too long. Interval for conditioning should be no more than 5 days.
P-6A: Coordinated Customer Conversions -- Hot Cut Timeliness % Within Interval and Average Interval	<p>Metric should be clarified to make clear that an early cut would be included as a missed appointment if cut was restarted within original window. Thirty minute buffer is excessive. Different intervals for IDLC are inappropriate and unjustified.</p> <p>The benchmark should be 95% completed within</p>

**Exhibit KK-B**  
**Additional Proposed Business Rule Changes**

	cutover window. BellSouth only appears to be measuring whether the cut started on time, but does not measure whether it finished within the cutover window proposed by the CLECs.
P6-B: Coordinated Customer Conversions – Average Recovery Time	<p>Only verified end user and CLEC caused reasons should be excluded. (i.e., the CLEC has to agree). Outages during and before the cut are included, not just those that can be reported after order completion through maintenance systems. BellSouth may separate out the later group of restorals and measure them as a disaggregation of Maintenance Average Duration with the same benchmark if it prefers.</p> <p>The benchmark should be 98% in 1 hour and 100% in 2 hours. These outages were caused by BellSouth's cut-over errors and, thus, should be easy for it to diagnose and resolve.</p>
P-6C: Coordinated Customer Conversions - % Provisioning Troubles Received Within 7 days of a completed Service Order	The benchmark should be 1%, not 5 % as BellSouth proposes.
P-7: Cooperative Acceptance Testing - % of xDSL Loops Tested	<p>BellSouth should report the number of exclusions (CLEC caused failures monthly) so CLECs can determine whether their reports do not match up.</p> <p>The benchmark should be 99.5%.</p>
M&R-3: Maintenance Average Duration	BellSouth should clarify what it means by a "correct" repair request and how a CLEC is informed that reporting of trouble is incorrect.
M&R-6: Average Time - Repair Centers	Benchmark should be the better of parity or at least the end user standard
M&R-7: Mean Time to Notify CLEC of Network Outages	Parity by design needs to be confirmed by KPMG. If confirmed, no metric is needed, just information on how to get the same notices at the same time as BellSouth.
B-2: Mean Time to	Bills rejected because of BellSouth formatting or

**Exhibit KK-B**  
**Additional Proposed Business Rule Changes**

Deliver Invoices	content errors should be included.
D-1: Average Database Update Interval	Parity by design needs to be confirmed by KPMG.
D-3: Percent NXXs and LRNs Loaded by LERG Effective Date	BellSouth's business rules should not define the interval by the completion of initial interconnection trunk groups when that happens after the LERG effective date. Otherwise, BellSouth could delay delivery of trunks to cover late LERG updates. The LERG effective date should be the end time in all cases.
CM-2: Change Management Notice Average Delay Days	Benchmark should be 95% in 5 days. For 30 days it should be a shorter delay day interval of no more than 3 days.
CM-3: Timeliness of Documents Associated with Change	<p>BellSouth's proposed exclusion for dates that slip less than 30 days "for reasons outside BellSouth control" is too broad.</p> <p>A Five day interval for documentation changes is too short for CLECs to be able to implement changes. CLECs recommend 30 days for documentation changes, unless it is for error correction, which should be provided within the five day timeframe. Further, if the documentation is associated with software changes, 90 days or more is needed for major releases.</p>
CM-4: Change Management Documentation Average Delay Days	Benchmark should be 98% in 5 days.
CM-5: Notification of CLEC Interface Outages	BellSouth should explain how it verifies outage and the interval between first notice of outage and verification. If this interval is long, the notice could be delayed and still appear to be on time because of "verification" condition.



## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
<p>Timeliness of Response to Requests for BellSouth-to-CLEC Trunks</p> <p>Mean Time to Provide Response</p> <p>% Within 7 Days</p> <p>% Negative Responses</p>
<b>Definition:</b>
Measures the time it takes for BST to provide the CLEC with a firm due date for inbound trunks.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>CLEC cancelled orders</li> </ul>
<b>Business Rules:</b>
<p>Time begins with date the CLEC sends a complete ASR or Trunk Group Sizing Request via email or fax. The interval ends with the date the ILEC sends a FOC in response to a complete ASR or sends an ASR in response to a TGSR. Any queries regarding CLEC transmission should occur within five days. A query or a negative response to request. Neither queries or negative responses should stop the clock for this metric if (1) the query is invalid and CLEC request included all clearly required information and (2) the existing inbound trunks are operating at least at a 50% utilization level. BST will count the percent of requests receiving negative responses by reason (lack of facilities, need questioned, etc.).</p>
<b>Calculation:</b>
<p>Mean: (Date FOC/ASR returned – Date ASR/TGSR )/Number of Requests in Reporting Period</p> <p>% On Time: (Number of FOCs/ASRs sent in 7 or less business days/all requests for inbound trunks in reporting period) x 100.</p> <p>% Negative: (Number of requests denied/Total Requests Submitted in Reporting Period) x 100</p>
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>CLEC Specific</li> <li>CLEC Aggregate</li> <li>BST Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>Company</li> <li>Affiliate(s)</li> <li>CLEC Specific</li> <li>CLEC Aggregate</li> <li>Interface Type (fax, email, ASR)</li> <li>Negative Response Reason Type</li> </ul>
<b>Retail Analog/Benchmark:</b>
<p>If the ILEC does not deliver direct comparative results or the ILEC has not produced benchmark levels based upon a verifiable study of its own operation as agreed to with the CLEC, then result(s) related to the CLEC operation should be provided according to the following levels of performance in order to provide the CLEC with a meaningful opportunity to compete:</p> <ul style="list-style-type: none"> <li>95% in 7 days</li> </ul>

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent Service Order Accuracy
<b>Definition:</b>
Customers expect that their service provider will deliver precisely the service ordered and all the features specified. A service provider that is unreliable in fulfilling orders will not only generate ill-will with customers when errors are made, but will also incur higher costs to rework orders and to process customer complaints. This measurement monitors the accuracy of the provisioning work performed by the ILEC in response to CLEC orders. When the ILEC provides the comparable measure for its own operation, it is possible to know if provisioning work performed for CLECs is at least as accurate as that performed by the ILEC for its own retail local service operations.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Orders canceled by the CLEC</li> <li>• Order Activities of the ILEC associated with internal or administrative use of local services.</li> <li>• For resubmissions impact on due date measure, ILEC would not have to comply if tying final accepted order to original order is technically infeasible (but feasibility issue will be revised as systems are upgraded.)</li> </ul>
<b>Business Rules:</b>
<b>For CLEC Results:</b> <ul style="list-style-type: none"> <li>• For each order completed during the reporting period, the original account profile and the order that the CLEC sent to the ILEC are compared to the services and features reflected upon the account profile as it existed following completion of the order by the ILEC. An order is "completed without error" if all service attribute and account detail changes (as determined by comparing the original and the post order completion account profile) completely and accurately reflect the activity specified on the original and any supplemental CLEC orders. "Total number of orders completed" refers to the total number of order completion notices sent to the CLEC by the ILEC for each reporting dimension identified below.</li> </ul>
<b>Calculation:</b>
Percent Order Accuracy = $[(\Sigma \text{ Orders Completed w/o Error})/(\Sigma \text{ Orders Completed})] \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• Interface Type</li> <li>• Standard Product Categories</li> <li>• Volume Category</li> </ul>
<b>Retail Analog/Benchmark:</b>
<ul style="list-style-type: none"> <li>• Completed CLEC Orders, By Reporting Dimension, Are Accurate No Less Than 99.0 Percent Of The Time.</li> </ul>

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
- Call Abandonment Rate – Ordering & Provisioning (similar for Maintenance)
<b>Definition:</b>
When CLECs experience operational problems dealing with ILEC processes or interfaces, prompt responses by ILEC support centers are required to ensure that the CLEC customers are not adversely affected. Any delay in responding to CLEC center requests for support (e.g., request for a vanity telephone number) will, in turn, adversely impact the CLEC retail customer who may be holding on-line with the CLEC customer service agent. This measure monitors the ILEC's handling of support calls from CLECs to determine if responsiveness is at parity with the service the ILEC provides its retail customers seeking assistance.
<b>Exclusions:</b>
None
<b>Business Rules:</b>
<p><b>For CLEC Results:</b></p> <p>The Call Abandonment Rate is based on the number of calls received by the call distribution system of the ILEC center for the reporting period, regardless of whether the call is actually transferred to ILEC personnel for processing. In addition, a count is accumulated of all calls that are subsequently terminated by the calling party or dropped due to equipment failure before transfer to the service agent for processing. The accumulated count of calls abandoned (terminated) is divided by the total count of calls received at the monitored center.</p> <p>Call Abandonment Rate is monitored through the call management technology utilized to distribute calls to ILEC agents supporting CLEC activities (i.e. call receipt personnel staffing ILEC support centers intended for CLEC use). Results for each measure are to be provided separately for each center handling CLEC inquiries. If centers deployed by the ILEC support multiple functions (e.g. both maintenance and provisioning) then the results for each function supported should be separately reported.</p>
<b>Calculation:</b>
Call Abandonment Rate = $\frac{[(\text{Count of Calls Terminated Before Answer During the Reporting Period})/(\text{Count of All Calls Placed in Queue During the Reporting Period})] \times 100}{1}$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Support Center Type (i.e., Center supporting CLEC maintenance, Center supporting CLEC provisioning, ILEC Center supporting retail customer maintenance calls, ILEC Center supporting business office inquiries)</li> </ul>
<b>Retail Analog/Benchmark:</b>
<ul style="list-style-type: none"> <li>• Less than 1% are calls are abandoned from queue.</li> </ul>

### Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent Completions/Attempts without Notice or with Less Than 24 Hours Notice.
<b>Definition:</b>
CLECs need adequate notice of order completion activities. They can be made to look disorganized by ILECs providing service without such advance notice: Customers and CLECs may even be unable to schedule necessary vendors on the scene to complete the installation, resulting in ILEC technicians being turned away and customer frustration with the CLEC. An ILEC could cause a great deal of harm to the CLEC competitively, yet look like it is providing parity or above parity service by the results of other provisioning measures. A measurement capturing any non-parity in the occurrence of surprise or short-notice service deliveries also is critical to affording CLECs a reasonable opportunity to compete.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Completions or Attempts Without Notice or With less than 24-hours' notice delivery that the CLEC specifically requested.</li> </ul>
<b>Business Rules:</b>
<p><b>For CLEC Results:</b> Calculation would exclude any successful or unsuccessful service delivery that CLEC was informed of at least 24 hours in advance. ILEC may also exclude from calculation deliveries on less than 24 hours' notice that CLEC requested.</p> <p><b>For ILEC Results:</b> The ILEC reports completions for which ILEC technicians delivered service to customers without giving sufficient advance notice to customers, sales or to internal account team to arrange for appropriate vendors to be on hand. Calculation of insufficient notice is similar to CLEC calculation (none or less than 24 hours). Similar surprise service deliveries are calculated for ILEC affiliate's account representatives.</p>
<b>Calculation:</b>
Percent Completions or Attempts without Notice or with Less Than 24 Hours Notice = $\frac{[(\text{Completion Dispatches (Successful and Unsuccessful) With No FOC or FOC Received Within 24 Hours of Due Date)} / (\text{All Completions})] \times 100}{1}$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>
<b>Level of Disaggregation: (See Exhibit KK-2)</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• Product Type</li> <li>• MSA</li> <li>• Dispatch in/Dispatch out/Non-dispatch</li> </ul>
<b>Retail Analog/Benchmark:</b>
<p>If the ILEC does not deliver direct comparative results or the ILEC has not produced benchmark levels based upon a verifiable study of its own operation as agreed to with the CLEC, then result(s) related to the CLEC operation should be provided according to the following levels of performance in order to provide the CLEC with a meaningful opportunity to compete:</p> <ul style="list-style-type: none"> <li>• &gt;98 Percent Of Completion And Completion Attempts Should Receive More Than 24 Hours Notice.</li> </ul>

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent On Time Hot Cut Performance
<b>Definition:</b>
Customers must not be subjected to unscheduled service disruptions because of lengthy or uncoordinated cutovers of loops with interim or permanent number portability or the provision of any other UNEs that require disconnection and reconnection of a customer.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>•</li> <li>• Cancelled orders</li> <li>• CLEC caused delays</li> </ul>
<b>Business Rules:</b>
The start time for this measure is the frame due time (FDT) indicated on the Firm Order Confirmation. The end time is the when the CLEC is notified by phone that the hot cut is complete. Orders disconnected early are considered not met.
<b>Calculation:</b>
Percent On Time Hot Cuts = $\frac{[(\text{Customer Conversions completed within commitment window})/(\text{All Customer Conversions Completed During Reporting Period})] \times 100}{1}$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>•</li> </ul>
<b>Level of Disaggregation: (See Exhibit KK-2)</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion).</li> <li>• MSA</li> <li>• Volume Category Dispatch in/Dispatch out/Non-dispatch</li> </ul>
<b>/Benchmark:</b>
<ul style="list-style-type: none"> <li>•</li> <li>• 95% of coordinated cutovers completed within the following window</li> <li>• 1-10 lines – 1 hour</li> <li>• 10 to 20 lines – 2 hours</li> <li>• more than 20 lines – negotiated.</li> <li>• If an order is cut more than 15 minutes prior to frame due time, it is not met.</li> </ul>

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent of Orders Cancelled or Supplemented at the Request of the ILEC
<b>Definition:</b>
Prior to or during the cutover, the ILEC may encounter internal problems with its network which make it impossible to perform the cutover at the agreed upon time. This results in significant inconvenience to the customer. As a result, the percent of orders that are cancelled or supped by the CLEC at the request ILEC must be measured. This measurement must be expressed as a fraction to understand both the number and the percent of times that the order must be supped at the ILEC Request.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Business Rules:</b>
<p><b>For CLEC Results:</b></p> <p>The percent of orders that are supplemented or cancelled due to a jeopardy and network problems attributable to the ILEC. The ILEC will track the number of orders that they request to be supplemented or changed. The total number of supplements and cancels from the CLEC will also be tracked. The ratio will be calculated by dividing the number of orders supplemented or cancelled at the request of the ILEC divided by the total supplements or cancels by the CLEC. For this formula, the resulting ratio will be expressed as a percentage.</p> <p><b>For ILEC Results:</b></p> <p>ILECs would use retail residential or business POTS outside move activity as an analog. An outside move occurs when a customer, with existing service, moves from one premises to another within the same central office area without disconnecting and reconnecting service. With inside moves the customer keeps their own phone number. Although an outside move involves disconnecting an existing loop from an operating port and reconnecting a different loop (within the same office) to that same port, the work involved is very similar (i.e. coordinated re-termination).</p>
<b>Calculation:</b>
Percent of Orders Cancelled or Supplemented at the Request of the ILEC = $\frac{[(\text{Number of Orders Cancelled or Supplemented at the Request of the ILEC During Reporting Period})/(\text{Number of Cancels and Supplements During the Reporting Period})] \times 100}{1}$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>
<b>Level of Disaggregation: (See Exhibit KK-2)</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• Product Type</li> <li>• MSA</li> <li>• Volume Category</li> <li>• Dispatch in/Dispatch out/Non-dispatch</li> </ul>
<b>Retail Analog/Benchmark:</b>
<p>If the ILEC does not deliver direct comparative results or the ILEC has not produced benchmark levels based upon a verifiable study of its own operation as agreed to with the CLEC, then result(s) related to the CLEC operation should be provided according to the following levels of performance in order to provide the CLEC with a meaningful opportunity to compete:</p> <ul style="list-style-type: none"> <li>• &lt;1.0 Percent Of Orders Supped Or Cancelled At The Request Of The ILEC.</li> </ul>

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent of Coordinated Cuts Not Working as Initially Provisioned
<b>Definition:</b>
Customers may experience either a full or partial loss of service due to defective ILEC facilities where the CLEC is reusing the customer's existing loop, or due to the switching platform not being properly set up with the 10 Digit / 6 Digit trigger being applied. To ensure that the CLEC's customers are not disproportionately losing dial tone, the percent of ILEC caused service interruptions outside of the initial customer cutover must be measured.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Cut-overs where service disruption is caused due to end-user or CLEC reasons</li> </ul>
<b>Business Rules:</b>
<b>For CLEC Results:</b> The ILEC will track the number of Coordinated Cuts that are not working as initially provisioned by the number of provisioning troubles by the CLEC during the cutover process that are ultimately attributable to the ILEC. The measurement will be calculated by dividing the number of troubles by the total number of Coordinated Cuts provisioned for the CLEC during the reporting period.
<b>Calculation:</b>
$\text{Percent of Coordinated Cuts Not Working as Initially Provisioned} = \left[ \frac{\text{(Number of Troubles Attributable to the ILEC on Initial Customer Cutover)}}{\text{(Number of Coordinated Cuts Provisioned During The Reporting Period)}} \right] \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> </ul>
<b>Level of Disaggregation: (See Exhibit KK-Dissag</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion).</li> <li>• MSA</li> <li>• Volume Category</li> <li>• Dispatch in/Dispatch out/Non-dispatch</li> </ul>
<b>Retail Analog/Benchmark:</b>
: <ul style="list-style-type: none"> <li>• &lt;1 Percent Of All Coordinated Cuts Not Working As Initially Provisioned.</li> </ul>

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Average Recovery Time
<b>Definition:</b>
Customers do not expect lengthy service outages due to problems experienced during the coordinated cut process. If problems do occur, the ILEC should work to minimize the customer outage. If a problem is found and can be isolated to the ILEC side of the network, the time between notification and resolution by the ILEC must be measured to ensure that CLEC customers do not experience unjustifiably lengthy service outages.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• Cut-overs where service disruption is caused due to end-user or CLEC reasons</li> </ul>
<b>Business Rules:</b>
<p><b>For CLEC Results:</b></p> <p>When there is a problem during the porting process, the ILEC will track the average duration of each service outage or trouble. The duration time is defined as the time from the initial trouble notification until the trouble has been restored and an index number issued by the CLEC. For each trouble, the ILEC will track the duration of the trouble. The sum of all time associated with the troubles will be divided by the number of troubles. Average recovery time does not include time restoring a customer to the ILEC.</p>
<b>Calculation:</b>
$\text{Average Recovery Time} = \Sigma \{[(\text{Date \& Time That Provisioning Trouble is Closed By CLEC}) - (\text{Date \& Time Initial Provisioning Trouble is Opened With ILEC})] / (\text{Number of Troubles Referred to the ILEC})\}$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>•</li> </ul>
<b>Level of Disaggregation: (See KK Disagg)</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion).</li> <li>• MSA</li> <li>• Volume Category</li> <li>• Dispatch in/Dispatch out/Non-dispatch</li> </ul>
<b>Retail Analog/Benchmark:</b>
<ul style="list-style-type: none"> <li>• 98.0 Percent Of Customer Recoveries (Troubles During The Porting Process) Resolved Within 1 Hour And 100 Percent Within 2 Hours.</li> </ul>



## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent Successful xDSL Loops Cooperatively Tested
<b>Definition:</b>
The percent of xDSL loops tested that pass the tests.
<b>Exclusions:</b>
None.
<b>Business Rules:</b>
When a BellSouth technician finishes delivering an xDSL loop at the customer premise, he is to call a toll free number to the CLEC's testing center. The tech and the CLEC representative at the center then test the line. As an example of the type of testing performed, the testing center may ask the tech to put a short on the line, so that the center can run a test to see if it can identify the short.
<b>Calculations:</b>
Percent Successful xDSL Cooperative Service Testing on First Attempt = [(Number of xDSL Loops Functional on First Test)/(Number of xDSL Loops Tested During Reporting Period)] x 100
Percent Successful xDSL Cooperative Service Testing on Second Attempt = [(Number of xDSL Loops Functional on Second Test)/(Number of xDSL Loops Tested During Reporting Period)] x 100
Percent Successful xDSL Cooperative Service Testing on Third Attempt = [(Number of xDSL Loops Functional on all subsequent attempts)/(Number of xDSL Loops Tested During Reporting Period)] x 100
<b>Report Structure:</b>
CLEC Specific
<b>Disaggregation:</b>
Company
Type of Loop
MSA
<b>Retail Analog/Benchmark:</b>
99.5% of loops should pass on the first series of tests.

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent Completion of Timely Loop Modification/De-Conditioning on xDSL loops:
<b>Definition:</b>
Some xDSL Loops Require Loop Modification/De-Conditioning to support xDSL services, including the removal of load coils, removal of excessive bridged tap, and removal of repeaters.
<b>Exclusions:</b>
Requests cancelled by ALEC,
<b>Business Rules:</b>
<b>Calculations:</b>
$\left[ \frac{\text{(Number of xDSL Loops on Which Loop Modification/De-Conditioning was Completed within established interval)}}{\text{(Number of xDSL Loops On Which Loop Modification/De-Conditioning Is Requested)}} \right]$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• Specific as to the type of loop tested</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• MSA</li> <li>• Type of loop (See Exhibit KK-2)</li> </ul>
<b>Retail Analog/Benchmark:</b>
95% within 5 business days

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent Billing Errors Corrected in X Days
<b>Definition:</b>
Measures the timely correction of DUF errors and timely carrier bill adjustments.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>Adjustments disputed by ILEC (but must be reported separately)</li> </ul>
<b>Business Rules:</b>
<ul style="list-style-type: none"> <li>This measurement applies to the daily usage feed and carrier wholesale bill adjustments.</li> <li>Performance for the DUF measurement is measured at two levels: <ul style="list-style-type: none"> <li>Severity 1 Bill Affecting where X = 24 hours with a maximum of 5 business days to correct error</li> <li>Severity 2 Non-Bill Affecting where X = 3 business days with a maximum of 10 business days to correct error</li> </ul> </li> <li>Elapsed time is measured in business days/hours. Clock starts when ILEC receives the CLEC's query or request for an adjustment (whether in electronic, written or voice form) and the clock stops when the CLEC receives the correct usage record from the ILEC.</li> <li>The ILEC shall send correct usage record within X days/hours of receipt of a query.</li> <li>The ILEC will adjust bill within X days (generally next CLEC bill unless adjustment request received after middle of the month )..</li> <li>Only usage records fully corrected to the CLEC's specifications will be considered timely.</li> <li>Excluded situations: <ul style="list-style-type: none"> <li>CLEC may agree to exclude adjustments disputed by ILEC from metric. If ILEC does not wish to pursue mutual agreement on such exclusion, ILEC must report separately the number of queries in dispute at end of the month as separate sub-metric</li> </ul> </li> </ul>
<b>Calculation:</b>
Percent Billing Errors Corrected in X Days = $\Sigma [(Number\ of\ ILEC\ Responses\ in\ X\ Days/Hours) / (Total\ Number\ of\ Queries\ in\ Reporting\ Period)] \times 100$
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>CLEC Specific</li> <li>CLEC Aggregate</li> <li>BST Aggregate</li> <li>BST Affiliates</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>Company</li> <li>Bill Type (DUF, Carrier Wholesale Bill)</li> <li>Severity Type</li> </ul>
<b>Retail Analog/Benchmark:</b>
<p>If the ILEC does not deliver direct comparative results or the ILEC has not produced benchmark levels based upon a verifiable study of its own operation as agreed to with the CLEC, then result(s) related to the CLEC operation should be provided according to the following levels of performance in order to provide the CLEC with a meaningful opportunity to compete:</p> <p>DUF:</p> <ul style="list-style-type: none"> <li>Severity 1 = 90% corrected in 24 hours and 100% in 5 business days</li> <li>Severity 2 = 90% corrected in 3 business days and 100% in 10 business days</li> </ul> <p>Carrier Wholesale Bill</p> <ul style="list-style-type: none"> <li>100% corrected within 45 Days.</li> </ul>

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent Response Commitments Met (On-Time)
<b>Definition:</b>
This measures whether the ILEC has kept commitment in contracts, business rules or provided on the initial phone for a substantive answer to a CLEC question or final resolution of the CLEC's problem. Different intervals may be appropriate based on the severity of the issue with problems stopping the CLECs ability to access pre-order and ordering systems or address a severe customer problem (i.e thousands of missing orders, confirmations or completions...
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>• None</li> </ul>
<b>Business Rules:</b>
<p>ILEC must report on whether or not time committed to CLEC in contracts, separate agreements or at time of call are being kept by ILEC's support centers. For instance, if contract requires a response to a billing inquiry in 24 hours, then on-time responses would be those received within 24 hours after the CLEC places a query to the appropriate point of contact and compared to all the responses to billing queries due that reporting period. If an ILEC account representative promises a response in X amount of time, the metric would address whether that commitment was met compared with all the other committed answers due that month. The measurement would be equivalent to an Estimated Time to Repair or Repair Appointment Met metric applied to non-maintenance types of problems. Missed commitments are those days/hours between the time the response was due and the time the response was actually received. For ILEC retail measurement, time to respond to end user bill questions and other business office queries would be measured.</p> <ul style="list-style-type: none"> <li>• All queries answered while the CLEC or ILEC retail customer is on the phone will be considered on time for this metric.</li> <li>• Responses do not necessarily have to resolve issue but must provide additional information on the status of resolving the query. Any new response commitment provided during the partial response must be measured for on-time performance as well and will be counted as a new commitment.</li> <li>• If CLEC poses more than one question on same call, ILEC may provide different response commitments for each query and measure each query separately.</li> <li>• CLEC and ILEC may devise a priority rating system for measurement by which the CLEC will identify the type of query upon reaching a representative at the CLEC center and the type of response interval required for such a query. (i.e., questions regarding problems with an OSS gateway blocking order placement or pre-order queries may receive a higher priority than a question to explain a business rule that is not impeding order activity.)</li> <li>• If ILEC is uncertain about whether response qualified as meeting the commitment interval, ILEC may seek CLEC agreement that response commitment has been met. Responses that no action has been taken yet on a query do not count as timely.</li> </ul> <p>If a question is posed to the wrong center, the center receiving the query will direct the CLEC immediately to the appropriate center to respond to the question Otherwise start time begins with initial call..</p>
<b>Calculation:</b>
Percent Response Commitments Met = $\Sigma$ [(Number of Response Commitments Met) / (Number of Responses Due in Reporting Period)] x 100
<b>Report Structure:</b>
<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• BST Affiliate</li> </ul>
<b>Level of Disaggregation:</b>

**Additional Measures Proposed by CLECs**

- Company (If dedicated representatives assigned to specific CLECs)
- Each CLEC Help Desk/Support Center (PreOrder, Ordering, Billing, etc.)
- Severity Type

**Retail Analog/Benchmark:**

- Billing = 100% in 24 hours of request for information
- Pre-Ordering/Ordering Help Desk = 98% within response commitment provided by ILEC
- Other = 95% within response commitment provided by ILEC
- 100% within 3 business days.

## Additional Measures Proposed by CLECs

<b>Report/Measurement:</b>
Percent Software Certification Failures Software Problem Resolution Timeliness and Average Delay Days.
<b>Definition:</b>
The first metric measures whether ILEC goes into production with software change that still leads to ILEC-software causing failures to CLEC test deck. The second measures the time it takes the ILEC to fix software problems its changes have caused. Third metric captures how long it takes to repair problems once the resolution standard is passed.
<b>Exclusions:</b>
<ul style="list-style-type: none"> <li>CLEC caused software failures (with notification and agreement from CLEC.)</li> </ul>
<b>Business Rules:</b>
<ul style="list-style-type: none"> <li>ILEC test deck may either represent regression testing of a new software release or progression testing of software being released for the first time. A regression test deck is a collection of test scenarios designed to verify that functionality in a software release that was available in a previous release continues to work as prescribed. A progression test deck is a collection of test scenarios designed to verify that functionality in a software release that is being introduced for the first time (or is being removed) works as prescribed.</li> <li>Test scenario is a description of a business event and the systems transactions performed to accomplish the business event. Test scenarios also include pre-conditions, input data and expected results.</li> <li>During a 30 day period following release to production, ILEC will track the number of changes required as a result of CLEC experiencing malfunctions during the execution of transactions directly related to the pre-defined conditions in the test desk.</li> <li>A transaction is defined as failed if the request cannot be submitted or processed or results in incorrect or improperly formatted data.</li> <li>Software validation procedures, test deck scenarios and error correction standards are to be agreed to by CLEC and the ILEC, with this metric monitoring adherence to that agreement.</li> <li>ILEC may exclude any CLEC malfunctions if both parties agree that malfunctions were CLEC's fault. If parties cannot agree on fault, then ILEC must report the number of malfunction incidents in dispute.</li> <li>Problem resolution timeliness will reflect the percentage of preorder and order transaction rejections resolved within the timeframe agreed to by CLEC and the ILEC for both errors with and without work-around.</li> <li>Problem resolution time will start being measured from time problem reported to help desk to time CLEC concurs that problem no longer exists as confirmed on resolution notice call from the ILEC's help desk.</li> </ul>
<b>Calculation:</b>
$\text{Software Certification Failures} = \Sigma [(\text{Number of Test Transactions in Test Deck} - \text{Count of Changes Required Due to CLECs Experiencing Malfunctions}) / (\text{Number of Test Transactions in Test Deck})] \times 100$
$\text{Software Problems Resolved On-Time} = \Sigma [\text{Number of Times Problem Resolved on Time} / \text{Number of Problems Resolved}] \times 100$
$\text{Average Delay Hours/Days for Software Problem} = \Sigma [(\text{Date and Time Problem Resolution Confirmed by CLEC} - \text{Date and Time Problem Resolution Due}) / (\text{Total Number of Problems Resolved})]$
<b>Report Structure:</b>

### Additional Measures Proposed by CLECs

<ul style="list-style-type: none"> <li>• CLEC Specific</li> <li>• CLEC Aggregate</li> <li>• BST Aggregate</li> <li>• BST Affiliates</li> </ul>
<b>Level of Disaggregation:</b>
<ul style="list-style-type: none"> <li>• Company</li> <li>• Interface Type</li> <li>• Severity Type (Work Around, No-Workaround)</li> </ul>
<b>Retail Analog/Benchmark:</b>
<p>If the ILEC does not deliver direct comparative results or the ILEC has not produced benchmark levels based upon a verifiable study of its own operation as agreed to with the CLEC, then result(s) related to the CLEC operation should be provided according to the following levels of performance in order to provide the CLEC with a meaningful opportunity to compete:</p> <ul style="list-style-type: none"> <li>• No more than 0.1% of test deck transactions should result in CLEC problems</li> <li>• Software errors with no work-around should be corrected in 24 hours.</li> <li>• Software errors with work-arounds should be corrected in 72 hours</li> <li>• Parity with ILEC affiliate on Delay Days or Standard of 100% in 48 for problems with no workaround and 100% within five days for problems with work-arounds..</li> </ul>

## KK-D

### CLEC Proposed Disaggregation (Process Level)

Disaggregation
<b>A. Pre-Order OSS Responsiveness</b> <ol style="list-style-type: none"> <li>1. Feature Function Availability/Service Availability</li> <li>2. Facility Availability Qualification of Loops for Advanced Digital Services</li> <li>3. Street Address Validation</li> <li>4. Appointment Scheduling</li> <li>5. Customer Service Records</li> <li>6. Telephone Number</li> <li>7. Rejected or Failed Queries (regardless of type)</li> <li>8. Timeouts (measured as a percent not an interval)</li> <li>9. Any new query type in 4 to 6 weeks of production.</li> </ol>
<b>B. Maintenance &amp; Repair OSS Responsiveness</b> <ol style="list-style-type: none"> <li>1. Create (or confirm logging of) a Maintenance Request</li> <li>2. Obtain Status</li> <li>3. Obtain Test Results</li> <li>4. Cancel Request</li> <li>5. Rejected or Failed Queries (regardless of type)</li> <li>6. Clearance Notification</li> <li>7. Closure Notification</li> <li>8. Any new Query type in 4-6 weeks of production.</li> </ol>
<b>C. Collocation</b> <ol style="list-style-type: none"> <li>1. Physical Caged</li> <li>2. Shared Caged</li> <li>3. Cageless</li> <li>4. Adjacent On-Site</li> <li>5. Adjacent Off-Site</li> <li>6. Augment to Physical (Disaggregated by standard interval—i.e. 90 day vs. 45 day augments).</li> <li>7. Virtual</li> <li>8. Augment to Virtual (Disaggregation by standard interval—i.e. 90 day vs. 45 augments).</li> <li>9. Remote Terminal</li> </ol>
<b>D. Multi-Functional Disaggregation</b> <ol style="list-style-type: none"> <li>1. Interface type—for preordering, ordering, billing and maintenance and repair OSS, for some metrics the specific electronic interface is required, for others the general interface type fully electronic or mechanized, partially electronic or mechanized and manual ( fax) are all that is required.</li> <li>2. Dispatch in, dispatch out, and non-dispatch—for provisioning and maintenance measures</li> <li>3. Volume—for ordering, provisioning, and maintenance measures (a) 1-5 lines, (b) 6-14 lines, and (c) 15+ lines</li> <li>4. Geographic --All measures should be disaggregated to a state level, if the data is available. Additionally, provisioning and maintenance measures should be disaggregated to the MSA level. MSA and Non-MSA areas where performance and geography is similar can be combined if BST shows this similarity.</li> <li>5. By CLEC, BST, and all BST affiliates for all measures</li> <li>6. Center—for OS/DA, ordering &amp; maintenance service center measures</li> </ol>
<b>E. Billing</b>



Disaggregation	
1.	Record Type (resale, interconnection, UNE) CABS and CRIS

Disaggregation, Analogs and Benchmarks		
F. Product Level Disaggregation for (Ordering, Provisioning, and Maintenance & Repair)	Benchmark-- 95 % within x Days unless otherwise noted for <u>Order Completion Interval</u> and <u>Missed Appointments</u>	Retail analog for other provisioning and maintenance and repair measures
<ol style="list-style-type: none"> <li>1. Resold Residence POTS</li> <li>2. Resold Business POTS</li> <li>3. Resale Design</li> <li>4. Resale PBX</li> <li>5. Resale Centrex</li> <li>6. Resold BRI ISDN</li> <li>7. Resold PRI ISDN</li> <li>8. Resold DID Trunks</li> <li>9. UNE Platform</li> <li>10. UNE Channelized DS1 (DS1 loop + multiplexing)</li> <li>11. UNE DS0</li> <li>12. UNE DS1</li> <li>13. UNE DS3 and greater</li> <li>14. Unbundled 8 dB Analog Loops</li> <li>15. Unbundled ISDN BRI</li> <li>16. Unbundled ISDN PRI</li> <li>17. Unbundled ADSL Loops</li> <li>18. Unbundled HDSL Loops</li> <li>19. UCL (short and long)</li> <li>20. Unbundled 2 wire xDSL Loop</li> <li>21. Unbundled 4 wire xDSL Loop</li> <li>22. Other Unbundled Loops</li> <li>23. Unbundled UDC/IDSL loop</li> <li>24. UNE Switch Port</li> <li>25. UNE Dedicated Transport</li> <li>26. Interconnect Trunks (DS0s, DS1s and DS3s,)</li> <li>27. Two-Way Trunking or Inbound BST-to-CLEC trunks</li> <li>28. Line-sharing/High Frequency Spectrum UNE</li> <li>29. Line-splitting/High Frequency Spectrum UNE</li> <li>30. Loop Modification/Loop Conditioning</li> <li>31. Enhanced Extended Loops</li> <li>32. Special Access to EELs Conversion</li> </ol>	<ol style="list-style-type: none"> <li>1. Retail Analog</li> <li>2. Retail Analog</li> <li>3. Retail Analog</li> <li>4. Retail Analog</li> <li>5. Retail Analog</li> <li>6. Retail Analog</li> <li>7. Retail Analog</li> <li>8. Retail Residential POTS</li> <li>9. 3, 7, and 10 days, for a, b, and c, volumes respectively</li> <li>10. Retail DS0</li> <li>11. Retail DS1</li> <li>12. Retail DS3 and greater</li> <li>13. 3, 7, and 10 days for a, b, c volumes</li> <li>14. Same as above</li> <li>15. Same as above</li> <li>16. Same as above</li> <li>17. Same as above</li> <li>18. Same as above</li> <li>19. Same as above</li> <li>20. Same as above</li> <li>21. Same as above</li> <li>22. Same as above</li> <li>23. 2 days</li> <li>24. 3, 7, and 10 days, for a, b, and c, volumes respectively</li> <li>25. DS1</li> <li>26. ILEC Trunks (excluding trunks for IXCs)</li> <li>27. ILEC Trunks (excluding trunks for IXCs)</li> <li>28. 3, 5 and 7 days for a, b and c, volumes</li> <li>29. 3, 5, 7, 10 days for a, b, and c, volumes</li> <li>30. 5 business days</li> <li>31. Special Access or ISDN PRI</li> <li>32. 10 business days</li> </ol>	<ol style="list-style-type: none"> <li>1. Retail Residential</li> <li>2. Retail Business</li> <li>3. Retail Designed</li> <li>4. Retail PBX</li> <li>5. Retail Centrex POTS</li> <li>6. Retail Analog</li> <li>7. Retail Analog</li> <li>8. Retail Residential Analog</li> <li>9. Retail Residential POTS</li> <li>10. Retail DS0</li> <li>11. Retail DS1</li> <li>12. Retail DS3 and OCns</li> <li>13. Retail Residential POTS</li> <li>14. Retail Residential POTS</li> <li>15. Retail Residential POTS</li> <li>16. Retail Residential POTS</li> <li>17. Retail Business POTS</li> <li>18. Retail POTS</li> <li>19. Retail POTS</li> <li>20. Retail Business POTS</li> <li>21. Retail POTS</li> <li>22. ISDN</li> <li>23. POTS</li> <li>24. ISDN</li> <li>25. DS1</li> <li>26. ILEC Trunks</li> <li>27. ILEC Trunks</li> <li>28. Retail POTS</li> <li>29. Retail POTS</li> <li>30. Retail POTS</li> <li>31. Special Access or ISDN PRI</li> <li>32. N/A</li> </ol>

Disaggregation, Analogs and Benchmarks		
F. Product Level Disaggregation for (Ordering, Provisioning, and Maintenance & Repair)	Benchmark-- 95% within x Days unless otherwise noted for <u>Order Completion Interval and Missed Appointments</u>	Retail analog for other provisioning and maintenance and repair measures
33. Projects	33. Retail Large Volume Equivalents	33. Retail Large Volume Equivalents

## CLEC REQUESTED DISAGGREGATION

Metric	BST Disaggregation	CLEC Disaggregation	Total Number
<b>OSS/PREORDER</b>			
OSS-1 Average Response Time and Response Interval (Pre-Ordering/Ordering)	1. Address (RSAG) 2. TN Reservation (ATLAS) 3. Appointment Scheduling (DSAP) 4. Customer Service Record (HAL/CRIS) 5. Feature/Service Availability (P/SIMS, COFFI and OASIS)	Same Plus 6. Failed Queries (those generating an error message that can be used to distinguish from other queries) 7. Percent Time Outs	7 multiplied by CLEC Interface Types (TAG, LENS) = 14 (Add EDI interface as queries are built to it.)
OSS-2 Interface Availability (Pre-Ordering/Ordering)	1. TAG 2. LENS  3. DOE 4. SOCS 5. ATLAS 6. RSAG 7. DSAP 8. BOCRIS 9. SONGs 10. HAL 11. P/SIMS 12. LEO Mainframe 13. LEO Unix 14. LESOG 15. EDI  (ROS, RNS are only used by BellSouth retail. Benchmark makes reporting unnecessary. DOE is used in Southern Bell states and SONGs in South Central Bell states)	Same plus  16. LNP Gateway 17. XDSL Gateway  (CLECs assume that entire route of middleware and backend systems accessed through TAG, LENS and EDI interfaces are covered by system availability metric.)	16
OSS-3 Interface Availability Maintenance and Repair	1. TAFI 2. ECTA  (Backend and middleware of LMOS, HOST, MARCH, SOCS, CRIS, PREDICTOR, LNP)	(CLECs assume that entire route of middleware and backend systems accessed through TAG, LENS and EDI interfaces are covered by system availability metric.)	2
OSS-4 Response Interval Maintenance and Repair	11 systems listed in reports	Create (or confirm logging of) a Maintenance Report; Obtain Status; Obtain Test Results; Cancel Request;	7 (fewer if BST has not yet built to CLEC proposed query types, multiplied by interface) x 2 interfaces (TAFI, ECTA) = 14

## CLEC REQUESTED DISAGGREGATION

		Rejected or Failed Queries (regardless of type); Clearance Notification; Closure Notification	
PO-1 Loop Make Up Response (Manual)	Loop Make Up	Same	1
PO-2 Loop Make Up Response (Electronic)	Loop Make UP	Same	1 (multiplied by EDI, LENS interfaces) = 2
<b>OSS 102 Percent Software Certification Failures</b>	NA	All weighted test deck failures aggregated together	1
<b>OSS 103 Software Problem Resolution Timeliness</b>	NA	Problems with Work-Arounds; Problems without Work-Arounds	2
<b>OSS 104 Software Problem Resolution Delay Hours/Days</b>	NA	Problems with Work-Arounds; Problems without Work-Arounds	2
<b>MI Percent Response Commitments Met on Time – Help Desk</b>	NA	Each Ordering/Provisioning /Systems Help Desk	3
<b>ORDERING</b>			
O-1 Acknowledgement Message Timeliness	1. EDI 2. TAG	Same	2
O-2 Acknowledgement Message Completeness	1. EDI 2. TAG	Same	2
<b>O-3 Percent Flow Through Total</b>	1. Residence (Resale) 2. Business (Resale) 3. LNP 4. UNE	Same But: Instead of (Aggregated) UNE: 4.. UNE-Platform 5. UNE Loops	5
O-4 Percent Flow Through Designed	1. Residence (Resale) 2. Business (Resale) 3. LNP 4. UNE	Same but: Instead of (Aggregated) UNE: 4. UNE-Platform 5. UNE Loops	5
O-5 Percent Flow Through Error Analysis		This is supporting data, not a performance report	
O-6 CLEC LSR Information	.	This is raw data not a performance report	
O-7 Percent Rejected Service Request	21 Services	Same. But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops	31

## CLEC REQUESTED DISAGGREGATION

		5. Other 4 wire xDSL loops. 6. Line Splitting Replace UNE Digital Loop > DS1 with: 7. UNE DS1 8. UNE DS3 and higher Replace UNE ISDN with: 9. UNE ISDN PRI 10. UNE ISDN BRI Replace UNE Combos Other with: 11. Enhanced Extended Loop (Dispatch) 12. Special Access to EELs Migration Replace Resale ISDN: 13. Resale ISDN PRI 14. Resale ISDN BRI 15. Resale DID trunks:	
O-8 Reject Interval	1. Fully Mechanized 2. Partially Mechanized 3. Non-Mechanized 4. And 21 Product Types	Same. But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops 5. Other 4 wire xDSL loops. 6. Line Splitting Replace UNE Digital Loop > DS1 with: 7. UNE DS1 8. UNE DS3 and higher Replace UNE ISDN with: 9. UNE ISDN PRI 10. UNE ISDN BRI Replace UNE Combos Other with: 11. Enhanced Extended Loop (Dispatch) 12. Special Access to EELs Migration Replace Resale ISDN: 13. Resale ISDN PRI 14. Resale ISDN BRI	31 x 3 order types = 93

## CLEC REQUESTED DISAGGREGATION

		15. Resale DID trunks	
O-9 FOC Timeliness	<ol style="list-style-type: none"> <li>1. Fully Mechanized</li> <li>2. Partially Mechanized</li> <li>3. Non-Mechanized</li> </ol> <p>Trunks And 21 Product Types</p>	<p>Same But: Instead of UNE xDSL loop:</p> <ol style="list-style-type: none"> <li>1. <u>Unbundled UNE-derived ADSL Loop</u></li> <li>2. <u>Unbundled UNE-derived HDSL loop</u></li> <li>3. <u>UCL Loops Long and Short</u></li> <li>4. <u>Other 2 wire xDSL loops</u></li> <li>5. <u>Other 4 wire xDSL loops.</u></li> <li>6. <u>Line Splitting</u></li> </ol> <p><u>Replace UNE Digital Loop &gt; DS1 with:</u></p> <ol style="list-style-type: none"> <li>7. <u>UNE DS1</u></li> <li>8. <u>UNE DS3 and higher</u></li> </ol> <p><u>Replace UNE ISDN with:</u></p> <ol style="list-style-type: none"> <li>9. <u>UNE ISDN PRI</u></li> <li>10. <u>UNE ISDN BRI</u></li> </ol> <p><u>Replace UNE Combos</u></p> <p><u>Other with:</u></p> <ol style="list-style-type: none"> <li>11. <u>Enhanced Extended Loop (Dispatch)</u></li> <li>12. <u>Special Access to EELs Migration</u></li> </ol> <p><u>Replace Resale ISDN:</u></p> <ol style="list-style-type: none"> <li>13. <u>Resale ISDN PRI</u></li> <li>14. <u>Resale ISDN BRI</u></li> <li>15. <u>Resale DID trunks</u></li> </ol>	31 x 3 order types = 93
O-10 Service Inquiry with LSR/FOC Response	<ol style="list-style-type: none"> <li>1. xDSL (includes UNE unbundled ADSL, HDSL, and UNE Unbundled Copper Loops)</li> <li>2. Unbundled Interoffice transport.</li> </ol>	<p>Same but: Replace xDSL with:</p> <ol style="list-style-type: none"> <li>2. Unbundled UNE-derived ADSL Loop</li> <li>3. Unbundled UNE-derived HDSL loop</li> <li>4. UCL Loops Long and Short</li> <li>5. Other 2 wire xDSL loops</li> <li>6. Other 4 wire xDSL loops.</li> </ol>	6

## CLEC REQUESTED DISAGGREGATION

O-11 FOC/Reject Completeness	21 Products Fully Mechanized Partially Mechanized Non-mechanized	Same But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops 5. Other 4 wire xDSL loops. 6. Line Splitting Replace UNE Digital Loop > DS1 with: 7. UNE DS1 8. UNE DS3 and higher Replace UNE ISDN with: 9. UNE ISDN PRI 10. UNE ISDN BRI Replace UNE Combos Other with: 11. Enhanced Extended Loop (Dispatch) 16. Special Access to EELs Migration Replace Resale ISDN: 17. Resale ISDN PRI 18. Resale ISDN BRI 19. Resale DID trunks  1.	31 x 3 order types = 93
O-12 Speed of Answer in Ordering Center	CLEC Local Carrier Service Center	Same (unless BST has other preorder, order, system help desks serving NC carriers)	3 (Varner testimony)
<i>OP-113 Call Abandonment Rate</i>	NA	CLEC Local Carrier Service Center (and any other help desk service N.C. carriers)	3 (Varner testimony)
O-13 LNP- Percent Rejected	Stand Alone LNP UNE loop and LNP	Same.	2
O-14 LNP – Reject Interval Distribution and Average Reject Interval	Stand Alone LNP UNE loop and LNP	Same	2
O-15 LNP – FOC Timeliness Distribution/FOC Average Interval	Stand Alone LNP UNE loop and LNP	Same	2
<i>OP-114 Mean Time to Provide Response to Request for BST-to-CLEC trunks</i>	NA	Inbound Trunks requested with TGSR/ ASR(BST ACNA)	1



## CLEC REQUESTED DISAGGREGATION

<i>OP-115 Percent Responses to Requests for BST-to-CLEC Trunks Provided in 7 Days</i>	NA	Inbound Trunks requested with TGSR/ ASR (BST ACNA)	1
<i>OP-116 Percent Negative Responses for BST-to-CLEC trunks</i>	NA	Inbound Trunks requested with TGSR/ASR(BST ACNA)	1
<b>PROVISIONING:</b>			
P-1 Mean Held Order Interval & Distribution	21 Products	<p>Same But: Instead of UNE xDSL loop:</p> <ol style="list-style-type: none"> <li>1. Unbundled UNE-derived ADSL Loop</li> <li>2. Unbundled UNE-derived HDSL loop</li> <li>3. UCL Loops Long and Short</li> <li>4. Other 2 wire xDSL loops</li> <li>5. Other 4 wire xDSL loops.</li> <li>6. Line Splitting</li> </ol> <p>Replace UNE Digital Loop &gt; DS1 with:</p> <ol style="list-style-type: none"> <li>7. UNE DS1</li> <li>8. UNE DS3 and higher</li> </ol> <p>Replace UNE ISDN with:</p> <ol style="list-style-type: none"> <li>9. UNE ISDN PRI</li> <li>10. UNE ISDN BRI</li> </ol> <p>Replace UNE Combos Other with:</p> <ol style="list-style-type: none"> <li>11. Enhanced Extended Loop (Dispatch)</li> <li>12. Special Access to EELs Migration</li> </ol> <p>Replace Resale ISDN:</p> <ol style="list-style-type: none"> <li>13. Resale ISDN PRI</li> <li>14. Resale ISDN BRI</li> <li>15. Add: Resold DID Trunks</li> <li>16. Inbound BST-to-CLEC trunks.</li> </ol>	32 x 3 geographic disaggregations = 96 (But BST should provide information to the Commission to determine the appropriate number of geographic disaggregations to capture regional differences: urban and rural and degree of competition—heavy or moderate.
P-2 Average Jeopardy Notice Interval & Percentage of Orders Given Jeopardy Notice	21 Products	See above. Plus Projects	33 x 3 geographic disaggregations = 99
P-3 Percent Missed Installation Appointments		See above. Plus Projects	33 x 3 geographic disaggregations = 99 Report CNA (Customer Not Ready) exclusions as diagnostic

## CLEC REQUESTED DISAGGREGATION

P-4 Average Completion Interval (OCI) & Order Completion Interval Distribution		See above. Plus Projects	$33 \times 3 = 99 \times 3$ (Dispatch, Non-Dispatch, Software Change) $= 297 \times 3$ (Volume Category) = 891
P-5 Average Completion Notice Interval		See above. Plus Projects	33
<i>OP-121 Percent Billing Completion Notices Sent Within Two Days of Work Completion</i>		See above Plus Projects	33
<i>P-6 Percent Completions/Attempts without Notice or &lt;24 Hours Notice</i>		1. UNE loop-hot cuts 2. UNE 2 wire xDSL 3. UNE 4 wire xDSL UNE-P-dispatch	4
P-7 CCC Interval			
<i>P-7a CCC Hot Cut % Within Interval and Average Interval (CLEC on time metric includes OP-106 early and OP-107 late cuts)</i>	NA	UNE-loop hot cut (two volume categories)	$2 \times 3$ geographic disaggregations = 6
P-7b CCC-Average Recovery Time		UNE-loop hot cut	1
<i>OP-111 and 112 Mean Time and Percent of Customers Restored to ILEC</i>	NA	UNE-loop hot cut	1
P-7c Hot Cut Provisioning Troubles in 7 Days	Hot Cut	UNE-loop hot cut	$1 \times 3$ geographic disaggregations = 3
<i>OP-108 Percent Orders Cancelled or Supplemented at the Request of the ILEC</i>	NA	Hot cuts	1
<i>OP-109 Percent of Hot Cuts Not Working as Initially Provisioned.</i>	NA	Hot cut loop	1
<i>OP-118 Percent Successful xDSL Cooperative Service Testing</i>	NA	2 wire xDSL 4 wire xDSL line sharing line splitting	$4 \times 3$ geographic disaggregations = 12
P-8 Cooperative Acceptance Testing Percent xDSL Loops Tested	xDSL	2 wire xDSL 4 wire xDSL line sharing line splitting	$4 \times 3$ geographic disaggregations = 12
<i>OP-120 Percent Successful Completion of Modification/Conditioning for xDSL Loops</i>	NA	2 wire xDSL 4 wire xDSL line sharing line splitting	$4 \times 3$ geographic disaggregations = 12
P-9 Percent Provisioning Troubles in 30 Days of	21	Same. But instead of UNE xDSL loop	$33 \times 3$ geographic disaggregations = 99

## CLEC REQUESTED DISAGGREGATION

Order Completion		<ol style="list-style-type: none"> <li>1. Unbundled UNE-derived ADSL Loop</li> <li>2. Unbundled UNE-derived HDSL loop</li> <li>3. UCL Loops Long and Short</li> <li>4. Other 2 wire xDSL loops</li> <li>5. Other 4 wire xDSL loops.</li> <li>6. Line Splitting Replace UNE Digital Loop &gt; DS1 with:</li> <li>7. UNE DS1</li> <li>8. UNE DS3 and higher Replace UNE ISDN with:</li> <li>9. UNE ISDN PRI</li> <li>10. UNE ISDN BRI</li> <li>Replace UNE Combos Other with:</li> <li>11. Enhanced Extended Loop (Dispatch)</li> <li>12. Special Access to EELs Migration</li> <li>Replace Resale ISDN:</li> <li>13. Resale ISDN PRI</li> <li>14. Resale ISDN BRI</li> <li>15. Add Resale DID trunks</li> <li>16. BST-to-CLEC trunks</li> <li>17. Projects .</li> </ol>	
P-10 Total Service Order Cycle Time		Not requested by CLECs.	0
<b><i>OP-104 (0-11 in GA)</i></b> <b><i>Service Order Accuracy</i></b>	NA	<ol style="list-style-type: none"> <li>1. Resale Residential</li> <li>2. Resale Business</li> <li>3. Resale ISDN-PRI</li> <li>4. Resale Centrex</li> <li>5. UNE- 2 wire voice loop</li> <li>6. UNE-2 wire xDSL loops</li> <li>7. UNE-4-wire xDSL loops</li> <li>8. UNE-platform</li> <li>9. UNE-other</li> </ol>	9
P-12 LNP-Percent Missed Installation Appointments	Hot Cut with LNP Hot Cut without	Hot Cut with LNP  Stand Alone LNP	2 x 3 geographic disaggregations. = 6
P-13 LNP-Average	LNP	LNP with Loop	2

## CLEC REQUESTED DISAGGREGATION

Disconnect Timeliness Interval & Disconnect Timeliness Interval Distribution		Stand Alone LNP	
P-14 LNP-Total Service Order Cycle Time		Not requested by CLECs.	0
<b>MAINTENANCE &amp; REPAIR</b>			
M&R-1 Missed Repair Appointments	21 products	Same. But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops 5. Other 4 wire xDSL loops. 6. Line Splitting 7. Replace UNE Digital Loop > DS1 with: 8. UNE DS1 9. UNE DS3 and higher Replace UNE ISDN with: 10. UNE ISDN PRI 11. UNE ISDN BRI Replace UNE Combos Other with: 12. Enhanced Extended Loop (Dispatch) 13. Special Access to EELs Migration Replace Resale ISDN: 14. Resale ISDN PRI 15. Resale ISDN BRI 16. Resale DID trunks	31 x 3 disposition codes (software change, dispatch in and dispatch out) x 3 geographic areas = 279
M&R-2 Customer Trouble Report Rate	21 Products	Same. But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops 5. Other 4 wire xDSL loops. 6. Line Splitting Replace UNE Digital	31 x 3 geographic areas = 93

## CLEC REQUESTED DISAGGREGATION

		Loop > DS1 with: 7. UNE DS1 8. UNE DS3 and higher Replace UNE ISDN with: 9. UNE ISDN PRI 10. UNE ISDN BRI Replace UNE Combos Other with: 11. Enhanced Extended Loop (Dispatch) 12. Special Access to EELs Migration Replace Resale ISDN: 13. Resale ISDN PRI 14. Resale ISDN BRI 15. Resale DID trunks	
M&R-3 Maintenance Average Duration	21 Products	Same. But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops 5. Other 4 wire xDSL loops. 6. Line Splitting Replace UNE Digital Loop > DS1 with: 7. UNE DS1 8. UNE DS3 and higher Replace UNE ISDN with: 9. UNE ISDN PRI 10. UNE ISDN BRI Replace UNE Combos Other with: 11. Enhanced Extended Loop (Dispatch) 12. Special Access to EELs Migration Replace Resale ISDN: 13. Resale ISDN PRI 14. Resale ISDN BRI 1. Resale DID trunks	31 x 3 disposition codes (software change, dispatch in and dispatch out) x 3 geographic areas = 279.
M&R-4 Percent Repeat Troubles within 30 Days	15 products	Same. But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-	25 x 3 geographic areas = 75

## CLEC REQUESTED DISAGGREGATION

		derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops 5. Other 4 wire xDSL loops. 6. Line Splitting Replace UNE Digital Loop > DS1 with: 7. UNE DS1 8. UNE DS3 and higher Replace UNE ISDN with: 9. UNE ISDN PRI 10. UNE ISDN BRI Replace UNE Combos Other with: 11. Enhanced Extended Loop (Dispatch) 12. Special Access to EELs Migration Replace Resale ISDN: 13. Resale ISDN PRI 14. Resale ISDN BRI 15. Resale DID trunks	
M&R-5 Out of Service > 24 Hours	21 products	But instead of UNE xDSL loop 1. Unbundled UNE-derived ADSL Loop 2. Unbundled UNE-derived HDSL loop 3. UCL Loops Long and Short 4. Other 2 wire xDSL loops 5. Other 4 wire xDSL loops. 6. Line Splitting Replace UNE Digital Loop > DS1 with: 7. UNE DS1 8. UNE DS3 and higher Replace UNE ISDN with: 9. UNE ISDN PRI 10. UNE ISDN BRI Replace UNE Combos Other with: 11. Enhanced Extended Loop (Dispatch)	31x 3 geographic areas = 93

## CLEC REQUESTED DISAGGREGATION

		12. Special Access to EELs Migration Replace Resale ISDN: 13. Resale ISDN PRI 14. Resale ISDN BRI 15. Add Resale DID trunks	
M&R-6 Average Answer Time-Repair Center	Regional Repair Center	Each Repair Center	3
M&R-7 Mean Time to Notify CLEC of Network Outage	All FCC Reportable Outages	Same	1
<b>MR-101 Call Abandonment Rate (Maintenance)</b>	Regional Repair Center	Regional Repair Center	3
<b>BILLING</b>			
B-1 Invoice Accuracy	Resale UNE Interconnection	Same	3
B-2 Mean Time to Deliver Invoices	Resale UNE Interconnection	Replace with: CRIS CABS	2
B-3 Usage Data Delivery Accuracy	Region	Resale UNE-P Interconnection	3
B-4 Usage Data Delivery Completeness	Region	CABs CRIS	2
B-5 Usage Data Delivery Timeliness	Region	CABs CRIS	2
B-6 Mean Time to Deliver Usage	Resale UNE Interconnection	CABs CRIS	2
B-7 Recurring Charge Completeness	Resale UNE Interconnection	CABs CRIS	2
B-8 Non-Recurring Charge Completeness	Resale UNE Interconnecton	CABs CRIS	2
<b>B-105 Percent Billing Errors Correcting in X Days</b>	NA	DUF Customer Bill Impacting Non-Customer Bill Impacting Invoice	3
<b>OPERATOR SERVICES AND DIRECTORY ASSISTANCE</b>			
OS-1 Speed of Answer/Average Speed of Answer-Toll	One Center	One Center if there is only one	1
OS-2 Speed of Answer/Percent Answered in X Seconds	One Center	One Center is there is only 1	1
DA-1 Speed of Answer/Average Speed	One Center	One Center if there is only 1	1

## CLEC REQUESTED DISAGGREGATION

of Answer-DA			
DA-2 Speed of Answer/ Percent Answered within X Seconds	One Center	One Center if there is only 1	1
<b>DATABASE UPDATE INFORMATION</b>			
D-1 Average Database Update Interval;	LIDB DL DA	Same	3
D-2 Percent Database Update Accuracy	LIDB DL DA	Same	3
D-3 Percent NXXs and LRNs Loaded by LERG Effective Date		Same	1
<i><b>MI-102 Average Time Allotted to Proof Listing Updates Before Publication</b></i>	NA	By Directory Closing	12 (Estimated closings where there is competitions)
<b>E911</b>			
E-1 Timeliness	E911	Same	1
E-2 Accuracy	E911	Same	1
E-3 Mean Interval	E911	Same	1
<b>TRUNK GROUP PERFORMANCE</b>			
TGP-1 Trunk Group Performance-Aggregate	None	DesignType:  2% 1% 0.5% blocking	3
TGP-2 Trunk Group Performance-CLEC Specific	NONE	See above	3
<b>COLLOCATION</b>			
C-1 Collocation Average Response Time	Virtual Initial Virtual Augment Physical Caged-Initial Physical Caged- Augment Physical Cageless – Initial Physical Cageless- Augment	Same but replace Physical Caged Augment with: Physical Caged 45-day augment. Physical Caged 60-day augment Remote	8 x 3 geographic = 24
C-2 Collocation Average Arrangement Time	Virtual Initial Virtual Augment Physical Caged-Initial Physical Caged- Augment Physical Cageless – Initial Physical Cageless- Augment	Same but replace Physical Caged Augment with: Physical Caged 45-day augment. Physical Caged 60-day augment And Remote	8 x 3 geographic = 24
C-3 Collocation Percent Missed Due Dates	See Above	Same plus Remote	7 x 3 geographic = 21
<b>CHANGE MANAGEMENT</b>			
CM-1 Timeliness of	None	Emergency	6



## CLEC REQUESTED DISAGGREGATION

Change Management Notices		Regulatory Requirement Industry Recommended Major Minor CLEC Initiated BST Initiated	
CM-2 Change Management Notice Average Delay Days	None	Same as above	6
CM-3 Timeliness of Documents Associated with Change	None	Same as above.	6
CM-4 Change Management Documentation Average Delay Days	None	Same as above.	6
CM-5 Notification of CLEC Interface Outages	EDI CSOTS LENS TAG ECTA TAFI	Same	6
<i>CM-6 Percent ILEC vs. CLEC Changes Made</i>	NA	CLEC Initiated BST Initiated	2
<b>BONA FIDE/NEW BUSINESS REQUEST PROCESS</b>			
<i>BFR-1 Percentage of BFR/NBR Requests Processed Within 30 Business Days.</i>	BFR	Same	1
<i>BFR-2 Percentage of Quotes Provided for Authorized BFR/NBRs Processed in 10./30/60 Business Days</i>	BFR	Same	1

TOTAL = 2778

## CLEC PERFORMANCE STANDARDS BY MEASURE

Measure	Standard/Benchmark
<ol style="list-style-type: none"> <li>1. Average Response Time and Response Interval (Pre-Ordering)</li> <li>2. Interface Availability (Pre-Ordering)</li> <li>3. Interface Availability (Maintenance &amp; Repair)</li> <li>4. Response Interval (Maintenance &amp; Repair)</li> <li>5. Loop make-up manual</li> <li>6. Loop make-up electronic</li> </ol>	<ol style="list-style-type: none"> <li>1. Retail analogs by function.</li> <li>2. 99.5 % availability for all OSS interfaces.</li> <li>3. 99.5% availability for all OSS interfaces.</li> <li>4. Retail analogs by function.</li> <li>5. 95% within 72 hours</li> <li>6. 95% within 1 minute</li> </ol>
<ol style="list-style-type: none"> <li>1. Percent Flow-through Service Requests</li> <li>2. Order Acknowledgement Timeliness</li> <li>3. Order Acknowledgement Completeness</li> <li>4. Percent Rejected Service Requests</li> <li>5. Reject Interval</li> <li>6. Firm Order Commitment Timeliness</li> <li>7. Firm Order Commitment/Rejection Response Completeness</li> <li>8. Speed of Answer in Ordering Center</li> <li>9. Percent Order Accuracy</li> <li>10. Timeliness of response for BST to CLEC trunks</li> <li>11. LNP Percent Rejected Service Requests</li> <li>12. LNP Reject Interval</li> <li>13. LNP Firm Order Commitment Timeliness</li> <li>14. Call Abandonment Rate</li> </ol>	<ol style="list-style-type: none"> <li>1. 98% flow-through, with an improvement plan if BST's current methodology is not rejected by the Commission.</li> <li>2. 98% of all Mechanized Acknowledgements Are Returned Within 15 Minutes of Receiving LSR</li> <li>3. Mechanized Acknowledgements Are Sent 100% of Time</li> <li>4. Diagnostic</li> <li>5. 95% or greater within: mechanized-- 1 hour, partially mechanized--5 hours, non-mechanized--24 hours</li> <li>6. 95% or greater within: mechanized-- 1 hour, partially mechanized--5 hours, non-mechanized--24 hours</li> <li>7. Firm Order Commitments or Reject Responses are Returned on 100% of LSRs.</li> <li>8. 95% within 20 seconds, 100% within 30 seconds</li> <li>9. 99% of Completed CLEC Orders Are Accurate</li> <li>10. 95% response in 7 days</li> <li>11. Diagnostic</li> <li>12. 95% or greater within: mechanized--1 hour, partially mechanized - 5 hours, non-mechanized -24 hours.</li> <li>13. 95% or greater within: mechanized--1 hour, partially mechanized - 5 hours, non-mechanized -24 hours.</li> <li>14. &lt;1% of calls are abandoned from queue.</li> </ol>
<ol style="list-style-type: none"> <li>1. Mean Held Order Interval &amp; Distribution Intervals</li> <li>2. Average Jeopardy Notice Interval &amp; % of Orders Given Jeopardy</li> </ol>	<ol style="list-style-type: none"> <li>1. Retail Analog</li> <li>2. Retail Analog</li> </ol>

## CLEC PERFORMANCE STANDARDS BY MEASURE

Measure	Standard/Benchmark
<b>Notices</b> 3. Percent Orders Completed On Time (or missed appointment) 4. Average Completion Interval 5. Average Completion Notice Interval 6. Coordinated Customer Conversions 7. Hot cut timeliness with interval 8. % Provisioning Troubles w/i 30 days of Service Order Completion 9. Percent Completions/Attempts without Notice or with Less Than 24 Hours Notice 10. % on time hot cuts 11. Percent of Orders Cancelled or Supplemented at the Request of the ILEC 12. Percent of Hot Cuts Not Working as Initially Provisioned 13. Average Recovery Time 14. Mean Time to Restore Customer to the ILEC 15. % Customer Restored to ILEC 16. % Cooperative Acceptance Testing 17. % successful xDSL loops cooperatively tested 18. % completion of timely loop modification 19. LNP missed appointments 20. LNP Disconnect Timeliness	3. Retail Analog 4. Benchmark or analog 5. Retail Analog 6. < 5 minutes per loop 7. 95% within + or - 15 minutes of schedule start time 8. Retail analog 9. ≥ 98 percent of completions and completion attempts should receive more than 24 hours notice via a FOC 10. 95% of coordinated cutovers complete no later than 1 hour past the committed due date and time on FOC for 1-10 lines and no later than 2 hours for greater than 10 lines. 11. < 1.0% Supped or Cancelled at Request of ILEC 12. < 1.0% of All Coordinated Cuts Not Working as Initially Provisioned 13. 98% of Customer Recoveries Done Within 1 Hour/ 100% of Customer Recoveries Done Within 2 Hours 14. 98% of Customers Restored to the ILEC Completed within 1 hour and 100% within 2 hours. 15. <1 per cent of all cuts restored to ILEC 16. 98% of lines should be tested 17. 99.5% of loops should pass on first series of tests 18. 95% within 5 days 19. Retail analog 20. 95% < 15 minutes
1. Customer Trouble Report Rate 2. Maintenance Average Duration 3. Percent Repeat Troubles w/i 30 days) 4. Average Answer Time - Repair Centers 5. Mean Jeopardy Interval for Maintenance & Trouble Handling 6. Percent Missed Repair Appointments 7. Mean Time To Answer Calls(Repair Service Center)	1. Retail Analog 2. Retail Analog 3. Retail Analog 4. 95% within 20 seconds, 100% within 30 seconds 5. Retail Analog 6. Retail Analogue 7. > 95% of calls, by center, are answered within 20 seconds, all calls within 30 seconds.
1. Usage Data Delivery Accuracy	1. Retail Analog

## CLEC PERFORMANCE STANDARDS BY MEASURE

Measure	Standard/Benchmark
2. Mean Time to Deliver Usage	2. Retail Analog
3. % Billing Errors Corrected in X Days	3. Retail analog
4. Usage Timeliness	4. Retail analog
5. Recurring charge completeness	5. Retail analog for resale UNE 90% complete.
6. Non recurring charge completeness	6. Retail analog for resale UNE 90% complete
7. % on time mechanized invoice delivery	7. within 10 calendar days 98% of time
8. Invoice accuracy	8. Retail analog
1. Mean Time To Answer(OS/DA)	1. >90% of Calls Answered in 10 Seconds
2. E-911 Timeliness	1. Parity
3. E-911 Accuracy	2. Parity
4. E-911 Mean Interval	3. Parity
1. Percent Call Completion (Trunking)	1. Dedicated trunk groups not to exceed blocking standard of B.01. Common Trunk Groups: Where CLEC/LD traffic share common ILEC trunks: No more than 1% of end offices may have more than 2% blockage a month based on Erlang B.01 scale. Where CLEC traffic traverses a separate common network from ILEC traffic: No more than 2% of end offices may have more than 2% blocking.
1. Collocation Average Response Time	1. 95% within 10 calendar days
2. Collocation Average Arrangement Time	2. Physical augment-90; physical augment 45 calendar days virtual 60 calendar days; virtual augment 60; virtual augment 90; cageless 60; remote 45 calendar days
3. Collocation % of Due Dates Missed	3. 0 misses of committed due date
1. Database Average Update Interval	1. 99.99% Completed in 24 Hours
2. Database Percent Update Accuracy	2. >99.99% Accurate
3. NNX and LRN loaded by LERG Effective Date	3. 99% by LERG effective date
% on time response commitments	100% within 3 business days
Mean Time to notify CLEC of network outages	Parity
% on time notification of interface outages	97% in 15 minutes
1. % Change Management Notices Sent on Time	1. 98% on time

## CLEC PERFORMANCE STANDARDS BY MEASURE

Measure	Standard/Benchmark
2. % Change Management Documentation Sent on Time 3. Average Delay Days for Change Notices 4. Average Delay Days for Documentation 5. ILEC vs CLEC Changes Made	2. 98% on time 3. No more than 5 days 4.. No more than 5 days 5. Parity
1. % Software Certification Failures 2. % Software Problems Resolved on Time	1. No more than 0.1% failures 2. With no workaround 24 hours/with workaround 72 hours