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March 1, 2001

Ms. Blanca S. Bayó, Director
Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Docket No. 000121-TP

Dear Ms. Bayó:

Enclosed for filing in the above-referenced docket on behalf of WorldCom, Inc., AT&T Communications of the Southern States, Inc., DIECA Communications Company d/b/a Covad Communications Company, New South Communications Corp., Mpower Communications Corp., e.spire Communications, Inc., ITC^DeltaCom Communications, Inc., and Rhythms Links Inc. are an original and fifteen copies each of the following documents:

1. Direct Testimony and Exhibits of Karen Kinard; 02795-01
2. Direct Testimony and Exhibits of Cheryl Bursh; and 02796-01
3. Direct Testimony and Exhibits of Robert M. Bell, Ph.D. 02797-00

Z-Tel Communications, Inc. sponsors the direct testimony and exhibits of Karen Kinard and Cheryl Bursh, except to the extent that Ms. Bursh's testimony addresses the area of statistical approaches.

Copies of the foregoing are being served on all parties of record in accordance with the attached Certificate of Service.

Thank you for your assistance with this matter.

Sincerely,

Donna Canzano McNulty

Enclosures

CERTIFICATE OF SERVICE
DOCKET NO. 000121-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was furnished
via U.S. Mail and hand delivery* to the following parties of record on this 1st day of

March 2001:

Tim Vaccaro*
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0580

Nancy B. White
c/o Nancy Sims
BellSouth Telecommunications, Inc.
150 S. Monroe Street, Suite 400
Tallahassee, FL 32301-1556

Kimberly Caswell
Verizon Select Services, Inc.
P.O. Box 110, FLTC0007
Tampa, FL 33601

Pennington Law Firm
Peter Dunbar
Karen Camechis
P.O. Box 10095
Tallahassee, FL 32302

Michael Gross
FCTA
310 N. Monroe St.
Tallahassee, FL 32301

Mark Buechele
Supra Telecom
1311 Executive Center Dr., Ste. 200
Tallahassee, FL 32301

Katz, Kutter Law Firm
Charles Pellegrini/Patrick Wiggins
12th Floor
106 East College Avenue
Tallahassee, FL 32301

Nanette Edwards
ITC Delta^Com
4092 S. Memorial Pkwy.
Huntsville, FL 35802

Scott Sapperstein
Intermedia Communications, Inc.
3625 Queen Palm Drive
Tampa, FL 33619

Susan Masterson/Charles Rehwinkel
Sprint Communications CO LP
P.O. Box 2214
MC: FLTLHO1017
Tallahassee, FL 32316-2214

Marsha Rule
AT&T
101 N. Monroe St, Ste. 700
Tallahassee, FL 32311

Brian Sulmonetti
MCI WorldCom
6 Concourse Pkwy, Suite 3200
Atlanta, GA 30328

Vicky Gordon Kaufman
McWhirter, Reeves, McGlothlin, Davidson
Decker, Kaufman, Arnold & Steen, P.A.,
117 South Gadsden Street
Tallahassee, Florida 32301

Jeremy Marcus
Elizabeth Braman
Blumenfeld & Cohen
1625 Massachusetts Ave. N.W.
Suite 300
Washington, D.C. 20036

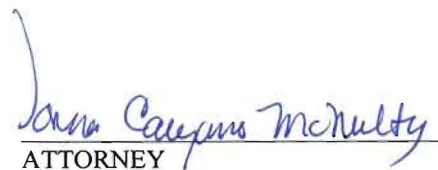
Jonathan E. Canis
Michael B. Hazzard
Kelley Drye & Warren, LLP
1200 19th Street, N.W. , Fifth Floor
Washington, DC 20036

Catherine F. Boone
Covad Communications Company
10 Glenlake Parkway, Suite 650
Atlanta, Georgia 30328-3495

Rick Melson
Hopping Green Sams & Smith, P.A.
Post Office Box 6526
Tallahassee, FL 32314

John Rubino
George S. Ford
Z-Tel Communications, Inc.
601 South Harbour Island Blvd.
Tampa, FL. 33602

William Prescott
AT&T
1200 Peachtree St., NE
Atlanta, GA 30309


ATTORNEY

BEFORE THE

FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KAREN KINDARD

ON BEHALF OF

**AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC.
WORLD COM, INC.
DIECA COMMUNICATIONS COMPANY D/B/A COVAD COMMUNICATIONS
COMPANY
NEW SOUTH COMMUNICATIONS CORP.
MPOWER COMMUNICATIONS CORP.
E.SPIRE COMMUNICATIONS, INC.
ITC^DELTA COM COMMUNICATIONS, INC.
RHYTHMS LINKS INC.
Z-TEL COMMUNICATIONS, INC.**

DOCKET NO. 000121-TP

MARCH 1, 2000

DOCUMENT NUMBER-DATE

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FPSC-RECORDS/REPORTING

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION.**

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

6 **Q. PLEASE PROVIDE INFORMATION ON YOUR BACKGROUND AND**
7 **EXPERIENCE.**

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 Before joining WorldCom, I was an editor for eleven years at
17 Telecommunications Reports ("TR"), covering technology, state regulation,
18 access charge issues, and jurisdictional cost separations policy. I also held the
19 position of chief technology editor and other top editorial positions, including
20 serving as the principal editor of TR's Communications Business and Finance and
21 Cable-Telco Competition Report newsletters. I initiated TR's Communications
22 Billing Report newsletter before joining Phillips Business International's
23 Communications Today daily electronic newsletter in 1995 as its chief FCC
24 correspondent. From 1976 to 1984, I served in various positions as an aide to the

1 Congressman for the Seventh District of Pennsylvania, including Press Secretary
2 and Legislative Assistant for telecommunications policy and banking.

3 I received my Masters of Science degree in Telecommunications Policy
4 and Management from George Washington University in 1984. I received a
5 Bachelors of Science degree in Communications from West Chester University in
6 1975. I also hold a paralegal certificate in Corporate Law from Widener
7 University.

8 **Q. WHAT IS YOUR EXPERIENCE IN PERFORMANCE MEASUREMENTS**
9 **WORK IN OTHER JURISDICTIONS?**

10
11 A. In addition to participation in several metric sessions with Florida staff last year, I
12 have been WorldCom's lead representative in carrier-to-carrier performance
13 measurement and remedy collaboratives, have made metric presentations, and
14 have testified or filed comments in many state proceedings since 1998. State
15 proceedings in which I have participated include those held in North Carolina,
16 Louisiana, Tennessee, New York, Pennsylvania, Massachusetts, New Jersey,
17 Virginia, Maryland, Illinois, Michigan, Ohio, Indiana and Arizona. I also have
18 filed declarations with the FCC on metric and remedy issues in the New York and
19 Massachusetts 271 proceedings, and I have made presentations and informally
20 discussed metrics and remedy issues with FCC and Department of Justice staff at
21 their request and in ex partes, either done jointly with other LCUG members or
22 solely for WorldCom.

23 **Q. WILL THE ALECs' PROPOSED METRIC ADDITIONS AND**
24 **IMPROVEMENTS HELP ALECS AS LOCAL COMPETITORS IN**
25 **FLORIDA?**
26

1 A. Yes. Along with better pricing and improved OSS functionality, enhanced
2 performance measurements, standards and remedies will be critical factors in
3 enabling ALECs to enter the Florida local market, particularly the residential
4 market. Many of the metric revisions and new metrics (particularly those
5 involving change management, confirmation and rejection completeness, software
6 validation and error correction, timely completion notices and loss notifications)
7 are geared toward ensuring that ALECs' market entry does not run into many of
8 the same impediments encountered elsewhere. These impediments have not only
9 slowed ALECs' growth in the residential market, but they also have harmed
10 customers with double billing and sometimes even local service termination when
11 the ILEC wrongly concluded that a customer was not paying its bills when in fact
12 the customer had been switched to an ALEC and was paying the ALEC's bills.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. The purpose of my testimony is to discuss the additional metrics to be reported by
15 BellSouth; appropriate business rules, exclusions, calculations, disaggregation and
16 performance standards; performance audits; and the provision of affiliate data.

17 My testimony addresses Issues A, 1(a), 1(b), 24(a), 24(b), 25, 26, 27(a), 27(b) 29,
18 30(a) and 30(b).

19

20 **ISSUE 1(a): WHAT ARE THE APPROPRIATE SERVICE QUALITY**
21 **MEASURES TO BE REPORTED BY BELL SOUTH?**

22

23 **Q. WHY IS IT IMPORTANT FOR THE METRICS IN A PERFORMANCE**
24 **MEASUREMENT PLAN TO BE COMPREHENSIVE?**

25

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

16 Measurements should cover all problems that can and have arisen through
17 real market experience with:

18 (A) Service delivery methods such as resale and individual unbundled
19 network elements (UNEs) (such as loops or transport); UNE
20 combinations (such as enhanced extended loops and platform); and
21 facilities interconnection.

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

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

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

10 (E) Maintenance responsiveness and capability in resolving customer
11 trouble reports.

12 (F) Billing accuracy and completeness for the end user customer and the
13 ALEC.

14 **Q. WHAT IS THE STATUS IN FLORIDA WITH RESPECT TO THE**
15 **PERFORMANCE MEASUREMENTS IN PLACE?**

16
17 A. BellSouth is reporting Service Quality Measurement (SQM) for Florida on its
18 website. BellSouth's latest SQM in Florida was filed in November, 2000 for the
19 interim metrics for the third party test. Comments in my attachments propose
20 changes to this document. If BellSouth files a revised SQM in this proceeding,
21 the ALEC coalition will have to respond to those revisions in my rebuttal
22 testimony.

23 **Q. HAS BELL SOUTH BEEN DIRECTED TO ADD METRICS IN OTHER**
24 **STATE JURISDICTIONS?**

25

1 A. Yes. A final Georgia order issued January 16, 2001 added the following
2 seventeen metrics to BellSouth's plan:

- 3 • Response Time for Manual Loop Make-Up (LMU) Queries
- 4 • Response Time for Electronic LMU Queries
- 5 • Acknowledgement Timeliness
- 6 • Acknowledgement Completeness
- 7 • FOC/Reject Response Completeness
- 8 • % Completions/Attempts w/o Notice or < 24 hours notice
- 9 • Average Recovery Time for Coordinated Cuts
- 10 • Cooperative Acceptance Testing Attempts vs. Requested by
- 11 ALECs
- 12 • Recurring Charge Completeness
- 13 • Non-recurring Charge Completeness
- 14 • Mean Time to Notify ALECS of Network Outages
- 15 • Mean Time to Notify ALECS of Interface Outages
- 16 • Average Database Update Interval
- 17 • Percent Database Update Accuracy
- 18 • NXX and LRNs loaded and tested by LERG date
- 19 • BFRs processed in 30 business days
- 20 • BFR Quotes provided in X days

21 It also should be noted that in the Georgia proceeding, BellSouth had
22 reported that it was then in the process of developing the following five
23 measurements:

- 24 • Service Inquiry with Firm Order (Manual)
- 25 • Loop Makeup Inquiry (Manual and Electronic)
- 26 • Timeliness of Change Management Notices
- 27 • Percentage Functional Acknowledgements Returned on Time

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- Percentage Troubles within 7 Days of Hot Cut

In addition, as part of an arbitration ruling, the Tennessee Regulatory Authority has directed BellSouth to incorporate numerous metrics from the Texas measurement collaborative into the interconnection agreement between BellSouth and ITC^DeltaCom Communications, Inc.

- Firm order confirmation returned within specified time (Texas Plan Measurement No. 5);
- Mechanized rejects returned within one hour (Texas Plan Measurement No. 10);
- Percent of accurate and complete formatted mechanized bills (Texas Plan Measurement No. 15);
- Billing completeness (Texas Plan Measurement No. 17);
- Unbillable usage (Texas Plan Measurement No. 20);
- Percent busy in the local service center (LSC) (Texas Plan Measurement No. 23);
- Percent busy in the local operations center (LOC) (Texas Plan Measurement No. 26);
- Percent installations completed within industry guidelines for LNP with loop (Texas Plan Measurement No. 56.1);
- Average response time for loop makeup information (Texas Plan Measurement No. 57);
- Directory assistance average speed of answer (Texas Plan Measurement No. 80);
- Operator services speed of answer (Texas Plan Measurement No. 82);
- Percentage of LNP-only due dates within industry guidelines (Texas Plan Measurement No. 91);

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- Percentage of time the old service provider releases the subscription prior to the expiration of the second nine-hour (T2) timer (Texas Plan Measurement No. 92);
- Percentage of customer account restructured prior to LNP due date (Texas Plan Measurement No. 93);
- Percentage premature disconnects for LNP orders (Texas Plan Measurement No. 96);
- Average days required to process a request (Texas Plan Measurement No. 106);
- Percentage of updates completed into the DA database within 72 hours for facility-based ALECs (Texas Plan Measurement No. 110);
- Average update interval for DA database for facility-based ALECs (Texas Plan Measurement No. 111);
- Percentage DA database accuracy for manual updates (Texas Plan Measurement No. 112);
- Percentage of premature disconnects (coordinated cutovers) (Texas Plan Measurement No. 114);
- Percentage of missed mechanized INP conversions (Texas Plan Measurement No. 116);
- Percent NXXs loaded and tested prior to the LERG effective date (Texas Plan Measurement No. 117);
- Average delay days for NXX loading and testing (Texas Plan Measurement No. 118);
- Mean time to repair NXX problems (Texas Plan Measurement No. 119);
- Percentage of access to right of way requests processed within 30 business days (Texas Plan Measurement No. 120); and
- Percentage of quotes provided for authorized BFRs/special requests within X (10, 30, 90) days (Texas Plan Measurement No. 121).

1 Thus, many of the metrics that the Florida Public Service Commission has
2 asked KPMG to evaluate already have been adopted in other BellSouth states.
3 Most of the remaining metrics ALECs have requested have been adopted in states
4 outside BellSouth's region, as described elsewhere in my testimony.

5 BellSouth has not yet published a new SQM incorporating most of the
6 ordered measures from Georgia and Tennessee. If they are added during this
7 proceeding, ALECs will need to examine associated business rules, exclusions,
8 calculations, disaggregation and standards to comment on their adequacy in the
9 same manner as I have done in Exhibit KK-1 attached to my testimony.

10 **ISSUE A RESULTS OF KPMG'S REVIEW OF BELLSOUTH**
11 **PERFORMANCE MEASURES**

12
13 **Q. HOW SHOULD THE RESULTS OF KPMG'S REVIEW OF BELLSOUTH**
14 **PERFORMANCE MEASURES BE INCORPORATED INTO THIS**
15 **PROCEEDING?**

16
17 As stated above, many of the additional measures under review by KPMG have
18 been ordered in other jurisdictions and are requested by the ALECs in this docket.
19 Accordingly, the ALECs urge the Commission to adopt these measures as part of
20 this proceeding. Additionally, KPMG is reviewing the appropriateness of
21 BellSouth's existing measures. In my exhibit KK-1, I point out critical changes
22 that the ALECs urge the Commission to make regarding BellSouth's existing
23 measures. To the extent KPMG recommends changes to BellSouth's existing
24 SQM or additional measures beyond those requested by the ALECs in this

1 proceeding, those KPMG recommendations should be reviewed as part of the first
2 six-month review cycle in this docket.¹

3 **Q. WHAT METRICS SHOULD BE INCLUDED IN BELLSOUTH'S**
4 **PERFORMANCE MEASUREMENT PLAN?**

5
6 A. A number of metrics still need to be added to BellSouth's SQM. ALECs have
7 proposed the additional measures that were proposed in their issues list submitted
8 on January 19, 2001 to the Commission. The business rules, calculation formulas,
9 disaggregation levels and standards for the metrics below are described in
10 attachment KK-4 to my testimony. I explain the need for these measures below:

11 **1. Additional Pre-Ordering Measures**

12 **OSS- Average Response Time for Loop Makeup Information**

13 While BellSouth has announced plans to add a manual loop qualification metric in
14 Georgia, it has proposed untenable standards of seven days for manual (compared
15 to ALECs' proposed 72 hours, which is generous compared to New York's 48
16 hour standard). Georgia recently ordered three days as requested by the ALECs.
17 BellSouth needs to provide ALECs with access to loop makeup information
18 quickly. Loop makeup information is information about the physical
19 characteristics of the loop. This information is necessary for some ALECs to
20 determine the services, particularly for digital subscriber line ("DSL" or "xDSL")
21 services, that they can provide over a loop. BellSouth has only recently made
22 electronic access to loop makeup available for ALECs in Florida. As a result,

¹ According to the current procedural schedule in this docket, the Staff will issue its recommendation on June 14, it will be voted on by the Commission on June 26, and an order will be issued by July 16. It is not clear that KPMG's recommendation will be available to incorporate into this proceeding.

1 while some ALECs are building their side of the interfaces to use this electronic
2 access, they are forced to continue to obtain information manually. Moreover, as
3 indicated in COVAD's direct testimony, BellSouth has admitted in testimony in
4 Florida and elsewhere that detailed loop information will not be available on
5 every loop through the electronic systems. Furthermore, BellSouth has admitted
6 that the loop makeup information housed in Loop Facilities Assignment Control
7 Systems ("LFACS") may be inaccurate 10% or more of the time. Thus, in
8 instances where ALECs do not yet have access electronically to loop makeup
9 information, or where that information is either not available electronically or is
10 inaccurate (see COVAD testimony), ALECs must rely on manual loop makeup
11 information. Because ALECs may be unable to inform potential customers of the
12 type of services that they can provide until they obtain the loop makeup
13 information, it is important that BellSouth provide this information as quickly and
14 accurately as possible and that BellSouth's performance be measured. Adding 7
15 days onto an already elongated loop provisioning process will not provide ALECs
16 in Florida a meaningful opportunity to compete.

17 OSS-Average Response Time for Loop Makeup Information – Mechanized
18 (measured individually for each interface – EDI, RoboTag, Tag and LENS)

19
20 BellSouth has only recently begun providing ALECs with mechanized access to
21 its loop makeup information. This mechanized access, however, is not available
22 for all interfaces and BellSouth needs to commit to offering it with the EDI
23 interface. BellSouth's performance in responding to loop make-up queries should
24 be measured for each interface. Again, BellSouth's Georgia promise of adding a
25 mechanized loop qualification metric comes with an unacceptable standard of 4

1 hours (compared to ALECs' proposed less than 1 minute standard, which is
2 comparable to Texas' benchmark and New York's "parity plus 4 seconds"
3 results). The Georgia PSC agreed with ALECs and ordered a benchmark for
4 electronic loop qualification of 5 minutes immediately, to be reduced to 1 minute
5 in six months. Further, BellSouth only proposed to meet its lax standard 85% of
6 the time, not 95% of the time as required in New York and Texas.

7 **2. Additional Ordering Measures**

8 OP-Acknowledgement Timeliness

9 OP-Acknowledgement Completeness

10 ALECs 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 an ALEC 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. ALECs 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 BellSouth proposed in Georgia to add a timeliness metric for acknowledgements
20 and should do so in Florida as well, but the completeness metric is even more
21 critical and BellSouth has not indicated plans to add one to date. As noted
22 previously, Georgia ordered these metrics.
23

1 OP-Firm Order Confirmation and Reject Response Completeness

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

14 OP-Mean Time to Provide Response to Request for BellSouth-to-ALEC Trunks
15 OP-Percent Responses to Requests for BellSouth-to-ALEC Trunks Provided
16 within 7 Days

17 OP-Percent Negative Responses to Requests for BellSouth-to-ALEC Trunks

18 ALECs cannot expand without adequate trunk capacity inbound from the ILEC as
19 well as outbound to the ILEC. ILEC delays in providing reciprocal trunks or
20 delays in providing ALECs a due date for such trunks forces ALECs to delay
21 installing new customers. ALECs would rather manage a single customer's
22 expectation for a due date than install a customer that will cause further blocking
23 on inbound calls to all ALEC local customers in the area. ILEC delays on trunk
24 resizing keep ALECs from growing market share. The proposed measures in this
25

1 area should apply regardless of how an ALEC sends its request, whether via fax,
2 email or as an Access Service Request (ASR).

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

20 **3. Additional Provisioning Measures**

21 OP- Order Accuracy

22 BellSouth currently reports this metric, albeit on a flawed basis, for Georgia. (See
23 revisions proposed for Georgia metric in table KK-1.) Florida ALECs also need

1 to ensure that BellSouth provisions an order the way it was entered or faxed by
2 the ALECs. An Order Accuracy metric would capture whether orders are
3 changed through BellSouth's manual handling of partially mechanical or faxed
4 orders and thus provisioned inaccurately in great annoyance to the customer.

5 OP-Percent Completions/Attempts without Notice or with Less Than 24 Hours
6 Notice

7
8 Missed or late confirmations make ALECs look disorganized since they have to
9 scramble to meet the due date or are caught off guard by a service delivery to their
10 customer. Such absent or late notices can lead to "customer not ready" situations
11 where late service delivery is wrongly blamed on the ALEC and excluded from
12 the interval metrics. The Georgia PSC also ordered this metric.

13 OP-Percent On-Time Hot Cut Performance

14 ALEC customers often suffer from degraded or lost service through ILEC
15 mistakes or failure to adhere to established cutover procedures. An early cut of
16 facilities can cause the customer to lose service. If the time is during business
17 hours, this can be devastating to the customer who relies on the telephone. A late
18 cut translation often means the customer cannot receive all or certain incoming
19 calls. Either is harmful to ALECs' reputations and can lead to costly lawsuits if
20 service is lost unexpectedly during business hours. Both Texas and New York
21 have similar measures to capture these important processes.

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

23
24 This metric, adopted in the New York Carrier-to-Carrier proceeding, captures
25 when ALECs do not extend the due date voluntarily but rather at the request of
26 BellSouth in order to adjust for BellSouth-caused failures to complete the order.

1 When an ALEC agrees to supplement the order at BellSouth's request, what
2 would have been a missed due date now gets a new due date in the future.
3 Therefore, without this metric, BellSouth would meet the measure even though
4 the customer and ALEC are frustrated with the later date.

5 OP-Percent of Coordinated Cuts Not Working as Initially Provisioned

6 This metric captures when loops are provisioned on time but are not working.
7 Often ALECs cannot log a trouble report until the order is completed in the
8 ILEC's billing system, and that may take many hours or days. Consequently,
9 these provisioning troubles are undetectable by BellSouth's current performance
10 measures.

11 OP-Average Recovery Time

12 When early or late cuts occur it is important to get the customer's service
13 promptly restored and switched over to the ALEC, assuming there has been an
14 outage. This metric measures how quickly service is restored to the ALEC. Both
15 New York and Texas have similar measures. The Georgia PSC also adopted this
16 measure.

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

18 OP-Percent of Customers Restored to the ILEC

19
20 These metrics measure the speed of restoring service to BellSouth when a
21 customer conversion fails and the percent of accurate port-backs to BellSouth
22 when necessary. Customers need to have service and may not be able to wait for
23 the conversion to work. Therefore, the customer would be ported back to
24 BellSouth. Restorations due to ALEC errors would need to be excluded from this
25 metric.

1 OP-Call Abandonment Rate – Ordering and Provisioning
2 MR-Call Abandonment Rate -Maintenance

3
4 BellSouth only captures the call center response time for customers who wait for
5 their calls to be completed. The number of customers who abandon the call
6 because of long waits in queue are not captured and that causes any problem in
7 the call center answer time metrics to be understated. Mpower’s testimony
8 regarding long hold times may indicate the need for an abandonment
9 measurement to capture those calls where the ALEC gives up in frustration.

10 OP-Percent xDSL Lines Cooperatively Tested
11 OP-Percent Successful xDSL Service Testing

12
13 ALECs need to have cooperative testing done on xDSL loops to determine if
14 BellSouth has done all the appropriate work to provide connectivity. Like
15 coordinated cuts, this also should be part of the end time measurement for
16 Average Completion Interval and Missed Appointment metrics for xDSL loops,
17 but it is not in BellSouth’s proposal. In New York, Verizon measures for both
18 ALECs that use and do not use an acceptance process as part of its Missed
19 Appointment metrics for xDSL service. This measure goes beyond that and
20 reports on how many loops BellSouth actually did test.

21 Along the same lines, BellSouth should measure the percent of successful
22 xDSL cooperative testing. Similar to the defective loop metric for coordinated
23 cuts, this measure would pick up how often an xDSL loop that is not working is
24 delivered to the ALEC. This metric could be disaggregated by reason codes for
25 the loop not working and while one remedy would apply for missing the standard
26 for delivering working xDSL loops, the disaggregation would aid BellSouth in
27 root cause analysis to address the problem area. COVAD’s testimony

1 underscores the importance of joint testing between ALEC and ILEC in providing
2 timely working xDSL service to the customer. Georgia ordered the Percent
3 Tested metric proposed above.

4 OP- (disaggregation or new metric) - Percent Completion of Timely Loop
5 Modification/Conditioning on xDSL loops

6
7 Some loops require modification or conditioning before they can be used to
8 provide a customer with xDSL service. This metric measures BellSouth's
9 timeliness in making the needed modifications or performing the necessary de-
10 conditioning. COVAD's testimony emphasizes the need for a metric or at least
11 disaggregation for interval metrics and held orders for loop provisioning where
12 conditioning is required.

13 **4. Additional Billing Measures**

14 BL-Percent Billing Errors Correct in X Days

15 BellSouth delays in providing adjustments to carrier bills or correct daily usage
16 feed errors can harm the ALEC and its customer in several ways. Errors that do
17 not get corrected promptly in the daily usage file either lead to the ALEC's
18 holding up charges or passing on wrong charges to the customer, which the ALEC
19 has to expend resources to adjust later. BellSouth's invoice accuracy measure
20 does not capture whether errors are corrected within a reasonable time.

21 BL- Usage Timeliness

22 BellSouth measures the percentage of recorded usage data that is delivered to the
23 ALEC within six calendar days from the receipt of the original recording. ALECs
24 also need to know how timely the usage records on average are delivered to
25 ALECs, and therefore request this additional measure.

1 **BL-Recurring Charge Completeness**

2 This metric is similar to Texas Measure 17, which has been ordered implemented
3 in Tennessee. ALECs need all charges promptly billed so that they can audit
4 properly. ALECs do not believe the audits BellSouth claims it is doing focus on
5 wholesale bills or capture missing charges. This metric also was adopted by the
6 Georgia PSC.

7 **BL-Non-Recurring Charge Completeness**

8 Non-recurring charges need to be timely on bills to make it easier for ALECs to
9 keep check on their costs. Where such non-recurring charges get passed on to
10 customer, the ALEC needs them in a timely manner to avoid disputes over late
11 charges the customer no longer recalls. The ALEC needs to be in compliance
12 with any state back-billing limitations regarding passing on such charges to the
13 customer. The Georgia PSC ordered this additional billing metric as well.

14 **BL- Percent On-Time Mechanized Local Service Invoice Delivery**

15 Not only do the charges on the bills need to be correct and complete but also the
16 formatting must follow appropriate industry standards so that they can be
17 electronically processed in the ALEC systems. Without properly mechanized
18 bills, ALECs may be forced to reconcile boxes of paper bills for charges that
19 cannot be accepted or audited by their electronic systems.

20 **5. Other Additional Measures**

21 **MI- Percent Response Commitments Met On Time**

22 Even more important than how quickly BellSouth representatives answer the
23 phone is how quickly they answer questions or resolve problems. ALECs should

1 not have to wait days for BellSouth to respond to a problem that has stalled
2 production of orders for the ALEC. The addition of this metric would help
3 address MPower's issues with the slow response of BellSouth help desks.
4 However, such a measure would not help with Mpower's issues regarding
5 BellSouth representatives accurately interpreting business rules. Help Desk
6 responsiveness on missing notifier (confirmations, rejection, completion)
7 problems is also crucial to ALECs. Verizon's problems in this area led to the
8 introduction of a three-day standard for resolving such requests in the New York
9 metrics. The Commission should adopt a measurement and standard for
10 responsiveness to all help desk questions that impede an ALEC's ability to place
11 orders or response to customer status questions about their order.

12 MI- Mean Time To Notify ALEC of Network Outages

13 If an ALEC's maintenance team must wait longer to learn of a network outage
14 than BellSouth's maintenance team, the ALEC is placed at a disadvantage
15 because it has less time to devise alternatives for customers. Knowing about an
16 outage promptly as well as the estimated time of resolution can help ALECs
17 address customer calls and concerns about disrupted service. This metric was
18 among those added by the Georgia Commission.

19 MI-Average Update Interval

20 MI-Percentage Database Update Accuracy

21
22 ALEC customers are concerned if their information is not in BellSouth's directory
23 assistance and directory listings database promptly and accurately after obtaining
24 service from their new ALEC. The Georgia PSC ordered this metric for directory
25 assistance and directory listings.

1 OP-NXX and LRN(s) Loaded by LERG Effective Date

2 Failure to load the ALEC's NXXs and LRNs in BellSouth's switches and tandems
3 and perform testing by the LERG (Local Exchange Routing Guide) effective date
4 can delay an ALEC's switch launch or calling area expansion in a market. It also
5 can keep a new customer from getting personal or business calls they used to
6 receive and decrease the non-toll calling area to which they are accustomed.

7 Again, this measure was ordered by Georgia.

8 OSS-Notification of Interface Outages

9 ALECs need to be informed promptly when BellSouth's systems are down so that
10 they can make alternative work plans. Failure to timely inform ALECs of
11 BellSouth outages can cause them to waste time troubleshooting their own
12 interfaces. Timely notification also prevents BellSouth's help centers from being
13 inundated with calls about an already known outage. This is also among the newly
14 ordered Georgia metrics.

15 CM- Percent Change Management Notices Sent On Time

16 CM- Average Delay Days for Notices

17 CM- Percent Change Management Final Documentation Sent on Time

18 CM-Average Delay Days for Documentation

19 CM- Percent ILEC vs. ALEC Changes Made

20
21 BellSouth has included metrics covering the timeliness of Change Management
22 Notices and Documentation in the OSS test SQM. As my Exhibit KK-1 explains,
23 there are many deficiencies with the business rules in the November 2000 SQM.
24 Further, reporting under these metrics on BellSouth's web site appears to be
25 different from what the business rules appear to require. In addition, there are
26 additional change control metrics that need to be added to ensure that ALEC

1 interfaces are not in jeopardy of being shut down without prompt relief. Often
2 ILEC failures to adhere to change management notice requirements have caused
3 delays in the building, or have stopped the functioning, of ALEC OSS interfaces.
4 BellSouth must measure its adherence to its change management notice
5 commitments and definitions of emergency notices. This is necessary to avoid
6 BellSouth's OSS software changes from harming competitors. New York has
7 added an additional metric to monitor timely availability of full and accurate
8 documentation related to change notices and Texas has recently agreed to two
9 change management measures, one for notices and documentation timeliness and
10 one for software problem resolution timeliness.

11 ALECs need timely notices of changes to plan for them and determine
12 what changes are required on their side of the interface. At best, late notices
13 require ALECs to pull information technology personnel from other projects to
14 keep the existing interface from going down. At worst, the ALEC cannot act
15 quickly enough to stop the changes from harming its production. Having a
16 change management process is not enough; reported data and enforcement of the
17 process is needed to ensure the process is effective and being followed.

18 Final documentation, in addition to the change management notice, must
19 be sent on time so ALECs can begin working on the changes to be ready from
20 their end. Without the documentation to support the changes, ALECs cannot
21 begin the necessary work. e.spire's testimony shows the harm delayed and
22 inadequate documentation can cause ALECs trying to enter the Florida
23 marketplace.

1 BellSouth has not yet included a metric in its SQM that tracks whether it
2 responds fairly to ALEC requests for changes and new functionalities on its
3 interfaces. While ALECs prioritize the change requests, BellSouth implements
4 these changes whenever it chooses, and it ignores the prioritization. Therefore,
5 the Commission needs to order BellSouth to measure the percentage of BellSouth
6 changes made versus the number of ALEC changes made to determine whether
7 ALEC requests for interface changes are being implemented in a fair and
8 equitable manner.

9 OSS- Percent Software Certification Failures

10 This measurement provides some assurance that BellSouth will sufficiently test
11 before a system is rolled out. ALECs need to be sure that their existing systems
12 still will be able to function when BellSouth introduces software upgrades.

13 OSS- Software Problem Resolution Timeliness

14 OSS- Software Problem Resolution Average Delay Days

15 This metric examines how quickly BellSouth fixes software errors caused by
16 changes to an existing interface, establishment of a new query type or other
17 changes. Different standards are set based on whether there is a work-around for
18 the problem. If an ALEC is prevented from entering orders, extremely prompt
19 responses are required. The delay day measure captures the degree to which the
20 problem is allowed to continue. As mentioned previously, Georgia recently
21 ordered BellSouth to add a Software Error Correction timeliness metric, and the
22 New York and Texas plans also include such a metric. In addition, the New York
23 plan includes a Software Validation metric, to ensure that interfaces are not
24

1 launched while still failing a test deck of transactions that ALECs and Verizon
2 have developed.

3 **Q. FROM TIME TO TIME, SHOULD THE COMMISSION REVIEW THE**
4 **METRICS IT ADOPTS?**

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

1 Other states have set six-month reviews of metrics. Most recently,
2 Georgia has ordered a staff review every six months. The New York Carrier-to-
3 Carrier Working Group continues to meet monthly, developing a report on
4 consensus and nonconsensus items to be referred to the commission, accompanied
5 by an Administrative Law Judge recommendation, for a vote. Texas also has
6 adopted a review process for SBC's metrics. Although ILECs often dispute new
7 measures or changes claiming that Verizon-NY and SBC-Texas received 271
8 approval without them, both Texas and New York have added new metrics,
9 modified standards, and taken other actions post-271 approval. Vigilance is
10 required to ensure that metric and remedy systems are appropriate to open local
11 markets in the first place as well as to prevent backsliding after 271 approval.
12 Staff's testimony recognizes the need for such reviews. (Paul Stallcup, pg. 18).

13 **ISSUE 1(b): WHAT ARE THE APPROPRIATE BUSINESS RULES,**
14 **EXCLUSIONS, CALCULATIONS, AND LEVELS OF DISAGGREGATION AND**
15 **PERFORMANCE STANDARDS FOR EACH?**

16
17 **Q. PLEASE EXPLAIN WHAT IS MEANT BY BUSINESS RULES AND WHY**
18 **THEY ARE IMPORTANT IN METRIC DEFINITION.**

19
20 **A. Business rules are the heart of every measure. Business rules state the start and**
21 **stop time of each metric and provide details necessary to describe processes in**
22 **between. The rules on how the data will be collected for ALECs and for**
23 **BellSouth also are included. The business rules need to be detailed enough that a**
24 **third party can use them to recreate BellSouth's performance measurement reports**
25 **using BellSouth's raw data. They also must be structured to ensure that BellSouth**
26 **discrimination is not being masked.**

1 Business rule issues often require discussion of the substantive aspects of
2 BellSouth's OSS. For example, in the Percent Rejected Service Requests
3 measure that BellSouth has proposed, BellSouth has stated that an LSR should be
4 rejected and sent back to the ALEC once the first known error is discovered. This
5 approach means that if an LSR contains more than one error, that order may be
6 rejected several times because only one error at a time may be identified. Multiple
7 rejections of the same order leads to considerable wasted time and effort. If
8 BellSouth's rejection interval is based on such business rules, BellSouth's
9 performance may be portrayed as being good when in fact there is a significant
10 problem with BellSouth's process.

11 e.spire's testimony regarding problems with receiving notice of facility
12 holds on orders after receiving a firm order confirmation may be addressed by a
13 business rule for Missed Appointments. The ALECs propose that in such
14 circumstances where a facilities pending notice follows a confirmation, the due
15 date on that confirmation will be considered missed. The facilities check should
16 have been completed beforehand.

17 **Q. WHY ARE EXCLUSIONS NECESSARY?**

18 A. There may be several legitimate reasons to exclude certain circumstances from a
19 measure. These need to be agreed upon so everyone understands what the
20 measure does and does not include. Failure or delay caused by the ALEC or the
21 ALEC's customer is an example of a reason for excluding a transaction from the
22 data to be reported, at least for remedy purposes.

1 **Q. WHAT DOES THE METRIC CALCULATION INVOLVE?**

2 A. The metric calculation is the mathematical equation that generates the
3 performance result. Once the appropriate data for a metric has been collected, it
4 can be input into the calculation formula to produce a numerical result.

5 **Q. WHAT IS DISAGGREGATION?**

6
7 A. Disaggregation involves breaking down performance data into sufficiently
8 specific categories so that like-to-like comparisons can be made. Disaggregation
9 prevents poor performance in one area (such as xDSL) from being obscured by
10 being lumped together with other performance data. Just as it is important for
11 performance metrics to be comprehensive in scope, it is critical that performance
12 reporting be required at a sufficiently detailed level to provide meaningful results.
13 Covad's testimony discusses further the need for xDSL and line sharing/splitting
14 disaggregation.

15 **Q. IN GENERAL, WHAT TYPES OF DISAGGREGATION SHOULD BE
16 REQUIRED IN A PERFORMANCE MEASUREMENT PLAN?**

17 A. Disaggregation should be required by geography, interface type, pre-order query
18 type, product, service order activity, volume category, trouble type, trunk design
19 and type (for trunk blockage measurements), maintenance and repair query type
20 and collocation category. e.spire's testimony indicates that disaggregated
21 reporting for Special Access to Enhanced Extended Loop conversions are
22 required for the ordering and provisioning metrics to capture problems it has run
23 into in migrating between the two BellSouth services. I will discuss the additional
24 disaggregation needed in my exhibits. See KK-1 and KK-2.

1 **Q. SHOULD BELL SOUTH BE REQUIRED TO REPORT ON ITS**
2 **PERFORMANCE IN FLORIDA FOR EACH MEASUREMENT?**

3
4 A. Yes, unless all BellSouth activity comes from a centralized location and the data
5 cannot be separated and is not different in process, Florida data should be
6 reported. BellSouth's performance relating specifically to Florida customers
7 cannot be evaluated unless BellSouth reports its performance for Florida. The
8 same ALECs do not operate in all the same states, let alone at the same volumes
9 in each state or with the same type of product mixes. Products ordered in Florida
10 may be more advanced than in another state causing intervals to vary and bill
11 invoices and usage feeds to be more complex. To report a particular service for
12 an entire nine-state region would not allow ALECs or the Commission to
13 understand the level of performance in Florida.

14 **Q. PLEASE EXPLAIN WHY REPORTING AT THE LOCAL LEVEL (SUCH**
15 **AS BY MSA) IS IMPORTANT.**

16
17 A. If only statewide reporting is provided, ALECs that operate only in discrete areas
18 of the state cannot compare the performance they receive to what BellSouth
19 provides itself in those areas. Because service levels may vary from area to area,
20 such ALECs cannot determine whether they are receiving parity of service.
21 BellSouth currently reports provisioning and repair metrics at an MSA level in
22 Louisiana.

23 **Q. PLEASE EXPLAIN WHY METRICS SHOULD BE DISAGGREGATED**
24 **BY INTERFACE TYPE.**

25
26 A. One interface may react quicker or slower than another. The only way to
27 determine, for example, whether BellSouth's TAG interface meets the applicable

1 standards is to review data specifically for that interface. If TAG data is lumped
2 together with EDI data, the performance of the TAG interface will be obscured.

3 **Q. PLEASE EXPLAIN WHY PRE-ORDER QUERY TYPE**
4 **DISAGGREGATION IS IMPORTANT.**

5
6 A. Pre-order query type disaggregation is important because a request for something
7 simple like a phone number may require less response time than a request for
8 something more complex like a due date reservation or loop makeup information.
9 Disaggregation for response time for error messages and percent time outs also
10 need to be included.

11 **Q. PLEASE EXPLAIN WHY METRICS SHOULD BE DISAGGREGATED**
12 **BY PRODUCT.**

13
14 A. Product disaggregation is key because different performance can be expected
15 based on the type of product being ordered. Lumping together one type of order
16 that has a two day interval with another type of order that has a ten day interval
17 and producing a report showing that on average the orders are provisioned in
18 seven days tells one nothing about whether either type of order was provided at
19 parity or met the benchmark. Such aggregate treatment masks disparities in
20 service and should not be permitted. The basic principle of product
21 disaggregation is that each product should be tracked separately. Examples of
22 product disaggregation include resale, UNEs and trunks, broken down by
23 residential and business customer, where appropriate. Further disaggregation for
24 resale and UNEs include DS1s and DS3s. DS1s and DS3s have differing
25 provisioning and repair intervals and complexities that require separate reporting.
26 Separating BRI ISDN from PRI ISDN is important for the same reason. Different

1 unbundled loop types, such as analog voice-grade loops, digital loops, ADSL
2 loops, HDSL loops, UCLs and xDSL loops, also should be disaggregated because
3 BellSouth's performance will vary for each loop type. Additionally, UNE-
4 Platform needs to be reported separately because this product combines a loop
5 with switching and transport and is different from just ordering a without the
6 switching and transport. ALECs simply want products disaggregated to the level
7 where relatively few dissimilarities are expected to exist.

8 **Q. PLEASE DESCRIBE WHY IT IS IMPORTANT TO DISAGGREGATE BY**
9 **TYPE OF WORK PERFORMED.**

10 A. In the provisioning and repair of services, BellSouth's personnel can perform
11 work in three basic ways: 1) through software change entered into a computer; 2)
12 via central office work; or 3) by dispatching a technician into the "field" at remote
13 facilities or the end-users premises. These three different types of work activities
14 can require significantly differing amounts of time, and combining them or
15 comparing one type of results to a different type, e.g. BellSouth's current practice
16 of comparing UNE orders to dispatch only retail, results in misleading
17 information about the amount of time required to perform activities for the ALEC
18 compared to itself. Although BellSouth currently reports by dispatch and non-
19 dispatch activity, it improperly combines dispatch in and dispatch out
20 performance that can mask non-parity performance. BellSouth should be required
21 to cease its current discriminatory reporting practices and report data for itself and
22 the ALECS as follows, software changes, dispatch in, and dispatch out.

23 **Q. WHY DO ALECS WANT METRICS DISAGGREGATED BY VOLUME**
24 **CATEGORY?**

1 A. Volume category disaggregation captures differences that may arise based on, for
2 example, the number of lines being ordered. ALECs recognize that the
3 appropriate interval for a particular metric may depend on whether, say, five or
4 fifty lines are being ordered.

5 **Q. WHY SHOULD THERE BE DISAGGREGATION BY TROUBLE TYPE?**

6 A. Lumping together different kinds of troubles leads to meaningless results. For
7 example, data for the mean time to restore service for a trouble requiring dispatch
8 to the customer's premises should not be included in the same data set as the
9 mean time to restore service for a trouble not requiring a dispatch. If one
10 customer trouble is restored with a dispatch, and another is restored without a
11 dispatch, and the average of the two restoration intervals is six hours, we would
12 learn nothing about either type of service. The nondispatch service may have
13 taken a long time or the dispatch service may have taken a rather short time, but
14 we don't know for sure. Disaggregation by trouble type may also highlight a
15 repetitive problem and lead to a prompt lasting resolution.

16 **Q. WHY SHOULD THE PERCENT TRUNK BLOCKAGE METRICS BE**
17 **DISAGGREGATED BY DESIGN AND TYPE?**

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

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Trunk Type

- OS/DA
- 911

Trunk Performance

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

Q. WHY IS MAINTENANCE AND REPAIR QUERY TYPE DISAGGREGATION IMPORTANT?

A. Maintenance and repair query type disaggregation is important for the same reasons as pre-order query type disaggregation. Different types of queries can be expected to take different lengths of time to process.

Q. WHY SHOULD THERE BE DISAGGREGATION BY COLLOCATION CATEGORY?

A. Different types of collocations and augments take different amounts of time to provision. For example, provisioning a cageless collocation space should require substantially less time than provisioning a caged collocation space. Augments of collocation space also should generally take less time than installing the original collocation space.

Q. IN GENERAL, WHAT APPROACH SHOULD THE COMMISSION TAKE WITH RESPECT TO RETAIL ANALOGS AND BENCHMARKS?

A. A retail analog is a service or function that BellSouth provides for itself, its customers or its affiliates that is analogous to a service or function that BellSouth provides to ALECs. When a BellSouth retail analog exists, BellSouth's

1 performance for itself, its customers and its affiliates should be compared to its
2 performance for ALECs to determine if BellSouth is meeting the Act's parity
3 requirement. If no retail analog exists, BellSouth's performance must be gauged
4 by a performance standard, also known as a benchmark. A benchmark is a set
5 level of performance, such as provisioning a particular UNE 95% of the time
6 within three days. *See Application of Ameritech Michigan to Provide In-Region,*
7 *InterLATA Services in Michigan, CC Docket 97-137, Memorandum Opinion and*
8 *Order, FCC 97-137 at ¶¶ 139-41 (rel. Aug. 19, 1997).*

9 **Q. ON WHAT SHOULD BENCHMARKS BE BASED?**

10 A. Benchmarks should be based on the level of performance that can be expected to
11 offer an efficient carrier a meaningful opportunity to compete. Benchmarks
12 cannot be based simply on BellSouth's historical performance – that BellSouth
13 has provided a certain level of service to ALECs in the past does not mean that
14 level of service provides ALECs a meaningful opportunity to compete or to even
15 meet Florida's end user standards.

16 **Q. HOW IMPORTANT IS THE CHOICE OF A RETAIL ANALOG?**

17 A. Choosing a retail analog that is dissimilar than the service or product being
18 measured can make discriminatory performance look like parity. If a slow
19 process is chosen on the retail side, it masks poor performance on the wholesale
20 side. If the performance of a BellSouth affiliate is used to judge parity, the
21 affiliate's activity must be studied to see if it is similar to that of the ALECs' and
22 makes the appropriate analog.

23 **Q. ARE ALECS PROPOSING ANALOGS AND BENCHMARKS IN THIS**
24 **DOCKET?**

1 A. Yes. I address the analogs and benchmarks ALECs are proposing in exhibits KK-
2 1 and KK-3.

3 **Q. SHOULD THE BENCHMARKS ESTABLISHED IN THIS DOCKET BE**
4 **REVIEWED IN THE FUTURE?**

5
6 A. Yes. Any numerical benchmark decided in this proceeding would need to be
7 reviewed in the future. As BellSouth improves its systems and processes, it may
8 be that the service level BellSouth should be required to provide today is longer
9 than the time that should be required in the year 2001 and beyond. All
10 benchmarks will need to be reviewed periodically to ensure that ALECs are given
11 a meaningful opportunity to compete as the industry progresses.

12 **Q. ARE BELL SOUTH'S BENCHMARKS ADEQUATE TO PROMOTE**
13 **COMPETITION?**

14
15 A. No. Many standards are set below the 95% and higher thresholds required in New
16 York and Texas for most metrics (except call center and OS/DA answer times).
17 Often not only the percentage of timely performance but also the intervals
18 themselves are set below those adopted in other states, as COVAD highlights
19 regarding xDSL intervals for Texas metrics. BellSouth's trunk confirmation and
20 collocation intervals are excessively long and need to be tightened up to foster
21 competition in Florida. See exhibits KK-1 and KK-3 for more on the need to
22 improve BellSouth's performance standards.

23 **Q. ARE THERE PROBLEMS WITH THE BUSINESS RULES, EXCLUSIONS**
24 **AND DISAGREGATIONS AND STANDARDS IN BELL SOUTH'S SQM?**

25 A. Yes. Exhibit KK-1 describes the reasoning behind disputed or missing language
26 for each metric in BellSouth's SQM. Although some disaggregation and
27 standards issues are described in this first exhibit, exhibits KK-2 (disaggregation

1 other than product/UNE type) and KK-3 (analogs and benchmarks) list the
2 ALEC's specific requirements in detail.

3 **ISSUE 24(a): SHOULD PERIODIC THIRD-PARTY AUDITS OF**
4 **PERFORMANCE ASSESSMENT PLAN DATA AND REPORTS BE REQUIRED?**

5

6 **Q. SHOULD SUCH AUDITS BE REQUIRED?**

7

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

16 **ISSUE 24(b): IF SO, HOW OFTEN SHOULD AUDITS BE CONDUCTED, AND**
17 **HOW SHOULD THE AUDIT SCOPE BE DETERMINED?**

18

19 **Q. HOW OFTEN SHOULD SUCH AUDITS BE CONDUCTED, AND HOW**
20 **SHOULD THE AUDIT SCOPE BE DETERMINED?**

21

22 **A.** A comprehensive audit should be conducted every twelve months, with the first
23 such audit commencing twelve months after the conclusion of the KPMG OSS
24 Test's metric replication. The audit scope should be determined in an audit process
25 that is open to ALECs.

26 **ISSUE 25: IF PERIODIC THIRD-PARTY AUDITS ARE REQUIRED, WHO**
27 **SHOULD BE REQUIRED TO PAY THE COST OF THE AUDITS?**

28

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

30

1 A. Costs for these annual audits should be borne by BellSouth. BellSouth is the
2 dominant market provider with the incentive and ability to discriminate. To
3 ensure that BellSouth's reporting is accurate and trigger remedies designed to
4 curb its incentives to discriminate, comprehensive annual audits are critical. The
5 FCC's order approving Verizon's 271 application to enter the New York long-
6 distance market noted that an important characteristic of Verizon's Amended
7 Performance Assurance Plan was "reasonable assurances that the reported data is
8 accurate." *In re: Application by Bell Atlantic New York for Authorization Under*
9 *Section 271 of the Communication Act to Provide In-Region, InterLATA Service*
10 *in New York*, CC Docket No. 99-295, Memorandum Opinion and Order ¶ 433
11 (rel. Dec. 22, 1999). This assurance should come at the incumbent's expense.

12 **ISSUE 26: WHO SHOULD SELECT THE THIRD-PARTY AUDITOR IF A**
13 **THIRD-PARTY AUDIT IS REQUIRED?**

14
15 **Q. WHO SHOULD SELECT THE THIRD-PARTY AUDITOR?**

16
17 A. The third-party auditor should be jointly selected by BellSouth and the ALECs. If
18 the parties cannot agree on the auditor, the Commission should determine the
19 auditor.

20 **ISSUE 27(a): SHOULD AN ALEC HAVE THE RIGHT TO AUDIT OR**
21 **REQUEST A REVIEW BY BELL SOUTH FOR ONE OR MORE SELECTED**
22 **MEASURES WHEN IT HAS REASON TO BELIEVE THE DATA COLLECTED**
23 **FOR A MEASURE IS FLAWED OR THE REPORT CRITERIA FOR THE**
24 **MEASURE IS NOT BEING ADHERED TO?**

25
26 **Q. SHOULD AN ALEC HAVE THE RIGHT TO REQUEST A MINI-AUDIT?**

27
28 A. Yes. In addition to an annual audit, ALECs should have the right to mini-audits of
29 individual performance measures/submeasures during the year. When an ALEC
30 has reason to believe the data collected for a measure is flawed or the reporting

1 criteria for the measure is not being adhered to, it should have the right to have a
2 mini-audit performed on the specific measure/sub-measure upon written request
3 (including e-mail), which will include the designation of an ALEC representative
4 to engage in discussions with BellSouth about the requested mini-audit. If, thirty
5 days after the ALEC's written request, the ALEC believes that the issue has not
6 been resolved to its satisfaction, the ALEC should be able to commence the mini-
7 audit upon providing BellSouth with five business days advance written notice.
8 Each ALEC would be limited to auditing three single measures/sub-measures or
9 one domain area (preorder, ordering, provisioning, maintenance or billing) during
10 the audit year. The audit year would begin with the start of the OSS test (or an
11 annual audit). Mini-audits could be requested for months including and
12 subsequent to the month in which the KPMG OSS or an annual audit was initiated.
13 Mini-audits could not be requested by an ALEC while the OSS third party test or
14 an annual audit was being conducted (that is, before completion).

15 Mini-audits would include all systems, processes and procedures
16 associated with the production and reporting of performance measurement results
17 for the audited measure/sub-measure. Mini-audits would include two months of
18 data. All parties agree that raw data supporting the performance measurement
19 results will be available monthly to ALECs.

20 No more than three mini-audits would be conducted simultaneously unless
21 more than one ALEC wanted the same measure/sub-measure audited at the same
22 time, in which case mini-audits of the same measure/sub-measure should count as
23 one mini-audit for this purpose. Mini-audits would be conducted by a third-party

1 auditor, selected by the same method as described above. BellSouth would pay
2 for fifty percent of the costs of the mini-audits. The other fifty percent of the
3 costs will be divided among the ALEC(s) requesting the mini-audit unless
4 BellSouth is found to be “materially” misreporting or misrepresenting data or to
5 have non-compliant procedures, in which case, BellSouth would pay for the entire
6 cost of the third party auditor. BellSouth would be “materially” at fault if a
7 reported successful measure changed as a consequence of the audit to a missed
8 measure, or if there was a change from an ordinary missed measure to
9 intermediate or severe. Each party to the mini-audit should bear its own internal
10 costs, regardless of which party ultimately bears the costs of the third party
11 auditor.

12 If, during a mini-audit, it was found that for more than thirty percent of the
13 measures in a major service category BellSouth was “materially” at fault (that
14 is, a reported successful measure changes as a consequence of the audit to a
15 missed measure, or there was a change from an ordinary missed measure to
16 intermediate or severe), the entire service category would be re-audited at
17 BellSouths’s expense. The major service categories for this purpose would be:

- 18 • Pre-Ordering/Ordering
- 19 • Billing
- 20 • Provisioning - POTS and UNE Loop and Port Combinations
- 21 • Provisioning - Resale Specials and UNE Loop and Port Combinations
- 22 • Provisioning - Unbundled Network Elements
- 23 • Maintenance - POTS and UNE Loop and Port Combinations
- 24 • Maintenance - Resale Specials and UNE Loop and Port Combinations
- 25 • Maintenance - Unbundled Network Elements
- 26 • Interconnection Trunks
- 27 • Local Number Portability
- 28 • Database - 911
- 29 • Database - Directory Assistance

- 1 • Database - NXX
- 2 • Collocation
- 3 • Coordinated Conversions

4
5 Each mini-audit should be submitted to the ALEC involved and to the Commission
6 as a proprietary document. BellSouth should provide notification to all ALECs of
7 any mini-audit requested when the request for the audit is made.

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

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

22 **ISSUE 27(b): IF SO, SHOULD THE AUDIT BE PERFORMED BY AN**
23 **INDEPENDENT THIRD-PARTY?**

24
25 **Q. SHOULD THE AUDIT BE PERFORMED BY AN INDEPENDENT THIRD**
26 **PARTY?**

27
28 **A.** Although there may be cases in which the ALECs and BellSouth could jointly
29 review certain metric reporting issues with Commission oversight, in most cases
30 an unbiased third-party would be the best choice as an auditor.

1 **ISSUE 29: WHAT IS THE APPROPRIATE DEFINITION OF "AFFILIATE"**
2 **FOR THE PURPOSE OF THE PERFORMANCE ASSESSMENT PLAN?**

3
4 **Q. HOW SHOULD "AFFILIATE" BE DEFINED?**

5 A. The affiliate reporting should include all affiliates that purchase wholesale services
6 from BellSouth and the term affiliate should be defined pursuant to the
7 Telecommunications Act definition. Section 3(1) of the Communications Act
8 defines affiliate as follows: "The term 'affiliate' means a person that (directly or
9 indirectly) owns or controls, is owned or controlled by, or is under common
10 ownership or control with, another person. For purposes of this paragraph, the
11 term "own" means to own an equity interest (or the equivalent thereof) of more
12 than 10%." Such affiliate reporting was ordered by the Pennsylvania Public
13 Utility Commission in its December 31, 1999 performance standards and
14 remedies order.

15 **ISSUE 30(a): SHOULD BELLSOUTH BE REQUIRED TO PROVIDE**
16 **"AFFILIATE" DATA AS IT RELATES TO THE PERFORMANCE**
17 **ASSESSMENT PLAN?**

18
19 **Q. SHOULD BELLSOUTH BE REQUIRED TO PROVIDE AFFILIATE**
20 **DATA?**

21
22 A. Yes. BellSouth should report monthly any affiliate activity for the metrics adopted
23 in this proceeding. The affiliate information should be reported separately by
24 each affiliate (data, wireless, future long distance, or other) with activity in the
25 metric category. BellSouth may exclude the number of affiliate observations
26 from data reported to individual ALECs but not in data reported to the
27 Commission.

28 **ISSUE 30(b): IF SO, HOW SHOULD DATA RELATED TO BELLSOUTH**
29 **AFFILIATES BE HANDLED FOR PURPOSES OF (1) MEASUREMENT**
30 **REPORTING? (2) TIER 1 COMPLIANCE? and (3) TIER 2 COMPLIANCE?**

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Q. HOW SHOULD AFFILIATE DATA BE HANDLED FOR PURPOSES OF MEASUREMENT REPORTING, TIER 1 COMPLIANCE AND TIER 2 COMPLIANCE?

A. ALECs propose that data be reported for several months before a decision is made on giving up set benchmarks for parity comparisons with the ALEC. BellSouth’s affiliates may have different service delivery plans (such as only ordering virtual collocation, only ordering line sharing not DSL-capable unbundled loops, or only ordering high-capacity loops) or not have enough activity yet to make it an appropriate and dependable analog for parity comparisons. If the affiliate is deemed in a future collaborative as an appropriate retail analog, ALECs may choose either to adopt a standard of parity with the affiliate or choose to use an existing benchmark, perhaps updated periodically based on historical affiliate treatment during the study period.

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. Comprehensive performance measures are critical to ensure that ALECs receive parity service from BellSouth and a meaningful opportunity to compete. ALECs request the Commission to adopt the additional measures they have proposed, in addition to reviewing BellSouth’s SQM periodically to ensure that it covers all areas needed to sustain competition. ALECs further request the Commission to ensure that the measures already in BellSouth’s SQM are properly defined, that they are appropriately disaggregated, and that suitable benchmarks are put in place where retail analogs do not exist. Finally, ALECs request that appropriate auditing mechanisms and requirements regarding affiliate data be adopted.

1 Q. DOES THAT CONCLUDE YOUR TESTIMONY?

2 A. Yes, at this time.

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

BellSouth Measurement	Business Rules, Exclusions, Calculations and Standards in Need of Immediate Change¹
<p>OSS-1. Average Response Time and Response Interval (Pre-Ordering)</p>	<p>Definition: The measurement time should begin when BellSouth receives the query from the ALEC and should end when BellSouth returns a response to the ALEC 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 ALEC 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 ALEC."</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 ALEC. Responses to invalid queries could come more quickly than a response to a valid query, thus diluting the results in terms of how quickly ALECs 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 ALECs, 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 ALECs. 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 ALEC is trying to sign them up to new service.</p>
<p>OSS-2. Interface Availability (Pre-Ordering)</p>	<p>Definition: BellSouth's definition should be expanded to include all interfaces, not just legacy systems. It is of no use to a CLEC if the legacy system is up, but the interface needed to access it is down.</p> <p>Business Rules: BellSouth's tortured and unsubstantiated business rules place severe limitations on what is considered an outage. All such exclusions should be eliminated from this measure.</p> <p>Data Retained: BellSouth should be required to post its own scheduled hours of OSS availability on its web-site as it</p>

¹ 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 KK-2 (disaggregation) and KK-3 (analogs and benchmarks).

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<p>currently does for ALEC OSS availability. Parity of scheduled availability cannot be determined without this information. If ALECs do not know the starting point of this measure, the usefulness of the % schedule met is limited.</p>
<p>OSS-3. Interface Availability (Maintenance & Repair)</p>	<p>Disaggregation: BellSouth needs to disaggregate by all its OSS Systems., . If any route to that OSS varies, then each interface route should be reported separately.</p> <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 ALEC 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 ALEC prime operational hours: 5 to 9 p.m. versus its own prime hours: 9 to 5 p.m.</p>
<p>O-1. Percent Flow-through Service Requests (Summary) O-2. Percent Flow-through Service Requests (Detail) O-3. Flow-through Error Analysis</p>	<p>Exclusions: BellSouth's SQM should not exclude orders that fall to manual, through no fault of the ALEC, 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. ALECs 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 ALECs..</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. ALECs request that the Commission reject this unjustified and discriminatory exclusion. At a minimum, the Commission should establish a timely sunset provision² 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.</p>

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

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<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%. ALECs propose that both total and achieved/designed flow through performance should be measured.</p>
<p>O-5 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 ALECs 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, ALECs 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 ALEC's learning to avoid such errors in the future.</p>
<p>O-6. 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 ALEC interface. BellSouth should measure the entire interval up to the point that it returns the rejected LSR to the ALEC. 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 ALEC."</p> <p>BellSouth's SQM indicates that it uses the date/time stamp in LEO for mechanized orders. ALECs 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 ALEC. 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 ALECs 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 ALEC 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>O-7. 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</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<p>follows: The measured interval should end upon delivery by BellSouth of a response to the ALEC 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 recorded by (both LEX and) EDI and reflect the actual date and time the FOC is available to the ALEC."</p> <p>BellSouth's SQM is unclear for this measure for mechanized orders and should be changed to clearly indicate that the end time is the date/time stamp in EDI/LENs/TAG.. 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 ALECs 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>Also, if ALECs order inbound BellSouth to ALEC trunks through ASRs, the confirmation of those ASRs should be included in this metric. ALECs 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. ALECs often wait long times for ILECs to send the ASRs when capacity is inadequate to carry calls from ILEC customers to ALEC customers. ALECs 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.</p> <p>BellSouth also should confirm facilities availability for all orders, not just trunks, before issuing a confirmation. If ALECs cannot depend on the due date given them then confirmations are useless. Too often in BellSouth territory ALECs receive confirmations immediately followed by notice that the order is being held for facilities. Facilities checks should be a standard requirement for all orders.</p> <p>Standards: While BellSouth and ALECs 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>
<p>O-8 Speed of Answer (Ordering Center)</p>	<p>Disaggregation: The reports should be by each help desk center</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<p>the ALECs call into as each may have different answering times.</p> <p>Benchmark: The ALEC 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 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. ALECs 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>O-9 LNP Percent Rejected Service Requests</p>	<p>BellSouth should not be allowed to exclude non-mechanized orders.</p>
<p>O-10 LNP Reject Interval Distribution and Average Reject Interval</p>	<p>Exclusions: BellSouth should not be allowed to exclude non-mechanized orders from this measure.</p> <p>Business Rules: BellSouth's business rules for the start and stop times for this measure are unclear. BellSouth should be accountable for the LSR while it is in its possession and should change its business rules to reflect that it uses the date/time stamps in EDI/LENS and TAG to measure this interval.</p> <p>Standards: BellSouth has proposed extremely long intervals for returning partially mechanized 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 return interval for all electronic orders. Manual orders should be returned in 24 hours.</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

<p>O-11 LNP Firm Order Confirmation Timeliness Interval Distribution and Firm Order Confirmation Average Interval</p>	<p>Exclusions: BellSouth should not be allowed to exclude non-mechanized orders from this measure.</p> <p>Business Rules: BellSouth's business rules for the start and stop times for this measure are unclear. BellSouth should be accountable for the LSR while it is in its possession and should change its business rules to reflect that it uses the date/time stamps in EDI/LENS and TAG to measure this interval.</p> <p>Standards: BellSouth has proposed extremely long intervals for returning partially mechanized 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 return interval for all electronic orders. Manual orders should be returned in 24 hours.</p>
<p>P-1 Mean Held Order Interval and Distribution Intervals</p>	<p>Business Rules and Calculations: BellSouth's approach to this measure is fatally flawed in that it allows any held order which is closed prior to the end of the month to be excluded from this calculation. Therefore an order could be held on the 1st of the month, and not be released until the 29th, but not appear in this report. BellSouth should be required to report the average delay of all orders held for lack of facilities past the due date.</p> <p>Disaggregation: ALECs 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>P-2 Average Jeopardy Notice Interval and Percentage of Orders Given Jeopardy Notices</p>	<p>Business Rules: ALECs 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 ALECs 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 ALECs not receiving notices on orders that are going to be missed.</p>
<p>PP-3 Percent Missed Installation Appointments</p>	<p>Business Rules: Disconnect and From orders should be disaggregated and reported separately, rather than be excluded as BellSouth proposes. ALECs 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. The due date on any firm order confirmation followed by a</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<p>notice of facilities hold status should be considered a missed appointment, because BellSouth should have checked facilities before issuing the confirmation. (See e.spire testimony.)</p> <p>Business Rules/Calculation: BellSouth includes only misses of the original due date. Therefore, if an appointment is rescheduled, and also missed, BellSouth does not report it. This is misleading and can mask discriminatory behavior. BellSouth should be required to report on all its missed appointments. The denominator is also incorrect. BellSouth uses the number of orders confirmed in the reporting period, but it should use the number of orders due in the reporting period. Orders could and likely would be confirmed in one month, but not due until the next month, and should not be included.</p> <p>This measure should be changed to include time, when time specific appointments are ordered by the ALEC. This measure should evaluate the level of service ALECs 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 ALEC, particularly if the ALECs' proposed measure on acceptance testing is not adopted.</p> <p>Disaggregation: ALECs 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.</p>
<p>P-4. Average Completion Interval (OCI) Interval Distribution</p>	<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 ALECs 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 ALEC. Both the New York and 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. BellSouth's approach eliminates what could be considerable time from the interval, particularly for non-flow through orders. BellSouth is in control of that time, not the ALEC, and should be accountable for it.</p> <p>Disaggregation: Orders designated "pending facilities" should be a level of disaggregation, as well as the other proposed levels of disaggregation in KK-2. ALECs need to see if BellSouth's orders designated as pending facilities get completed at a faster pace than ALEC orders that were pending facilities.</p> <p>ALECs need to see disaggregation by the various xDSL-capable loops, line-sharing and splitting requests, etc. As mentioned</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<p>above, information on whether these products also include conditioning should be a level of disaggregation. ALECs need to see if they are receiving line conditioning on orders in a non-discriminatory fashion.</p> <p>BellSouth should be required to report its provisioning measures that have a parity standard by type of work performed. BellSouth currently reports by dispatch and non-dispatch. However, this is causing misleading results as BellSouth combines central office and field work in the dispatch category. BellSouth should be required to report by non-dispatch, dispatch in (or CO work), and dispatch out (or field work).</p> <p>Instead of excluding orders with intervals later than the offered interval, they should be <u>disaggregated and reported separately</u>.</p>
<p>P-5. Average Completion Notice Interval</p>	<p>Exclusions: BellSouth should be required to remove its exclusion of non-mechanized and partially mechanized orders. The Commission should not allow BellSouth to discriminate against ALECs who place orders via non-mechanized and partially mechanized means. Information regarding completion of service orders for non-mechanized and partially mechanized orders is just as critical to the ALEC and its customers as it is for fully mechanized orders. Further, in some cases, for example, xDSL services and enhanced extended loops (EELs), ALECs 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 ALEC 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 ALEC/BST system. ALECs request that the exact ALEC (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 ALECs know when 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</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<p>least one hour after work completion.</p>
<p>P-6 Coordinated Customer Conversion 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>Benchmarks: 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 ALEC's standard is generous considering it should not take more than 5 minutes per loop for conversion.</p>
<p>P6-A 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 ALECs request that this measurement be modified to include the entire hot cut interval or replaced with the hot cut timeliness measure requested by the ALECs 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 ALEC be included in this measure. The loop should not be considered delivered until BellSouth and the ALEC 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>P-7 Percent Provisioning Troubles within 30 days of Service Order Completion</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>P-8 Total Service Order Cycle Time (TSOCT)</p>	<p>ALECs did not analyze this measure.</p>
<p>P-9 LNP Percent Missed Installation Appointments</p>	<p>See missed appointment issues in P-3 above.</p> <p>The measure should be modified to include non-mechanized orders. The Commission should not allow BellSouth to discriminate against ALECs who place orders via non-mechanized means. BellSouth's performance for services ordered via non-mechanized means is obviously just as critical to the ALEC 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. 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>P-10 LNP Disconnect Timelines Interval</p>	<p>BellSouth should be required to actually perform the disconnect</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

	<p>activity before completing the service order in SOCs.</p> <p>BellSouth should be required to include non-mechanized orders. See comments in measure above.</p>
P-11 LNP Total Service Order Cycle Time	ALECs did not analyze this measure.
MR-1 Missed Repair Appointments	<p>Exclusions: BellSouth may exclude customer provided or ALEC equipment troubles from the metric but it should report the number of exclusions monthly. This will enable the ALEC 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 ALEC receives notice that the service is restored. This will enable the ALEC to notify BellSouth promptly if it disagrees that the service has been restored.</p>
MR-2 Customer Trouble Report Rate	<p>See MR-1.</p> <p>Standard: The standard should be parity or no worse than the end user standard in Florida. Otherwise ALECs will not be able to meet the end user standard.</p>
MR-3 Maintenance Average Duration	<p>Exclusions: Customer and ALEC 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 ALEC is given notice. "Restore" means to return to the normally expected operating parameters for the service and verification by the ALEC that the service has been restored. ALECs 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 ALEC customer's service is still impaired.</p> <p>Disaggregation: All maintenance metrics should be disaggregated by trouble type so ALECs 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 ALEC 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 ALEC equipment trouble exclusions should be reported separately (See MR-1).</p> <p>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 ALEC could not meet that standard.</p>

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

MR-5 Out of Service (OOS) > 24 hrs.	ALECs have no changes for this metric.
MR-6 Average Answer Time (Repair Center)	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. 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.
BL-1. Invoice Accuracy	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. ALECs request that the Commission order the additional billing measures in my direct testimony to address wholesale bill performance.
BL-2. Mean Time to Deliver Invoices	This measure should be modified to be based on percent invoices received on time, or the Commission should adopt the Percent On-Time Mechanized Local Service Invoice Delivery measure recommended by the ALECs.
BL-3 Usage Data Delivery Accuracy	Calculation: ALECs 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	ALECs have no changes for this measure.
BL-5 Usage Data Delivery Timeliness	ALECs have no changes for this measure.
BL-6 Mean Time to Deliver Usage	Business Rule: ALECs believe that the measurement should begin with the generation of data by the ALEC retail customer or ALEC access customer (by the AMA recording equipment associated with the ALEC 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	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 ALEC's proposed new measure on call abandonment then this issue is moot. Standard: ALECs 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 ALECs need to meet the end user standard. ALECs want third-parity verification of BellSouth's claims that this measure is parity by design.
OD-2 OS/DA Speed to Answer Performance/Percent Answered in X Seconds	ALECs 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	ALECs 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 -	Business Rules: ALECs are seeking the inclusion of 911 trunks

ARGUMENTS FOR ALEC BUSINESS RULE CHANGES

<p>Aggregate</p>	<p>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>Standards: The measure should be based on parity in not exceeding the various blocking design levels. See KK-3.</p>
<p>TG-2 Trunk Group Performance – ALEC Specific</p>	<p>See TG-1.</p>
<p>TG-3 Trunk Group Service Report</p>	<p>ALECs have no comment.</p>
<p>TG-4 Trunk Group Service Detail</p>	<p>ALECs have no comment.</p>
<p>CO-1 Collocation Average Response Time</p>	<p>Standards: ALECs propose to change metric to a proportion and set standard at 95% in 10 calendar days.</p>
<p>C-2. Collocation Average Arrangement Time</p>	<p>Business Rules: Further, a collocation should not be considered complete until the ALEC 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 needs to also include Remote collocations and separate out the augment types by differing intervals (i.e. 90 day physical augment from 45-day physical augment) for reporting average intervals.</p>
<p>C-3 Collocation Percent Due Dates Missed</p>	<p>Standard: Due to control BellSouth has over the committed due date and the long standard intervals, ALECs recommend that no misses should be allowed.</p>
<p>CM-1 Timeliness of Change Management Notices</p>	<p>Business Rules: Business rules do not state whether CLECs receive both notice and documentation within specified time before implementation.</p> <p>Disaggregation: Need to disaggregate by notice type (i.e. BellSouth initiated, CLEC initiated, industry forum, regulatory or emergency, for example)</p> <p>Standards: Standards in underlying change management process are unclear and reporting on website does not match business rules in the metrics. For instance, for CM-3 and CM-4 the website reporting appears to cover notices of the documentation not whether the documentation itself was available to the ALECs 30 days before implementation. (Please note that the underlying intervals for metrics are currently being debated in various forums—including the AT&T arbitration—as they are much shorter than Verizon’s Change Management notice requirement of 73 days for business rule and 66 days for technical documentation.)</p>
<p>CM-2 Average Delay Days for Change Management Notices</p>	<p>(See Above.)</p>
<p>CM-3 Timeliness of Documents Associated with Change</p>	<p>(See Above.)</p>
<p>CM-4 Average Delay Days for Documentation</p>	<p>(See Above.)</p>

ALEC Proposed Disaggregation (Process Level)

Disaggregation
<p>A. Pre-Order OSS Responsiveness</p> <ol style="list-style-type: none"> 1. Feature Function Availability/Service Availability 2. Facility Availability Qualification of Loops for Advanced Digital Services 3. Street Address Validation 4. Appointment Scheduling 5. Customer Service Records 6. Telephone Number 7. Rejected or Failed Queries (regardless of type) 8. Timeouts (measured as a percent not an interval) 9. Any new query type in 4 to 6 weeks of production.
<p>B. Maintenance & Repair OSS Responsiveness</p> <ol style="list-style-type: none"> 1. Create (or confirm logging of) a Maintenance Request 2. Obtain Status 3. Obtain Test Results 4. Cancel Request 5. Rejected or Failed Queries (regardless of type) 6. Clearance Notification 7. Closure Notification 8. Any new Query type in 4-6 weeks of production.
<p>C. Collocation</p> <ol style="list-style-type: none"> 1. Physical Caged 2. Shared Caged 3. Cageless 4. Adjacent On-Site 5. Adjacent Off-Site 6. Augment to Physical (Disaggregated by standard interval—i.e. 90 day vs. 45 day augments). 7. Virtual 8. Augment to Virtual (Disaggregation by standard interval—i.e. 90 day vs. 45 augments). 9. Remote Terminal
<p>D. Multi-Functional Disaggregation</p> <ol style="list-style-type: none"> 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. 2. Dispatch in, dispatch out, and non-dispatch—for provisioning and maintenance measures 3. Volume—for ordering, provisioning, and maintenance measures (a) 1-5 lines, (b) 6-14 lines, and (c) 15+ lines 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 5. By ALEC, BST, and all BST affiliates for all measures 6. Center—for OS/DA, ordering & maintenance service center measures
<p>E. Billing</p> <ol style="list-style-type: none"> 1. Record Type (resale, interconnection, UNE)

Disaggregation, Analogs and Benchmarks		
G. Product Level Disaggregation for (Ordering, Provisioning, and Maintenance & Repair)	Benchmark-- 95% within x Days unless otherwise noted (resale) for <u>Order Completion Interval</u>	Retail analog for other provisioning and maintenance and repair measures
1. Resold Residence POTS	1. Retail Analog	1. Retail Analog
2. Resold Business POTS	2. Retail Analog	2. Retail Analog
3. Resold BRI ISDN	3. Retail Analog	3. Retail Analog
4. Resold PRI ISDN	4. Retail Analog	4. Retail Analog
5. Resold Centrex/Centrex-like	5. Retail Analog	5. Retail Analog
6. Resold Analog PBX trunks	6. Retail Analog	6. Retail Analog
7. Resold DID Trunks	7. Retail Analog	7. Retail Analog
8. Resold Voice-Grade Private Line	8. Retail Analog	8. Retail Analog
9. Resold DS1 Services	9. Retail Analog	9. Retail Analog
10. Resold DS3 Services	10. Retail Analog	10. Retail Analog
11. Resold >DS3 Services	11. Retail Analog	11. Retail Analog
12. Other Resold Services	12. Retail Analog	12. Retail Analog
13. UNE Platform	13. Retail POTS	13. Retail POTS
14. UNE Channelized DS1 (DS1 loop + multiplexing)	14. 3, 7, and 10 days, for a ,b, and c, volumes respectively	14. DS1
15. Unbundled 8 dB Analog Loops	15. Same as above	15. Retail POTS
16. Unbundled 2-wire Digital Loops	16. Same as above	16. Retail POTS
17. Unbundled 4-wire Digital Loops	17. Same as above	17. Retail POTS
18. Unbundled ADSL Loops	18. Same as above	18. Retail POTS
19. Unbundled HDSL Loops	19. Same as above	19. Retail POTS
20. UCL (short and long)	20. Same as above	20. Retail POTS
21. Unbundled xDSL Loops	21. Same as above	21. Retail POTS
22. Other Unbundled Loops	22. Same as above	22. Retail POTS
23. Unbundled UDC/IDSL loop	23. Same as above	23. ISDN
24. UNE Analog Switch Port (line side)	24. 2 days	24. POTS
25. UNE BRI Capable Switch Port (line side)	25. 3 days	25. ISDN
26. UNE DS1 Switch Port (line side)	26. 5 days	26. DS1
27. UNE PRI Switch Port (trunk side)	27. 5 days	27. ISDN
28. UNE DID-capable Switch Port (trunk side)	28. 5 days	28.
29. UNE Message Trunk Port	29. 5 days	29. DS1
30. UNE Dedicated DS0 Transport	30. 3, 7, and 10 days, for a ,b, and c, volumes respectively	30. DS1
31. UNE Dedicated DS1 Transport	31. Same as above	31. DS1
32. UNE Dedicated DS3 Transport	32. Same as above	32. DS3
33. Interconnect Trunks (DS0s, DS1s and DS3s,)	33. ILEC Trunks	33. ILEC Trunks

Disaggregation, Analogs and Benchmarks		
G. Product Level Disaggregation for (Ordering, Provisioning, and Maintenance & Repair)	Benchmark-- 95% within x Days unless otherwise noted (resale) for <u>Order Completion Interval</u>	Retail analog for other provisioning and maintenance and repair measures
34. Two-Way Trunking, Inbound Augments, separately)	34. ILEC Trunks	34. ILEC Trunks
35. ILNP	35. 3, 7, and 10 days, for a ,b, and c, volumes respectively	35. Retail POTS
36. PNP or LNP	36. Same as above	36. Retail POTS
37. Line-sharing/High Frequency Spectrum UNE	37. 3, 5 and 7 days for a, b and c, volumes	37. Retail POTS
38. Line-splitting/High Frequency Spectrum UNE	38. 5, 7, 10 days for a, b, and c, volumes	38. Retail POTS
39. Sub-loop unbundling, e.g. network terminating wire	39. 5, 7, 10 days for a, b, and c volumes.	39. N/A
40. Loop Modification/Loop Conditioning	40. 95% within 5 business days.	
41. Special Access to EELs Conversion		

ALEC PERFORMANCE STANDARDS BY MEASURE

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

ALEC PERFORMANCE STANDARDS BY MEASURE

Measure	Standard/Benchmark
<ol style="list-style-type: none"> 1. Mean Held Order Interval & Distribution Intervals 2. Average Jeopardy Notice Interval & % of Orders Given Jeopardy Notices 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 	<p>(See Section G of KK-2 for product specific benchmark or retail analog) (See Section D of KK-2 re: company, and geographic, dispatch, and volume disaggregation)</p> <ol style="list-style-type: none"> 1. Retail Analog 2. Retail Analog 3. Retail Analog 4. Benchmark or analog (See Exhibit KK-2) 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
<ol style="list-style-type: none"> 1. Customer Trouble Report Rate 2. Maintenance Average Duration 	<p>(See Section G of KK-2 for product specific retail analog) (See Section D of KK-2 re: company, and geographic, dispatch, and volume disaggregation)</p> <ol style="list-style-type: none"> 1. Retail Analog 2. Retail Analog

ALEC PERFORMANCE STANDARDS BY MEASURE

Measure	Standard/Benchmark
<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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.
<ul style="list-style-type: none"> 1. Usage Data Delivery Accuracy 2. Mean Time to Deliver Usage 3. % Billing Errors Corrected in X Days 4. Usage Timeliness 5. Recurring charge completeness 6. Non recurring charge completeness 7. % on time mechanized invoice delivery 8. Invoice accuracy 	<p>(See Section D of KK-2 re: interface and company disaggregation)</p> <ul style="list-style-type: none"> 1. Retail Analog 2. Retail Analog 3. Retail analog 4. Retail analog 5. Retail analog for resale UNE 90% complete. 6. Retail analog for resale UNE 90% complete 7. within 10 calendar days 98% of time 8. Retail analog
<ul style="list-style-type: none"> 1. Mean Time To Answer(OS/DA) 	<p>((See Section D of KK-2 re: company and center)</p> <ul style="list-style-type: none"> 1. >90% of Calls Answered in 10 Seconds
<ul style="list-style-type: none"> 2. E-911 Timeliness 3. E-911 Accuracy 4. E-911 Mean Interval 	<ul style="list-style-type: none"> 1. Parity 2. Parity 3. Parity
<ul style="list-style-type: none"> 1. Percent Call Completion (Trunking) 	<ul style="list-style-type: none"> 1. Dedicated trunk groups not to exceed blocking standard of B.01. Common Trunk Groups: Where ALEC/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 ALEC traffic traverses a separate common network from ILEC traffic: No more than 2% of end offices may have more than 2% blocking.
<ul style="list-style-type: none"> 1. Collocation Average Response Time 2. Collocation Average Arrangement Time 3. Collocation % of Due Dates Missed 	<p>(See Section D of KK-2 re: company and geographic disaggregation and Section C re: collocation disaggregation)</p> <ul style="list-style-type: none"> 1. 95% within 10 calendar days 2. Physical-90 calendar days; 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. 0 misses of committed due date

ALEC PERFORMANCE STANDARDS BY MEASURE

Measure	Standard/Benchmark
1. Database Average Update Interval 2. Database Percent Update Accuracy 3. NNX and LRN loaded by LERG Effective Date	(See Section D of KK-2 re: company) 1. 99.99% Completed in 24 Hours 2. >99.99% Accurate 3. <u>99% by LERG effective date</u>
% 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 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	1. 98% on time 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/wiith workaround 72 hours

Exhibit KK-4
Additional Measures Proposed by CLECs

Additional Pre-Order Measure (1)
(Disaggregated by electronic and manual)

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Average Response Time for Loop Make-Up Information – Manual Access
Definition:
The average time required to provide any of the following loop makeup information:
<ol style="list-style-type: none"> 1. Loop Length 2. Loop Length by Segment 3. Length by Gauge 4. 26 gauge equivalent loop length 5. Quantity of load coils 6. Location of load coils 7. Quantity of bridge taps 8. Location of bridged tap by occurrence 9. Length of bridge taps by occurrence 10. Quantity of pair gain/DLCs 11. Location of pair gain/DLC 12. Type of DLC 13. Qualification status of loop based on specific PSD 14. Source of data - actual or designed 15. Presence of DAML 16. Presence of disturbers in the same or adjacent binder groups 17. Loop medium (copper or fiber) 18. Length that is copper or fiber 19. Whether a loop originates at a remote switching unit (RSU) 20. Location of RSU (Remote Switching Unit) 21. Type of RSU (Remote Switching Unit) 22. Type of Plant (aerial or buried) 23. Location of repeaters (designate mid-span) 24. Type of repeaters 25. Quantity of repeaters 26. Availability of spare facilities 27. Quantity of Low pass filters 28. Location of Low pass filters 29. Quantity of Range extenders 30. Location of Range extenders 31. Number of gauge changes 32. Resistance Zone
Exclusions:
<ul style="list-style-type: none"> • Loop make-up requests cancelled by the CLEC
Business Rules:
<ul style="list-style-type: none"> • The time starts when a request is received by the ILEC and ends when the information on the loop make-up has been made available to the CLEC.
Calculation:
$\frac{\sum(\text{Date and Time the Loop make-up is made available to CLEC} - \text{Date and Time the CLEC request is received})}{\text{Total number of loop makeup queries}}$
Report Structure:
<ul style="list-style-type: none"> • CLEC specific • CLEC aggregate • BST affiliate
Level of Disaggregation:
<ul style="list-style-type: none"> • ADSL • HDSL

Exhibit KK-4
Additional Measures Proposed by CLECs

- | |
|--|
| <ul style="list-style-type: none">• UCL• UDC/IDSL• xDSL• Line Sharing / High Frequency Spectrum Network Element |
|--|

Retail Analog/Benchmark:

- | |
|---|
| <ul style="list-style-type: none">• 95% within 72 hours |
|---|

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Average Response Time for Loop Make-Up Information – Mechanized (measured individually for each interface – EDI, RoboTag, Tag, and LENS)
Definition:
The average time required to provide any of the following loop makeup information:
<ol style="list-style-type: none"> 1. Loop Length 2. Loop Length by Segment 3. Length by Gauge 4. 26 gauge equivalent loop length 5. Quantity of load coils 6. Location of load coils 7. Quantity of bridge taps 8. Location of bridged tap by occurrence 9. Length of bridge taps by occurrence 10. Quantity of pair gain/DLCs 11. Location of pair gain/DLC 12. Type of DLC 13. Qualification status of loop based on specific PSD 14. Source of data - actual or designed 15. Presence of DAML 16. Presence of disturbers in the same or adjacent binder groups 17. Loop medium (copper or fiber) 18. Length that is copper or fiber 19. Whether a loop originates at a remote switching unit (RSU) 20. Location of RSU (Remote Switching Unit) 21. Type of RSU (Remote Switching Unit) 22. Type of Plant (aerial or buried) 23. Location of repeaters (designate mid-span) 24. Type of repeaters 25. Quantity of repeaters 26. Availability of spare facilities 27. Quantity of Low pass filters 28. Location of Low pass filters 29. Quantity of Range extenders 30. Location of Range extenders 31. Number of gauge changes 32. Resistance Zone
Exclusions:
<ul style="list-style-type: none"> • Loop make-up requests cancelled by the CLEC
Business Rules:
<ul style="list-style-type: none"> • The time starts when a request is received by the ILEC and ends when the information on the loop makeup has been made available to the CLEC.
Calculation:
$\frac{\sum(\text{Date and Time the Loop Makeup is made available to CLEC} - \text{Date and Time the CLEC request is received})}{\text{Total number of loop makeup queries}}$
Report Structure:
<ul style="list-style-type: none"> • CLEC specific • CLEC aggregate • BST affiliate
Level of Disaggregation:
<ul style="list-style-type: none"> • ADSL

Exhibit KK-4
Additional Measures Proposed by CLECs

- | |
|--|
| <ul style="list-style-type: none">• HDSL• UCL• UDC/IDSL• Other DSL• Line Sharing / High Frequency Spectrum Network Element |
|--|

Retail Analog/Benchmark:

- | |
|---|
| <ul style="list-style-type: none">• 95% within 1 minute |
|---|

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Additional Ordering Measures (6)

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Acknowledgement Timeliness
Definition:
This measure is designed to monitor the rate at which the CLECs receive a timely acknowledgement from the ILEC after the submission of a Local Service Request.
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<p>For CLEC Results: An acknowledgement is the first indicator that the Local Service Request has been received by the ILEC and is under analysis. Acknowledgement Timeliness is determined by computing the elapsed time (in minutes and seconds) from the ILEC receipt of a Local Service Request from the CLEC, to the time the ILEC returns the acknowledgement that a syntactically correct order has been received. Elapsed time is calculated for each acknowledgement. The acknowledgments that are returned within 15 Minutes are categorized in a manner consistent with the specified level of disaggregation, then divided by the associated total number of acknowledgements transmitted by the ILEC during the reporting period.</p> <p>Other Clarifications and Qualification:</p> <ul style="list-style-type: none"> • When the ILEC processes orders for a CLEC via different interfaces (e.g., LENS, EDI or TAG) then the preceding measurement must be computed for each interface arrangement. • All intervals are measured in minutes and seconds rounded to the nearest second. • Because this should be a highly automated process, the accumulation of elapsed time continues through off-schedule, weekends and holidays. • “Syntactically correct” means all fields required to process an order are populated and reflect the correct format as agreed and documented in the current interface specifications.
Calculation:
$\text{Acknowledgement Timeliness} = \frac{[(\text{Date and Time Local Service Request is Received by the ILEC}) - (\text{Date and Time Acknowledgement of Syntactically Correct Local Service Request is Transmitted From the ILEC Gateway})];}{[(\text{Count of All Acknowledgements Transmitted Within 15 Minutes})/(\text{Count of All Acknowledgements Transmitted in the Reporting Period})] \times 100}$
Report Structure:
<ul style="list-style-type: none"> • Fully Mechanized, Partially Mechanized, Total Mechanized • State and Region • CLEC Specific • CLEC Aggregate
Level of Disaggregation (See Exhibit KK-2)
<ul style="list-style-type: none"> • Interface Type •
Retail Analog/Benchmark:
<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"> • Mechanized And Partially Mechanized Acknowledgements Are Returned Within 15 Minutes Of Receiving Local Service Requests, 98.0 Percent Of The Time.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Acknowledgement Completeness
Definition:
This measure is designed to monitor the percent of acknowledgements received by the CLEC from the ILEC after the submission of a Local Service Request.
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<p>For CLEC Results: An acknowledgement is the first indicator that the Local Service Request has been received by the ILEC and is under analysis. Acknowledgement Completeness is determined by computing the number of acknowledgements transmitted by the ILEC and divided by the number of Local Service Requests received by the ILEC during the reporting period.</p> <p>Other Clarifications and Qualification:</p> <ul style="list-style-type: none"> • When the ILEC processes orders for a CLEC via different interfaces (e.g., LENS, EDI or TAG) then the preceding measurement must be computed for each interface arrangement. • All intervals are measured in minutes and seconds rounded to the nearest second. • Because this should be a highly automated process, the accumulation of elapsed time continues through off-schedule, weekends and holidays. • “Syntactically correct” means all fields required to process an order are populated and reflect the correct format as agreed and documented in the current interface specifications.
Calculation:
Acknowledgements Completeness = [(Total Number of Acknowledgements)/(Total Number of Service Requests Received in the Reporting Period)] X 100
Report Structure:
<ul style="list-style-type: none"> • Fully Mechanized, Partially Mechanized, Total Mechanized • State and Region • CLEC Specific • CLEC Aggregate
Level of Disaggregation: (See exhibit KK-2)
<ul style="list-style-type: none"> • Interface Type •
Retail Analog/Benchmark:
<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"> • Mechanized And Partially Mechanized Acknowledgements Are Returned On 100 Percent Of The Mechanized And Partially Mechanized Local Service Requests.

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Report/Measurement:
Firm Order Confirmation and Reject Response Completeness
Definition:
A response is expected from the ILEC for every Local Service Request transaction (version). More than one response or differing responses per transaction is not expected. Firm Order Confirmation and Reject Response Completeness is the corresponding number of Local Service Requests received to the combination of Firm Order Confirmation and Reject Responses.
Exclusions:
<ul style="list-style-type: none"> • Service Requests canceled by the CLEC prior to being confirmed or rejected.
Business Rules:
<ul style="list-style-type: none"> • Mechanized - The number of FOCs or Rejects sent to the CLEC from LENS, EDI, TAG in response to electronically submitted LSRs (date and time stamp in LENS, EDI, TAG). • Partially Mechanized – The number of FOCs or Rejects sent to the CLEC from LENS, EDI, TAG in response to electronically submitted LSRs (date and time stamp in LENS, EDI, TAG), which fall out for manual handling by the LCSC personnel. • Total Mechanized - The number of the combination of Fully Mechanized and Partially Mechanized LSRs • Non-Mechanized - The number of FOCs or Rejects sent to the CLEC via FAX Server in response to manually submitted LSRs (date and time stamp in FAX Server). <p>For CLEC Results: Firm Order Confirmation and Reject Response Completeness is determined in two dimensions:</p> <ul style="list-style-type: none"> • Percent responses is determined by computing the number of Firm Order Confirmations and Rejects transmitted by the ILEC and dividing by the number of Local Service Requests (all versions) received in the reporting period. • Percent of multiple responses is determined by computing the number of Local Service Request unique versions receiving more than one Firm Order Confirmation, Reject or the combination of the two and dividing by the number of Local Service Requests (all versions) received in the reporting period. <p>For ILEC Results: Same computation as for the CLEC.</p> <p>Other Clarifications and Qualification:</p> <ul style="list-style-type: none"> • When the ILEC processes orders for a CLEC via different interfaces (e.g., LENS, EDI or TAG) then the preceding measurement must be computed for each interface arrangement. • The ILEC service agent's attempt to submit an order for processing by the ILEC OSS is considered equivalent to the ILEC acknowledgment of the CLEC's order. • The ILEC OSS return of any indication to the service agent that an order cannot be processed as submitted is considered equivalent to the ILEC return of a rejection notice to the CLEC. • Return of any information (e.g., order recapitulation) to the ILEC customer service agent that indicates no errors are evident or that an order can be processed, is the equivalent of the ILEC return of a FOC to the CLEC.
Calculation – Single FOC/Reject Response Expected
Firm Order confirmation / Reject Response Completeness = [(Total Number of Service Requests for Which a Firm Order Confirmation or Reject is Sent/Total Number of Service Requests Received in the Report Period)] X 100
Report Structure:
<ul style="list-style-type: none"> • Fully Mechanized, Partially Mechanized, Total Mechanized, Non-Mechanized • State and Region • CLEC Specific • CLEC Aggregate

Exhibit KK-4
Additional Measures Proposed by CLECs

<ul style="list-style-type: none">• BellSouth Specific
Level of Disaggregation: See Exhibit KK-2
<ul style="list-style-type: none">• Interface Type• Product Type•
Retail Analog/Benchmark:
<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">• Firm Order Confirmations Or Reject Responses Are Returned On 100 Percent Of The Local Service Requests.•

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
<p>Timeliness of Response to Requests for BellSouth-to-CLEC Trunks Mean Time to Provide Response % Within 7 Days % Negative Responses</p>
Definition:
Measures the time it takes for BST to provide the CLEC with a firm due date for inbound trunks.
Exclusions:
<ul style="list-style-type: none"> • CLEC cancelled orders
Business Rules:
<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>
Calculation:
<p>Mean: (Date FOC/ASR returned – Date ASR/TGSR)/Number of Requests in Reporting Period % On Time: (Number of FOCs/ASRs sent in 7 or less business days/all requests for inbound trunks in reporting period) x 100. % Negative: (Number of requests denied/Total Requests Submitted in Reporting Period) x 100</p>
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • Affiliate(s) • CLEC Specific • CLEC Aggregate • Interface Type (fax, email, ASR) • Negative Response Reason Type
Retail Analog/Benchmark:
<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"> • 95% in 7 days

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent Service Order Accuracy
Definition:
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.
Exclusions:
<ul style="list-style-type: none"> • Orders canceled by the CLEC • Order Activities of the ILEC associated with internal or administrative use of local services. • 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.)
Business Rules:
<p>For CLEC Results:</p> <p>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.</p> <ul style="list-style-type: none"> •
Calculation:
Percent Order Accuracy = $[(\Sigma \text{Orders Completed w/o Error}) / (\Sigma \text{Orders Completed})] \times 100$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate •
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • Interface Type • Standard Product Categories • Volume Category
Retail Analog/Benchmark:
<ul style="list-style-type: none"> • Completed CLEC Orders, By Reporting Dimension, Are Accurate No Less Than 99.0 Percent Of The Time.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
- Call Abandonment Rate – Ordering & Provisioning (similar for Maintenance)
Definition:
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.
Exclusions:
None
Business Rules:
<p>For CLEC Results:</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>
Calculation:
Call Abandonment Rate = [(Count of Calls Terminated Before Answer During the Reporting Period)/(Count of All Calls Placed in Queue During the Reporting Period)] x 100
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • 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)

Exhibit KK-4

Additional Measures Proposed by CLECs

ORDERING AND PROVISIONING –

OP- Call Abandonment Rate – Ordering and Provisioning, Maintenance, cont.

•	•
Retail Analog/Benchmark:	
• Less than 1% are calls are abandoned from queue.	

Exhibit KK-4
Additional Measures Proposed by CLECs

Additional Provisioning Measures (10)

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent Completions/Attempts without Notice or with Less Than 24 Hours Notice.
Definition:
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 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.
Exclusions:
<ul style="list-style-type: none"> • Completions or Attempts Without Notice or With less than 24-hours' notice delivery that the CLEC specifically requested.
Business Rules:
<p>For CLEC Results: 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>For ILEC Results: 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>
Calculation:
Percent Completions or Attempts without Notice or with Less Than 24 Hours Notice = [(Completion Dispatches (Successful and Unsuccessful) With No FOC or FOC Received Within 24 Hours of Due Date)/(All Completions)] X 100
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation: (See Exhibit KK-2)
<ul style="list-style-type: none"> • Company • Product Type • MSA • Dispatch in/Dispatch out/Non-dispatch
Retail Analog/Benchmark:
<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"> • >98 Percent Of Completion And Completion Attempts Should Receive More Than 24 Hours Notice.

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Report/Measurement:
Percent On Time Hot Cut Performance
Definition:
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.
Exclusions:
<ul style="list-style-type: none"> • • Cancelled orders • CLEC caused delays
Business Rules:
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.
Calculation:
Percent On Time Hot Cuts = $\frac{[(\text{Customer Conversions completed within commitment window}) / (\text{All Customer Conversions Completed During Reporting Period})] \times 100}{1}$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate •
Level of Disaggregation: (See Exhibit KK-2)
<ul style="list-style-type: none"> • Company • Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion). • MSA • Volume Category Dispatch in/Dispatch out/Non-dispatch
/Benchmark:
<ul style="list-style-type: none"> • • 95% of coordinated cutovers completed within the following window • 1-10 lines – 1 hour • 10 to 20 lines – 2 hours • more than 20 lines – negotiated. • If an order is cut more than 15 minutes prior to frame due time, it is not met.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent of Orders Cancelled or Supplemented at the Request of the ILEC
Definition:
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.
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<p>For CLEC Results: 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>For ILEC Results: 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>
Calculation:
Percent of Orders Cancelled or Supplemented at the Request of the ILEC = [(Number of Orders Cancelled or Supplemented at the Request of the ILEC During Reporting Period)/(Number of Cancels and Supplements During the Reporting Period)] x 100
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation: (See Exhibit KK-2)
<ul style="list-style-type: none"> • Company • Product Type • MSA • Volume Category • Dispatch in/Dispatch out/Non-dispatch
Retail Analog/Benchmark:
<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"> • <1.0 Percent Of Orders Supped Or Cancelled At The Request Of The ILEC.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent of Coordinated Cuts Not Working as Initially Provisioned
Definition:
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.
Exclusions:
<ul style="list-style-type: none"> • Cut-overs where service disruption is caused due to end-user or CLEC reasons
Business Rules:
<p>For CLEC Results:</p> <p>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.</p>
Calculation:
Percent of Coordinated Cuts Not Working as Initially Provisioned = [(Number of Troubles Attributable to the ILEC on Initial Customer Cutover)/(Number of Coordinated Cuts Provisioned During The Reporting Period)] X 100
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation: (See Exhibit KK-2)
<ul style="list-style-type: none"> • Company • Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion). • MSA • Volume Category • Dispatch in/Dispatch out/Non-dispatch
Retail Analog/Benchmark:
<ul style="list-style-type: none"> • <1 Percent Of All Coordinated Cuts Not Working As Initially Provisioned.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Average Recovery Time
Definition:
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.
Exclusions:
<ul style="list-style-type: none"> • Cut-overs where service disruption is caused due to end-user or CLEC reasons
Business Rules:
<p>For CLEC Results:</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>
Calculation:
$\text{Average Recovery Time} = \frac{\sum \{[(\text{Date \& Time That Provisioning Trouble is Closed By CLEC}) - (\text{Date \& Time Initial Provisioning Trouble is Opened With ILEC})] / (\text{Number of Troubles Referred to the ILEC})\}}{1}$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate •
Level of Disaggregation: (
<ul style="list-style-type: none"> • Company • Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion). • MSA • Volume Category • Dispatch in/Dispatch out/Non-dispatch
Retail Analog/Benchmark:
<ul style="list-style-type: none"> • 98.0 Percent Of Customer Recoveries (Troubles During The Porting Process) Resolved Within 1 Hour And 100 Percent Within 2 Hours.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Mean Time to Restore a Customer to the ILEC
Definition:
If there are extenuating circumstances during a port such that the customer is out of service for an extended amount of time, the CLEC may determine that the problem cannot be resolved quickly, and the service must be restored to the ILEC. The CLEC will communicate to the ILEC Coordinator that the customer needs to be restored to the ILEC until the situation can be resolved. To ensure that the customer is not out of service for an extended period of time during the restoration to the ILEC, the time it takes to re-establish the end user's service must be also be measured.
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<p>For CLEC Results: If the customer has been out of service, and there are issues that cannot be fixed or resolved in an expeditious manner, the CLEC may request to reestablish the customer on the existing ILEC facilities. This will allow both the ILEC and the CLEC to resolve the issues and the port to proceed at a later date without further outage of the customer's service. For each customer restored to ILEC service, the ILEC will track the cumulative amount of time between the initial notification from the CLEC until the time when the end user or CLEC has confirmed that their service has been restored. The cumulative time will be divided by the number of customers restored to the ILEC during the reporting period.</p> <p>For ILEC Results: 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>
Calculation:
$\text{Mean Time to Restore A Customer to the ILEC} = \frac{\sum \{[(\text{Date \& Time Service is Restored to Customer}) - (\text{Date \& Time of Initial Notification to Restore})]\}}{(\text{Number of Circuits Restored to ILEC})}$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation: (See Exhibit KK-2)
<ul style="list-style-type: none"> • Company • Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion). • MSA • Volume Category • Dispatch in/Dispatch out/Non-dispatch
Retail Analog/Benchmark:
<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"> • 98.0 Percent Of Customer Restorals To The ILEC Completed Within 1 Hour And 100 Percent Within 2 Hours.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent of Customers Restored to the ILEC
Definition:
In addition to monitoring the time it takes for the ILEC to re-establish the end-user's service, the frequency that a CLEC customer must be restored to the ILEC must be measured.
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<p>For CLEC Results: The ILEC will track the number of circuits that need to be reestablished with the ILEC and divide them by the cumulative number of coordinated cuts during the established period. This measurement will be expressed as a percentage.</p>
Calculation:
Percent Of Customers Restored to the ILEC = [(Number of Circuits Restored to ILEC/Number of Total Circuits Attempted to Port During Interval)] X 100
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate •
Level of Disaggregation: (See Exhibit KK-2)
<ul style="list-style-type: none"> • Company • Type of Loop or UNE Combination Cutover and Type of NP involved (i.e. ILNP, PNP or ILNP-to-PNP conversion). • Volume Category • MSA • Dispatch in/Dispatch out/Non-dispatch
Retail Analog/Benchmark:
<ul style="list-style-type: none"> • <0.1 Percent Of All Coordinated Cuts Restored To The ILEC.

Exhibit KK-4
Additional Measures Proposed by CLECs

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Report/Measurement:
Cooperative Acceptance Testing (What percentage of xDSL loops installed are tested)
Definition:
The loop would not be considered "tested" unless the BellSouth tech actually called the testing center, spoke with the CLEC representative, and jointly performed the tests
Exclusions:
Lines BellSouth is unable to test due to CLEC or end-user caused reasons xDSL lines of CLECs who do not participate in cooperative acceptance testing
Business Rules:
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.
Calculations:
$(\text{Total number of xDSL loops tested cooperatively by BellSouth}) / (\text{Total Number of xDSL loops installed in the reporting period.})$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • Specific as to the type of loop tested
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • MSA • Type of loop tested.
Retail Analog/Benchmark:
BellSouth should test 98% of the lines.

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Report/Measurement:
Percent Successful xDSL Loops Cooperatively Tested
Definition:
The percent of xDSL loops tested that pass the tests.
Exclusions:
None.
Business Rules:
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.
Calculations:
Percent Successful xDSL Cooperative Service Testing on First Attempt = $[(\text{Number of xDSL Loops Functional on First Test})/(\text{Number of xDSL Loops Tested During Reporting Period})] \times 100$
Percent Successful xDSL Cooperative Service Testing on Second Attempt = $[(\text{Number of xDSL Loops Functional on Second Test})/(\text{Number of xDSL Loops Tested During Reporting Period})] \times 100$
Percent Successful xDSL Cooperative Service Testing on Third Attempt = $[(\text{Number of xDSL Loops Functional on all subsequent attempts})/(\text{Number of xDSL Loops Tested During Reporting Period})] \times 100$
Report Structure:
CLEC Specific
Disaggregation:
Company Type of Loop MSA
Retail Analog/Benchmark:
99.5% of loops should pass on the first series of tests.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent Completion of Timely Loop Modification/De-Conditioning on xDSL loops:
Definition:
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.
Exclusions:
Requests cancelled by ALEC,
Business Rules:
Calculations:
[(Number of xDSL Loops on Which Loop Modification/De-Conditioning was Completed within established interval)/(Number of xDSL Loops On Which Loop Modification/De-Conditioning Is Requested)]
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • Specific as to the type of loop tested
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • MSA • Type of loop (See Exhibit KK-2)
Retail Analog/Benchmark:
95% within 5 business days

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Additional Billing Measures (5)

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent Billing Errors Corrected in X Days
Definition:
Measures the timely correction of DUF errors and timely carrier bill adjustments.
Exclusions:
<ul style="list-style-type: none"> • Adjustments disputed by ILEC (but must be reported separately)
Business Rules:
<ul style="list-style-type: none"> • This measurement applies to the daily usage feed and carrier wholesale bill adjustments. • Performance for the DUF measurement is measured at two levels: <ul style="list-style-type: none"> ▪ Severity 1 Bill Affecting where X = 24 hours with a maximum of 5 business days to correct error ▪ Severity 2 Non-Bill Affecting where X = 3 business days with a maximum of 10 business days to correct error • 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. • The ILEC shall send correct usage record within X days/hours of receipt of a query. • The ILEC will adjust bill within X days (generally next CLEC bill unless adjustment request received after middle of the month).. • Only usage records fully corrected to the CLEC's specifications will be considered timely. • Excluded situations: <ul style="list-style-type: none"> ▪ 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
Calculation:
Percent Billing Errors Corrected in X Days = $\Sigma [(Number\ of\ ILEC\ Responses\ in\ X\ Days/Hours) / (Total\ Number\ of\ Queries\ in\ Reporting\ Period)] \times 100$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate • BST Affiliates
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • Bill Type (DUF, Carrier Wholesale Bill) • Severity Type
Retail Analog/Benchmark:
<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"> • Severity 1 = 90% corrected in 24 hours and 100% in 5 business days • Severity 2 = 90% corrected in 3 business days and 100% in 10 business days <p>Carrier Wholesale Bill</p> <ul style="list-style-type: none"> • 100% corrected within 45 Days.

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Report/Measurement:
Usage Timeliness
Definition:
This measure captures the elapsed time between the recording of usage data generated either by CLEC retail customers or access usage associated with CLEC customers and the time when the data set, in a compliant format, is successfully transmitted to the CLEC.
Exclusions:
None
Business Rules:
This measurement assumes a daily transmission of usage to the CLECs. If the CLECs do not request daily transmissions, the measurement still applies based upon transmission availability date, however, the actual timeliness of the usage received by the CLEC will vary depending upon their requirements for frequency of transmissions (e.g., weekly).
Calculations:
$\text{Sum ((Message Transmission Availability Date) - (Date of Message Recording)) / (Count of All Messages available for Transmission in Reporting Period)}$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Product / Invoice Type <ul style="list-style-type: none"> ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope <ul style="list-style-type: none"> ➢ Region • Company
Retail Analog/Benchmark:
Parity for Resale and UNE Benchmark for Jointly provided switched access Standard 95% within 5 days

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Recurring Charge Completeness
Definition:
This measure captures percentage of fractional recurring charges appearing on the correct bill.
Exclusions:
None
Business Rules:
<ul style="list-style-type: none"> ▪ The effective date of the recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.
Calculations:
(Count of fractional recurring charges that are on the correct bill* / total count of fractional recurring charges that are on the bill) x 100
*Correct bill = next available bill
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Product / Invoice Type <ul style="list-style-type: none"> ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope <ul style="list-style-type: none"> ➢ Region • Company
Retail Analog/Benchmark:
Parity for Resale Benchmark for Facilities/Interconnection and UNE Specials Standard – 90% Complete

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Non-Recurring Charge Completeness
Definition:
This measure captures percentage of non-recurring charges appearing on the correct bill.
Exclusions:
None
Business Rules:
<ul style="list-style-type: none"> ▪ The effective date of the recurring charge must be within 30 days of the bill date for the charge to appear on the correct bill.
Calculations:
(Count of non-recurring charges that are on the correct bill / total count of non-recurring charges that are on the bill) x 100
*Correct bill = next available bill
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Product / Invoice Type <ul style="list-style-type: none"> ➢ Resale ➢ UNE ➢ Interconnection • Geographic Scope <ul style="list-style-type: none"> ➢ Region • Company
Retail Analog/Benchmark:
Parity for Resale Benchmark for Facilities/Interconnection and UNE Specials Standard – 90% Complete

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent On-Time Mechanized Local Service Invoice Delivery
Definition:
The purpose of this measurement is to monitor the percent of invoices successfully transmitted to the CLEC within 10 calendar days of the close of a bill cycle.
Exclusions:
<ul style="list-style-type: none"> • Any invoices rejected due to formatting or content errors
Business Rules:
This measure captures the elapsed number of days between the scheduled close of a Bill Cycle and the ILEC's successful transmission of the associated invoice to the CLEC. For each invoice, the calendar date of the scheduled close of Bill Cycle is compared to the calendar date that successful invoice transmission to the CLEC completes to determine the number transmitted within 10 calendar days. The number transmitted within 10 calendar days is divided by the number of complete invoices sent in the reporting period.
Calculation:
Percent On-Time Mechanized Local Services Invoice Delivery = $\frac{[(\text{Total Number of Mechanized Local Bills Received On Time})/(\text{Total Number of Mechanized Local Bills Processed})] \times 100}{}$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • Invoice (resale, UNE or interconnection services) • Region
Retail Analog/Benchmark:
<ul style="list-style-type: none"> • Mechanized Local Bills Received Within 10 Calendar Days, 98 Percent Of The Time.

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Other Additional Measures (8)

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent Response Commitments Met (On-Time)
Definition:
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...
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<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"> • All queries answered while the CLEC or ILEC retail customer is on the phone will be considered on time for this metric. • 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. • If CLEC poses more than one question on same call, ILEC may provide different response commitments for each query and measure each query separately. • 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.) • 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. <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>
Calculation:
Percent Response Commitments Met = $\Sigma \{(\text{Number of Response Commitments Met}) / (\text{Number of Responses Due in Reporting Period})\} \times 100$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate • BST Affiliate

Exhibit KK-4
Additional Measures Proposed by CLECs

Level of Disaggregation:
<ul style="list-style-type: none">• Company (If dedicated representatives assigned to specific CLECs)• Each CLEC Help Desk/Support Center (PreOrder, Ordering, Billing, etc.)• Severity Type
Retail Analog/Benchmark:
<ul style="list-style-type: none">• 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.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Mean time To Notify CLEC of Network Outages
Definition:
Both CLECs and ILECs must be made aware of major network events in order to notify customers and regulatory agencies (e.g. E-911 agencies, FAA, and other key customer accounts). To that end, the ILECs must provide the CLECs with timely and detailed information (pertaining to a network incident) to afford CLECs the opportunity to make prudent business decisions regarding management of their own customer base and networks. For example, the ILEC would inform the CLEC that the network incident was caused by a cable cut at a specified location.
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<p>For CLEC Results: The results will be based on the time it takes for the ILEC's Centralized Control Center to notify the CLEC and ILEC of a customer impacting network incident in equipment utilized by the CLEC. When the ILEC's Centralized Control Center becomes aware of the network incident, they must electronically notify both the ILEC and the CLEC. The notification time for each outage will be measured in minutes and divided by the number of outages for the reporting period.</p> <p>For ILEC Results: Same computation as for the CLEC.</p>
Calculation:
$\text{Meantime To Notify CLEC} = \frac{\sum \{[(\text{Date and Time ILEC Notified CLEC}) - (\text{Date and Time ILEC detected network incident})]\}}{(\text{Count of Network Incidents})}$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • By Switch and Tandem
Retail Analog/Benchmark:
<ul style="list-style-type: none"> • Parity.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Average Database Update Interval
Definition:
<p>CLECs must rely on ILEC databases in order to provide accurate E911/911 services, directory listings, directory assistance, and operator services. ILECs currently control the updating of many essential databases, such as the Line Information Database (LIDB); directory listings, E911 Automatic Location Identifier (ALI), Master Street Address Guide (MSAG) and selective routing databases.</p> <p>In addition, accurate and timely loading of NXXs before the LERG (Local Exchange Routing Guide) effectiveness date is vital to CLEC customer's receiving calls from ILEC customers, and it is essential to ensure that customers are charged correctly for local and toll calls. Routing of CLEC's NXXs at the tandem and central office to the proper Public Safety Answering Point (PSAP) for emergency calls also is critical to E911/911 service.</p> <p>Disparity in timely and accurate updates of the above databases can lead to annoying, costly and possibly "life and death" situations for CLEC customers.</p>
Exclusions:
<ul style="list-style-type: none"> • Updates Canceled by the CLEC • Initial update when supplemented by CLEC • ILEC updates associated with internal or administrative use of local services • Scheduled maintenance windows
Business Rules:
<p>For CLEC Results:</p> <p>The actual update interval is determined for each update processed during the reporting period. It is the elapsed time from the ILEC receipt of a syntactically correct transaction from the CLEC to the ILEC's accurate completion of updating all databases affected by the CLEC activity. Elapsed time for each update is accumulated for each affected database (e.g., E911/911, LIDB, Directory and Directory Listings). The time required to update each database is accumulated and then divided by the associated total number of updates completed within the reporting period.</p> <p>For ILEC Results:</p> <p>The ILEC computation is identical to that for the CLEC with the clarifications noted below.</p> <p>Other Clarifications and Qualification:</p> <ul style="list-style-type: none"> • For LIDB, the elapsed time for an ILEC update is measured from the point in time when the ILEC's file maintenance process makes the LIDB update information available until the date and time reported by the ILEC that database updates are completed. • Results for the CLECs are captured and reported at the update level by Reporting Dimension (see below). • The Completion Date is the date upon which the ILEC issues the Update Completion Notice to the CLEC. • If the CLEC initiates a supplement to the originally submitted update and the supplement reflects changes in customer requirements (rather than responding to ILEC initiated changes), then the update submission date and time will be the date and time of ILEC receipt of a syntactically correct update supplement. Update activities responding to ILEC initiated changes will not result in changes to the update submission date and time used for the purposes of computing the update completion interval. • Elapsed time is measured in hours and hundredths of hours rounded to the nearest tenth of an hour. • Because this should be a highly automated process, the accumulation of elapsed time continues through off-schedule, weekends and holidays; however, scheduled maintenance windows are excluded.
Calculation:
$\text{Average Update Interval} = \frac{\sum \{(\text{Completion Date \& Time of Database Update}) - (\text{Submission Date and Time})\}}{\text{Number of Updates}}$

Exhibit KK-4
Additional Measures Proposed by CLECs

Time of Database Change)/(Total Number of Updates Completed During Reporting Period)}
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • Database Type
Retail Analog/Benchmark:
<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"> • 99.99 Percent Completed In 24 Hours Or 100 Percent Completed By LERG Effective Date.

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent Database Update Accuracy
Definition:
<p>CLECs must rely on ILEC databases in order to provide accurate E911/911 services, directory listings, directory assistance, and operator services. ILECs currently control the updating of many essential databases, such as the Line Information Database (LIDB); directory listings, E911 Automatic Location Identifier (ALI), Master Street Address Guide (MSAG) and selective routing databases.</p> <p>In addition, accurate and timely loading of NXXs before the LERG (Local Exchange Routing Guide) effectiveness date is vital to CLEC customer's receiving calls from ILEC customers, and it is essential to ensure that customers are charged correctly for local and toll calls. Routing of CLEC's NXXs at the tandem and central office to the proper Public Safety Answering Point (PSAP) for emergency calls also is critical to E911/911 service.</p> <p>Disparity in timely and accurate updates of the above databases can lead to annoying, costly and possibly "life and death" situations for CLEC customers.</p>
Exclusions:
<ul style="list-style-type: none"> • Updates Canceled by the CLEC • Initial update when supplemented by CLEC • ILEC updates associated with internal or administrative use of local services
Business Rules:
<p>For CLEC Results:</p> <p>For each update completed during the reporting period, the original update that the CLEC sent to the ILEC is compared to the Database following completion of the update by the ILEC. An update is "completed without error" if the database completely and accurately reflects the activity specified on the original and supplemental update (e.g., orders) submitted by the CLEC. Each Database (e.g., E911/911, LIDB, Directory and Directory Listings) should be separately tracked and reported.</p> <p>For ILEC Results:</p> <p>The ILEC computation is identical to that for the CLEC with the clarifications noted below.</p> <p>Other Clarifications and Qualification:</p> <ul style="list-style-type: none"> • For LIDB, the elapsed time for an ILEC update is measured from the point in time when the ILEC's file maintenance process makes the LIDB update information available until the date and time reported by the ILEC that database updates are completed. • Results for the CLECs are captured and reported at the update level by Reporting Dimension (see below). • The Completion Date is the date upon which the ILEC issues the Update Completion Notice to the CLEC. • If the CLEC initiates a supplement to the originally submitted update and the supplement reflects changes in customer requirements (rather than responding to ILEC initiated changes), then the update submission date and time will be the date and time of ILEC receipt of a syntactically correct update supplement. Update activities responding to ILEC initiated changes will not result in changes to the update submission date and time used for the purposes of computing the update completion interval. • Elapsed time is measured in hours and hundredths of hours rounded to the nearest tenth of an hour. • Because this should be a highly automated process, the accumulation of elapsed time continues through off-schedule, weekends and holidays; however, scheduled maintenance windows are excluded.
Calculation:
Percent Update Accuracy = [(Number of Updates Completed Without Error)/(Number Updates Completed)] X 100
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate

Exhibit KK-4
Additional Measures Proposed by CLECs

<ul style="list-style-type: none">• BST Aggregate
Level of Disaggregation:
<ul style="list-style-type: none">• Company• Database Type
/Benchmark:
<ul style="list-style-type: none">• 99.99 Percent Accurate

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
NXX(s) & LRN(s) Loaded by LERG Effective Date
Definition:
Measures the number of NXXs & LRNs loaded and tested in end office and/or tandem switches by the LERG effective date.
Exclusions:
<ul style="list-style-type: none"> • None
Business Rules:
<ul style="list-style-type: none"> • This measurement applies to the daily usage feed and carrier wholesale bill adjustments. • Performance for the DUF measurement is measured at two levels: <ul style="list-style-type: none"> ▪ Severity 1 Bill Affecting where X = 24 hours with a maximum of 5 business days to correct error ▪ Severity 2 Non-Bill Affecting where X = 3 business days with a maximum of 10 business days to correct error • 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. • The ILEC shall send correct usage record within X days/hours of receipt of a query. • The ILEC will adjust bill within X days (generally next CLEC bill unless adjustment request received after middle of the month).. • Only usage records fully corrected to the CLEC's specifications will be considered timely. • Excluded situations: <ul style="list-style-type: none"> ▪ 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
Calculation:
$((\text{Number of NXXs or LRNs loaded and tested by LERG effective date}) / (\text{Number of NXXs or LRNs scheduled to be loaded and tested by LERG effective date})) \times 100$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate • BST Affiliates
Level of Disaggregation:
<ul style="list-style-type: none"> • Reported for all NXX or LRN codes scheduled to be loaded in reporting period. • NXX or LRN tables at end office • NXX or LRN tables at tandem
Retail Analog/Benchmark:
99% by LERG effective date.

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Report/Measurement:
Notification of Interface Outages
Definition:
Measures the time it takes the ILEC to notify the CLEC of an outage of an interface.
Exclusions:
None
Business Rules:
Calculations:
$((\text{Number of Interface Outages where CLECs are notified within 15 minutes}) / (\text{Total Number of Interface Outages})) * 100$
Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate
Level of Disaggregation:
By interface type for all interfaces accessed by CLECs
Retail Analog/Benchmark:
Benchmark
Standard – 97% in 15 minutes

Exhibit KK-4
Additional Measures Proposed by CLECs

<p>Report/Measurement:</p> <p>Timeliness of Change Management Notices Timeliness of Final Versions of Documents Associated w/ Change Average Delay Days for Notices Average Delay Days for Documentation % ILEC v. CLEC Changes Made (May be Eliminated if Change Control Process Gives CLECs a Significant Role in prioritization and if prioritization is not implemented according to CLEC requests)</p>
<p>Definition:</p> <p>Measures whether CLECs receive required notices and documentation on time to prepare for ILEC interface/ system changes so CLEC interfaces are not impaired by change. Last metric examines whether the ILEC is discriminating in ignoring CLEC requested changes to interfaces—i.e adding new queries and status notices, etc.</p>
<p>Exclusions:</p> <ul style="list-style-type: none"> • None
<p>Business Rules:</p> <ul style="list-style-type: none"> • These metrics are designed to measure the percent of change management notices and associated final documentation sent to the CLEC according to notification/documentation standards and timeframes prescribed by the Parties' Change Management Agreement. • Each type of change management notice is to be reported separately (see Appendix C). • Timely documentation is to be measured separately to the extent that times for providing documentation after each type of notice differ. • Documentation that is not accurate and complete to the extent that CLECs can implement change to their interfaces is not considered timely sent. • All intervals are measured in hours and hundredths of hours rounded to the nearest hundredth. • The accumulation of elapsed time is based on business days/hours. • Change notification must comply with agreed upon business rules for notification procedures and definition of type of change. <p>Any changes made without notification will be considered "sent late".</p>
<p>Calculation:</p> <p>Percent of Change Management Notices Sent On Time = Σ [(Change Management Notifications Sent Within Required Time Frames) / (Total Number of Change Management Notices Sent)] x 100</p> <p>Percent of Change Management Final Documentation Sent On Time = Σ [(Change Management Documentation Sent Within Required Time Frames After Notices) / (Total Number of Change Management Documentation Sent)] x 100</p> <p>Average Delay Dates for Change Notices = Σ [(Date Notice Sent – Date Notice Due) / (Total Number of Notices Sent)]</p> <p>Average Delay Dates for Final Documentation = Σ [(Date Final Documentation Provided – Final Documentation Due) / (Total Final Change Management Documents Sent)]</p> <p>Percent ILEC Changes vs. CLEC Changes Made = Σ [(Number of CLEC-Initiated Changes Implemented in Period) / (Total Number of CLEC Changes Requested)] x 100; and Σ [(Number of ILEC-Initiated Changes Implemented in Period) / (Total Number of ILEC Changes Requested)] x 100</p> <ul style="list-style-type: none"> • Ratios will be expressed in terms of percentage and compared. Counts of rejected and pending requests also will be reported monthly for both (ILEC initiated) and (CLEC initiated) categories.

**Exhibit KK-4
Additional Measures Proposed by CLECs**

Report Structure:
<ul style="list-style-type: none"> • CLEC Specific • CLEC Aggregate • BST Aggregate • BST Affiliates
Level of Disaggregation:
<ul style="list-style-type: none"> • Company • Type of Change Notice <ul style="list-style-type: none"> System Outage Regulatory Change Industry Standards BST initiated CLEC initiatedCLEC Impacting Defects/Expeditesi
Retail Analog/Benchmark:
<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>98% on-time notification</p> <p>98% on-time final documentation</p> <p>Average Delay Days: No more than 5.</p> <p>CLEC v. ILEC changes made: parity:</p> <ul style="list-style-type: none"> •

Exhibit KK-4
Additional Measures Proposed by CLECs

Report/Measurement:
Percent Software Certification Failures Software Problem Resolution Timeliness and Average Delay Days.
Definition:
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.
Exclusions:
<ul style="list-style-type: none"> CLEC caused software failures (with notification and agreement from CLEC.)
Business Rules:
<ul style="list-style-type: none"> 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. 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. 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 deck. A transaction is defined as failed if the request cannot be submitted or processed or results in incorrect or improperly formatted data. 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. 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. 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. 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.
Calculation:
$\text{Software Certification Failures} = \Sigma [(\text{Number of Test Transactions in Test Deck} - \text{Count of Changes Required Due to CLECs Experiencing Malfunctions}) / (\text{Number of Test Transactions in Test Deck})] \times 100$
$\text{Software Problems Resolved On-Time} = \Sigma [\text{Number of Times Problem Resolved on Time} / \text{Number of Problems Resolved}] \times 100$
$\text{Average Delay Hours/Days for Software Problem} = \Sigma [(\text{Date and Time Problem Resolution Confirmed by CLEC} - \text{Date and Time Problem Resolution Due}) / (\text{Total Number of Problems Resolved})]$
Report Structure:
<ul style="list-style-type: none"> CLEC Specific CLEC Aggregate BST Aggregate

Exhibit KK-4
Additional Measures Proposed by CLECs

<ul style="list-style-type: none">• BST Affiliates
Level of Disaggregation:
<ul style="list-style-type: none">• Company• Interface Type• Severity Type (Work Around, No-Workaround)
Retail Analog/Benchmark:
<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">• No more than 0.1% of test deck transactions should result in CLEC problems• Software errors with no work-around should be corrected in 24 hours.• Software errors with work-arounds should be corrected in 72 hours• Parity with ILEC affiliate on Delay Days or Standard of 100% in 48 for problems with no work-around and 100% within five days for problems with work-arounds..