ORIGINAL

Matilda Sanders

From: Smith, Debbie N. [Debbie.N.Smith@BellSouth.COM]
Sent: Monday, November 15, 2004 10:25 AM
To: Filings@psc.state.fl.us
Cc: Culpepper, Robert; Fatool, Vicki; Slaughter, Brenda ; Linda Hobbs; Bixler, Micheale; Holland, Robyn P; Nancy Sims
Subject: Florida Docket No. 000121A-TP
Importance: High

A. Debbie Smith
Legal Secretary for Robert A. Culpepper
BellSouth Telecommunications, Inc.
c/o Nancy Sims
150 South Monroe, Rm. 400
Tallahassee, FL 32301-1558
(404) 335-0772
debbie.n.smith@bellsouth.com

B. Docket No. 000121A-TP: In Re: Investigation into the Establishment of Operations Support Systems Permanent Performance Measures for Incumbent Local Exchange Telecommunications Companies (BellSouth Track).

C. BellSouth Telecommunications, Inc.
on behalf of Robert A. Culpepper

D. 22 pages total in PDF format

E. BellSouth Telecommunications, Inc.'s Responses to the SEEM Technical Matrix.

CMP _____
COM _____
CTR _____
ECR _____
GCL _____
OPC _____
MMS _____
RCA _____
SCR _____
SEC 1
OTH _____

Debbie Smith (sent on behalf of Robert A. Culpepper)
BellSouth Telecommunications, Inc.
Suite 4300 - Legal Department
675 W. Peachtree Street
Atlanta, GA 30375-0001
Phone: (404) 335-0772

<<BST's Responses to the SEEM technical matrix>>

*****

113

ORIGINAL

Legal Department

Robert A. Culpepper
General Attorney

BellSouth Telecommunications, Inc.
150 South Monroe Street
Room 400
Tallahassee, Florida 32301
(404) 335-0841

November 15, 2004

Mrs. Blanca S. Bayó
Director, Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 000121A-TP
In Re: Investigation into the establishment of operations support systems permanent incumbent local exchange Telecommunications companies

Dear Ms. Bayó:

Please find enclosed for filing BellSouth's responses to the SEEM technical matrix. A copy of the same is being served on all parties of record.

Sincerely,

Robert A. Culpepper

Enclosures

cc: All parties of record
Marshall M. Criser, III
Nancy B. White
R. Douglas Lackey

CERTIFICATE OF SERVICE
Docket No. 000121A-TP

I HEREBY CERTIFY that a true and correct copy of the foregoing was served via Electronic Mail and U.S. Mail this 15th day of November, 2004 to the following:

Adam Teitzman
Jerry Hallenstein
Staff Counsel
Florida Public Service Commission
Division of Legal Services
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
Tel. No. (850) 413-6175
Fax. No. (850) 413-6250
ateitzma@psc.state.fl.us
jhallens@psc.state.fl.us

Tracy W. Hatch
AT&T
101 North Monroe Street
Suite 700
Tallahassee, FL 32301
Tel. No. (850) 425-6360
Fax. No. (850) 425-6361
thatch@att.com

Sonia Daniels
AT&T
1230 Peachtree Street
Suite 400
Atlanta, GA 30309
Tel. No. (404) 810-8488
Fax. No. (281) 664-9791
soniadaniels@att.com

Verizon, Inc.
Kimberly Caswell
P.O. Box 110, FLTC0007
Tampa, FL 33601-0110
Tel. No. (813) 483-2617
Fax. No. (813) 223-4888
kimberly.caswell@verizon.com

Nanette Edwards (+)
Regulatory Attorney
ITC^DeltaCom
4092 S. Memorial Parkway
Huntsville, Alabama 35802
Tel. No. (256) 382-3856
Fax. No. (256) 382-3936
nedwards@itcdeltacom.com

Peter M. Dunbar, Esquire
Karen M. Camechis, Esquire
Pennington, Moore, Wilkinson, Bell & Dunbar, P.A.
Post Office Box 10095 (32302)
215 South Monroe Street, 2nd Floor
Tallahassee, FL 32301
Tel. No. (850) 222-3533
Fax. No. (850) 222-2126
pete@penningtonlawfirm.com

Brian Chaiken
Supra Telecommunications and Information Systems, Inc.
2620 S. W. 27th Avenue
Miami, FL 33133
Tel. No. (305) 476-4248
Fax. No. (305) 443-1078
bchaiken@stis.com

Michael A. Gross
Vice President, Regulatory Affairs & Regulatory Counsel
Florida Cable Telecomm. Assoc.
246 East 6th Avenue
Tallahassee, FL 32303
Tel. No. (850) 681-1990
Fax. No. (850) 681-9676
mgross@fcta.com

Susan Masterton
Charles J. Rehwinkel
Sprint
Post Office Box 2214
MS: FLTLHO0107
Tallahassee, Florida 32316-2214
Tel. No. (850) 599-1560
Fax. No. (850) 878-0777
susan.masterton@mail.sprint.com

Donna Canzano McNulty (+)
MCI
1203 Governors Square Blvd.
Suite 201
Tallahassee, FL 32301
Tel. No. (850) 219-1008
donna.mcnulty@mci.com

Brian Sulmonetti
MCI WorldCom, Inc.
6 Concourse Parkway, Suite 3200
Atlanta, GA 30328
Tel. No. (770) 284-5493
Fax. No. (770) 284-5488
brian.sulmonetti@wcom.com

William Weber, Senior Counsel
Gene Watkins (+)
Covad Communications
1230 Peachtree Street, N.E.
19th Floor, Promenade II
Atlanta, Georgia 30309
Tel. No. (404) 942-3494
Fax. No. (508) 300-7749
wweber@covad.com
jbell@covad.com
gwatkins@covad.com

John Rubino
George S. Ford
Z-Tel Communications, Inc.
601 South Harbour Island Blvd.
Tampa, Florida 33602
Tel. No. (813) 233-4630
Fax. No. (813) 233-4620
gford@z-tel.com

Joseph A. McGlothlin
Vicki Gordon Kaufman
McWhirter, Reeves, McGlothlin,
Davidson, Decker, Kaufman, et. al
117 South Gadsden Street
Tallahassee, Florida 32301
Tel. No. (850) 222-2525
Fax. No. (850) 222-5606
jmcglothlin@mac-law.com
vkaufman@mac-law.com
Represents KMC Telecom
Represents Covad
Represents Mpower

Jonathan E. Canis
Michael B. Hazzard
Kelley Drye & Warren, LLP
1200 19th Street, N.W., Fifth Floor
Washington, DC 20036
Tel. No. (202) 955-9600
Fax. No. (202) 955-9792
jacanis@kelleydrye.com
mhazzard@kelleydrye.com

Tad J. (T.J.) Sauder (*)
Manager, ILEC Performance Data
Birch Telecom of the South, Inc.
2020 Baltimore Avenue
Kansas City, MO 64108
Tel. No. (816) 300-3202
Fax. No. (816) 300-3350

John D. McLaughlin, Jr.
KMC Telecom
1755 North Brown Road
Lawrence, Georgia 30043
Tel. No. (678) 985-6262
Fax. No. (678) 985-6213
jmclau@kmctelecom.com

Andrew O. Isar
Miller Isar, Inc.
7901 Skansie Avenue
Suite 240
Gig Harbor, WA 98335-8349
Tel. No. (253) 851-6700
Fax. No. (253) 851-6474
aisar@millerisar.com

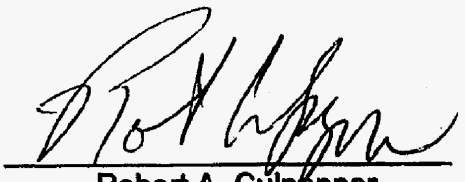
Renee Terry, Esq. (*)
e.spire Communications, Inc.
7125 Columbia Gateway Drive
Suite 200
Columbia, MD 21046
Tel. No. (301) 361-4298
Fax. No. (301) 361-4277

Mr. David Woodsmall
Mpower Communications, Corp.
175 Sully's Trail
Suite 300
Pittsford, NY 14534-4558
Tel. No. (585) 218-8796
Fax. No. (585) 218-0635
dwoodsmall@mpower.com

Suzanne F. Summerlin, Esq.
Attorney At Law
2536 Capital Medical Blvd.
Tallahassee, FL 32308-4424
Tel. No. (850) 656-2288
Fax. No. (850) 656-5589
summerlin@nettally.com

Dulaney O'Roark III (+)
WorldCom, Inc.
Six Concourse Parkway
Suite 3200
Atlanta, GA 30328
Tel. No. (770) 284-5498
De.ORoark@mci.com

Wayne Stavanja/Mark Buechele
Ann Shelfer
Supra Telecommunications
1311 Executive Center Drive
Suite 200
Tallahassee, FL 32301
Tel. No. (850) 402-0510
Fax. No. (850) 402-0522
ashelfer@stis.com



Robert A. Culpepper

(+) Signed Protective Agreement

#502166

CLEC Coalition Proposed Changes

Row #	Proposal Concepts	CLEC Reasoning	BST Response
1	**Measure-Based Concept**	➢ Transaction-based remedies provide an incentive for BellSouth to give worse service, in order to suppress CLEC volumes. ➢ Maintains continuity with the current remedy plan. ➢ Addresses the need for sufficient remedies even at small volumes. ➢ Violations give evidence of processes being out of parity. Measure-based plans tie the remedy to motivating behavior to provide incentive to fix the process.	**Measure-based plan:** ➢ The first point is illogical for a number of reasons: o Under a transaction based plan, penalties increase as service deteriorates where the penalties are constant under a measure based plan so even if this incentive exists it would be higher under a measure based plan. o If such incentive exists it would also exist under the CLECs' proposed modification to the measure based plan that incorporates severity. o The adverse consequences of such willful action by BellSouth resulting from CLECs filing complaints or lawsuits for example, are far too severe to make this a plausible concern. o This "concern" incorrectly assumes that such action could not be easily detected by CLECs or the Commission. o While BellSouth is not impugning the integrity of CLECs in this regard, to the extent that the commission should be concerned about disreputable conduct by a party, measure-based remedies provide CLECs with the incentive to cause BellSouth to miss standards by a small amount because it has no effect on service quality yet generates a large penalty. ➢ Maintaining continuity with the current plan is not a benefit since the current plan is severely flawed. ➢ If there is a problem with low penalties in low volume situations it is at most only applicable to newly emerging or nascent services. It is more reasonable to address this issue, if it exists, with a specific provision in the SEEM targeted to those few, if any, nascent services, than to impose the severe flaws that are present in a measure based structure on the overwhelming majority of

Row #	Proposal Concepts	CLEC Reasoning	BST Response
			services. A specific nascent services provision can be accommodated more easily in a transaction based plan. ➢ The assumption that violations (penalty payments) under the current SEEM indicate that processes are out of parity has been completely disproved. Evidence collected under the current plan clearly shows that violations occur due to the nature of the plan even when BellSouth's processes are nondiscriminatory. In fact, BellSouth's performance has been found to be nondiscriminatory and competition has flourished over the last few years. Nonetheless, BellSouth has paid huge penalties particularly in Florida even though it has met its non discrimination obligations. ➢ One fatal flaw is that the Measure-based plan is not scalable; i.e., it assesses the same penalty amount whether there is 1 failed transaction or there are 1000. ➢ The Current Plan is problematic in several ways: o Exorbitant penalties o Penalties bear no rational relationship to: • Performance provided to CLECs • Service charges associated with such penalties. • Damage (if any) sustained by the CLEC. o Penalties often amount to years worth of free service ➢ High penalty on "first offense" of missing a measurement ➢ History shows inherent difficulty of attempting to forcibly graft severity feature onto measure-based plan ➢ Problems with overlaying severity of measure-based plan: 1. no direct linkage to performance; 2. inability to link corrective action to performance failure; 3. arbitrary measures of severity; 4. huge payments for small performance differences;

Row #	Proposal Concepts	CLEC Reasoning	BST Response
			5. Imposition of arbitrary caps; and penalties increasing simply due to growth in number of customers served by CLECs.
2	**Base Remedy Payment Calculation** d * SQRT(n) * B d = disparity index = CLEC Perf./ Applicable Stnd. – 1 B = Factor varies by Meas./ Prod. Cat.	➢ Essential to incorporate severity considerations in the determination of the remedy amount. ➢ Measures severity in terms of the CLEC performance relative to either the ILEC performance or a designated benchmark. ➢ Disparity index derived based on like-to-like comparisons ➢ Disparity index capped to avoid extreme remedies when BellSouth's support for its own customers is extremely better than how it supports CLEC customers. ➢ Incorporates volume while maintaining adequate incentives at low volumes and avoiding extreme incentives at high volumes. ➢ Remedies designed to be close to the remedy amounts in the current SEEM fee schedule. ➢ Bases remedies on the disparity index which is similar to what FPSC Staff previously recommended.	➢ The base remedy calculation, d*SQRT (n)*B, is the product of multiple arbitrarily defined factors. ➢ The disparity index, d, is arbitrarily constructed so that there is always a division of one small number by another small number when performance is good– which arbitrarily magnifies the degree of disparate performance. For example, if performance is 80 for CLEC and 85 for Bellsouth, the disparity is 1.33, but if performance for CLEC is 99.5 and 99.9 for BellSouth, disparity is 5.0. The penalty is much higher even though the actual difference in performance is much smaller. Consequently, the penalty growth rate increases as performance improves. ➢ The CLECs proposal contains numerous arbitrary caps on the arbitrarily defined variables. By the CLECs own admission, existence of these caps indicates that the calculation method is not sound. ➢ There is no rationale for using this arbitrary indexing method instead of any other arbitrary indexing method such as dividing one large number by another or using the difference in performance as a measure of disparity for example. ➢ Using proportions, calculated like this disparity index, are inherently problematic because of their asymptotic nature. ➢ The disparity index is subjectively capped simply to prevent this proposed plan from producing outrageous results. The cap, however, introduces another flaw because at any performance level where the cap is applicable, performance improvements do not reduce penalties. ➢ Coupling the disparity cap with the volume factor creates an illogical plan where penalties can increase even though performance improves. ➢ **The B factors, in essence, resemble a fee** schedule. but the amounts are unsubstantiated.

Row #	Proposal Concepts	CLEC Reasoning	BST Response
			They are purportedly designed to achieve an undefined balance between two undefined numbers but the specific method used to derive these factors has not been provided. ➢ The data that has been provided with respect to the B factors indicates that a large increase in payments will result even though performance continues to be nondiscriminatory. There has been no rationale provided to justify such an increase. ➢ Further, revenue neutrality is an inappropriate standard because the penalties produced under the current plan are at least three times higher than the level that has been demonstrated to result in continued nondiscriminatory performance. ➢ Also, some metric domains, such as Billing, are not given a B value. ➢ Using the square root in the volume factor, SQRT (n), is another arbitrary value. Why not use the cube root or 20th root? ➢ For the same number of misses, the penalty increases with CLEC volume even though the impact on the CLEC is less. ➢ Even with all of the arbitrary limits the formula still produces high penalties for a small performance shortfall. ➢ Two CLECs with same aggregate performance and volume can get different penalties due to distribution of CLEC volume. ➢ The distribution of BellSouth misses among cells affects penalties, but the distribution of CLEC misses does not. ➢ BellSouth cannot effectively manage its efforts per this approach because the interaction of these variables in generating penalties is not principally tied to performance.

Row #	Proposal Concepts	CLEC Reasoning	BST Response
3	**$25,000 Limit on First Month Violation**	➢ Addresses concerns raised about the magnitude of per submetric remedy amounts.	➢ This $25,000 cap is more than 5 times the highest current maximum of $4,750 and 100 times the lowest current maximum of $250. ➢ The $25,000 limit has no defensible basis and still may be excessive where performance is good, but CLEC volume is high (ex. CTRR) ➢ Again, the existence of these caps is contrary to CLECs own stated position that they would be unnecessary if the calculation method were sound.
4	**Small Volume Cap**	➢ Further limits potential remedies at small volumes for proportion parity measures. ➢ **Address concerns about large remedies** at low volumes.	➢ The small volume cap is only needed because the CLECs methodology is unstable. There is no rationale given for why an unsound method should be adopted, particularly if arbitrary caps must be employed to attempt to compensate for its flaws. ➢ The small volume cap is just another arbitrary value chosen by the CLEC with no attempt at justification.

Row #	Proposal Concepts	CLEC Reasoning	BST Response
5	**Persistence Factor**	➢ Remedy amounts for Tier 1 should escalate in the same fashion across all domains ➢ **BellSouth continually reports below-standard performance for some submeasures** ➢ Factors approximate those in current fee schedule.	➢ Currently: o No basis for escalation rate each month o Application of escalation feature only compounds arbitrarily punitive nature of plan o There is no rationale given for why damage to CLECs increases just because unrelated transactions are missed in consecutive months. o Each month's failures are separate transactions unrelated to transactions in previous months o The persistence factor does not take into account that the metric may only be slightly out of parity o Tier 2 payments, triggered in the 3rd consecutive month, are designed as the additional punitive element for persistent failures, so this escalation is another mechanism to accomplish the same objective. o These Tier 2 payments would continue until parity is regained – which is more reasonable. ➢ Under the CLECs' proposal, because of the way the persistence factor is applied, the stated cap of $25,000 is really not a cap – could be $75,000.

Row #	Proposal Concepts	CLEC Reasoning	BST Response
6	**Tier 2**	➢ Status Quo ➢ Allows the Tier 1 implementation to be evaluated prior to disruption caused by modifications. If the modified Tier 1 proves to enable the generated remedies to be effective in motivating compliant performance by BellSouth, then potential changes associated with Tier 2 would be avoided.	➢ The existing Tier 2 penalty calculation methodology and fee schedule has all of the same faults as Tier 1 due to measure-based approach, fee schedule, lack of positive incentive, etc. These problems should not be ignored. ➢ Also, Tier 2 penalty amounts should be more rationally based, as with Tier 1, and a severity component included. ➢ There is no rational basis for severity to be **excluded from Tier 2.** ➢ The only stated reason by CLECs for not addressing Tier 2 was they wanted to wait and see how their proposal performed for Tier 1. This action shows that CLECs have significant doubts about the soundness of their own proposal. ➢ If CLECs themselves don't have confidence in their approach, it certainly should not be implemented for either Tier 1 or Tier 2.

BellSouth Proposed Changes

Row #	Proposed Change	BST Reasoning	CLEC Response
1	**Remedy Plan based on Transaction-based system**	**Transaction-based approach:** ➢ Inherently scalable ➢ Straightforward variation of penalties based on severity ➢ Does not require a proxy for severity, such as a disparity index -- which has proven to be very subjective and untenable, thus arbitrary ➢ Transaction-based plan is preferable as a general proposition, from a practical standpoint ➢ Currently, at least 40 states, including Florida, use transaction-based plans	➢
2	**Quantifying disparate transactions**	➢ Counts number of disparate transactions and pays penalties on those ➢ For Parity Measures, the most direct and logical approach: o Alter the most damaging "out-of-parity" situations first o **Alter next most** damaging until "parity" is achieved ➢ Corrects transactions having greatest potential customer impact first, before correcting those having lesser potential impact ➢ For Benchmark Measures, the disparate transactions are simply the number of additional transactions that must be changed for the better to meet the benchmark.	➢
3	**Interpolation for Total Affected Volume**	➢ All transactions in final cell may not need to be altered for "parity" ➢ Appropriate action: interpolate to bring sub-metric into "parity"	➢
4	**Parity Point versus Detection Point**	BellSouth is obligated to pay penalties under SEEM only up to the point necessary to achieve "parity" of service for CLECs.	➢
5	**Amounts per transaction**	➢ Current transaction-based fees in other states: o Outdated o Continued use is unwarranted and inefficient o Resulted from evidence presented to GPSC in 2000 o Developed with much less CLEC activity	➢

Row #	Proposed Change	BST Reasoning	CLEC Response
		○ Fee schedule artificially high, although thought to be too low initially ○ **Penalty amount/transaction – excessive relative to typical rate for service** ○ **Artificially high fee schedule compounded** with increased CLEC activity cause transaction-based payment to scale too high. ➢ Existing and new plans require BST to provide CLECs better service in the aggregate than retail in order to eliminate penalty payments because: ○ Performance for each CLEC is compared to BST's average performance across a geographic area ○ Contrary to intent of SEEM ➢ **A more rationale fee schedule reduces** the effect of this occurrence while still deterring backsliding very effectively. ➢ More in line with rebates in commercial transactions where performance guarantees are provided.	
6	**"High Performance" / "Standard Performance" / "Low Performance"** Enforcement Mechanisms Methodology (Tier 1) Section 4.3.1.4: If BellSouth's performance in the current month should exceed the baseline level by three standard deviations, no Tier-1 payment will apply for any CLEC in that month. Enforcement Mechanisms Methodology (Tier 2) Section 4.3.2.2: If BellSouth's performance, as measured by the average percent of submetrics met for the three months used to determine whether Tier 2 applies in the current data month, exceeds the baseline performance by three standard deviations, no Tier-2 payment will apply for any CLEC in the current data month. Need example showing how this will work for each possible combination: Benchmark/Parity/Mean/Proportion.	➢ Implements new anti-backsliding mechanism ➢ Two fee schedules proposed ○ New standard fee schedule ○ Low performance schedule • Will apply if performance materially deteriorates from current levels • Same as fee schedule currently in all other transaction-based SEEMs for BellSouth ○ Allay any concerns that Proposed SEEM is too soft to deter backsliding ○ If performance deteriorates by a statistically significant degree from baseline, then fees increase dramatically ○ Permits BellSouth to avoid penalties w/ statistically significant improvement in overall performance. ➢ Professed role of SEEM: provide another mechanism to deter backsliding in performance ➢ SEEM is not the only means available CLECs to address performance problems with BellSouth. Other mechanisms also exist to address backsliding:	➢

Row #	Proposed Change	BST Reasoning	CLEC Response
		○ Complaints to federal and state commissions ○ Monitoring by those same commissions ○ Contract provisions ○ Court actions ➢ Facts show that there has been no backsliding under the current SEEM ➢ Provision requires SEEM fee schedule to revert to a much more punitive fee schedule, consistent with the levels applicable in current transaction-based plans ~~SEEM~~ if performance deteriorates materially. ➢ New positive ~~Additional~~ incentive relieves BST of payments if a material improvement in overall performance occurs ○ To improve performance ○ To partially compensate for the risk of reverting to fee schedule used currently for other transaction-based plans ➢ Existing plan requires BST to provide CLECs better service in the aggregate than retail in order to eliminate penalty payments because: Performance for each CLEC is compared to BST's average performance across a geographic area ○ Contrary to intent of SEEM This mechanism puts a limit on this occurrence if performance improves significantly.	
7	**Disaggregation**	➢ The disaggregation for SEEM should be different from the SQM so that the statistical methodology can function according to design ➢ Report Structure changed to eliminate categories with little or no volume, resulting in data that should be more concise and meaningful. For example, >=10 lines/circuits virtually never has any data in the reports. These low volumes render the measure virtually useless to evaluate performance. ➢ The products in the low volume disaggregations will continue to be included in the results. They will simply be part of another category instead of reported separately. ➢ Cell structure, as defined by wire Center,	➢ Disaggregation should allow for like-to-like comparisons. The current set of submetrics facilitates accurate comparisons of results to expected performance.

Row #	Proposed Change	BST Reasoning	CLEC Response
		dispatched, service-type, # of circuits as previously agreed upon by BellSouth and the CLECs ensures like-to-like comparisons ➢ Truncated-z statistical methodology as previously developed jointly by BellSouth and CLECs permits aggregation of theses cells into submetrics to improve validity of results without masking poor performance. ➢ Recent testing of truncated z methodology by CLECs confirmed that mechanism does permit cell aggregation without masking as designed. ➢ The level of disaggregation should allow for a statistically meaningful number of transactions in each submetric ➢ Because Tier 1 penalties are calculated by individual CLEC, with too much disaggregation, the spread of transactions across cells means the vast majority of cells show little or no activity.	
8	**Degree of Escalation**	➢ Tier 1 fee amounts would only escalate in month 2 ➢ Tier 1 fees were designed to be liquidated damages – no reason to conclude that damages continue to escalate each month. ➢ CLECs would continue to receive payments at the increased Month 2 level if the condition persists. ➢ Tier 2 penalties, which were designed to be punitive, apply beginning in month 3 ➢ More fully utilizes the Tier 2 mechanism, which was designed to address cases of persistent metric failures.	➢

Row #	Proposed Change	BST Reasoning	CLEC Response
9	**To pay or not to pay for only 1 failed month** Enforcement Mechanisms Definitions Section 4.1.7: Tier-1 Enforcement mechanisms - …for any two consecutive months as calculated by BellSouth. Enforcement Mechanisms Methodology Section 4.3.1: Tier-1 Enforcement Mechanisms will be triggered … ~~in a given month~~ for two (2) consecutive months.	➢ Situation more likely problematic when volumes are low o Currently, due to excessive disaggregation o Still to some extent in Tier 1 for proposed plan ➢ Does not represent discriminatory practice ➢ Some failures are anomalies: o No systemic changes required to address failures o **Random occurrences:** • temporary random system malfunction • random human error o No corrective action can be taken o Neither predictable nor preventable o Penalty clearly inconsistent with objectives of SEEM. ➢ Assessing penalties based on a single-month failure equates statistical significance with materiality o Only deals in probabilities and not certainties o Depends on inputs for certain materiality parameters such as Delta, Psi and Epsilon o Only identify statistically significance o Cannot determine actual materiality ➢ Virtually removes likelihood of assessing remedies for random occurrences.	➢
10	Measured to be included in SEEM	➢ Proposed for each Domain, where such timeliness and accuracy are measured: o 1 measure of timeliness o 1 measure of accuracy ➢ Measures of some intermediate processes were removed o Little, if any, customer effect o Any significant customer effect would likely be reflected in other measures	➢

Row #	Proposed Change	BST Reasoning	CLEC Response
11	**Delta** Enforcement Mechanisms Definitions Section 4.1.6: Delta - ...For individual CLECs ~~submetrics~~ the Delta value shall be ~~determined using Ford's Delta Function as ordered by the Florida Public Service Commission.~~ 1.0 and for the CLEC aggregate the Delta value shall be 0.5.	➢ Single delta value o Tier 1 of 1.0 o Tier 2 of 0.5 ➢ Current delta function: o Initially proposed by Z-Tel's economist Dr. Ford o **To address adjustment to the statistical balancing methodology** o **Dr. Ford introduced some confusion** about several key hypothesis testing issues (1) statistical hypothesis test's significance **level** (2) **interpretation** of a "balanced" hypothesis **test** (3) **reasons** for using "balancing" in SEEM plan ➢ No need for "fix" of Dr. Ford's delta function o No reason to conclude serious flaws are in the balancing methodology o No indication of problem initially alleged by Dr. Ford in all 7 of BST's states with single delta value ➢ Use of delta function introduces additional variables o Requiring subjective exercise in determining values o Probably creates more problems than it solves.	➢
12	Appendix C: Statistical Properties and Definitions **C.1.5: Trimming**	➢ **Originated in Louisiana Workshop in 1999** o CLEC volumes and distributions were much smaller than they are now o Distributional differences no longer a factor ➢ Requires each observation to be discarded be examined to determine if true business reason exists for discarding this real data. ➢ Defeats Self Effectuating aspect of SEEM plan.	➢

Row #	Proposed Change	BST Reasoning	CLEC Response
13	**Appendix D**: Statistical Formulas and Technical Descriptions Beginning on page 101 Revised Section D to incorporate the change from measurement-based plan to a transaction based plan and to change from the floating delta approach, based on the Ford delta function, a fixed delta of 1.0 for Tier 1 and 0.5 for Tier 2. See Exhibit B, Appendix D.	Section D has been substantially revised to reflect the change from a per-measurement based SEEM plan to a per-transaction based SEEM plan. Therefore, the entire section is shown in red.	>
14	Appendix C Statistical Properties and Definitions Section C The statistical process for testing whether BellSouth's (BST) wholesale customers (alternative local exchange carriers or CLEC~~ALEC~~s) are being treated equally with BST's retail customers involves more than a simple mathematical formula. Three key elements need to be considered before an appropriate decision process can be developed. These are the type of: • data • comparison • performance This section describes the properties of a test methodology and the truncated Z statistic for ~~four~~two types of measures.	This change reflects the fact that BellSouth's proposal does not include rate or ratio measures and to correct ALEC to read CLEC.	>
15	Appendix C Statistical Properties and Definitions Section C.1 **Necessary Properties for a Test Methodology** Once the key elements are determined, a test methodology should be developed that complies with the following properties: • Like-to-Like Comparisons • Aggregate Level Test Statistic • Production Mode Process • Balancing ~~• Trimming~~	Changed to reflect the removal of the trimming of data in the process. See rationale below for Appendix C, section C.1.5.	>
16	Appendix C Statistical Properties and Definitions C.1.1 **Like-to-Like Comparisons** When possible, data should be compared at appropriate levels, e.g. wire center, time of month, dispatched residential, new orders. The testing process should: • Identify variables that may affect the performance measure • Record these important confounding covariates • Adjust for the observed covariates in order to remove potential biases and to make the CLEC ~~ALEC~~ and the ILEC units as comparable as possible.	Correction	>
17	Appendix C Statistical Properties and Definitions	Correction	>

<table>
<tr><th>Row #</th><th>Proposed Change</th><th>BST Reasoning</th><th>CLEC Response</th></tr>
<tr><td></td><td>C.1.2 Aggregate Level Test Statistic
Each performance measure of interest should be summarized by one overall test statistic giving the decision maker a rule that determines whether a statistically significant difference exists. The test statistic should have the following properties:
• The method should provide a single overall index on a standard scale.
• If entries in comparison cells are exactly proportional over a covariate, the aggregated index should be very nearly the same as if comparisons on the covariate had not been done.
• The contribution of each comparison cell should depend on the number of observations in the cell.
• Cancellation between comparison cells should be limited.
• The index should be a continuous function of the observations.</td><td></td><td></td></tr>
<tr><td>18</td><td>Appendix C Statistical Properties and Definitions
C.1.6 Measurement Types
The performance measurements that will undergo testing are of ~~four~~two types: mean~~, ratio,~~ and proportion~~, and rate~~. ~~All four~~Both have similar characteristics. Different types of data are used to calculate them. Table C-1 shows the type of data that is used to derive each measurement type.
Table C-1: Measurements Types and Data
<table>
<tr><th>Measurement Type</th><th>Data Used to Derive Measure</th></tr>
<tr><td>Mean</td><td rowspan="2">Interval measurements</td></tr>
<tr><td>~~Ratio~~</td></tr>
<tr><td>Proportion</td><td rowspan="2">Counts</td></tr>
<tr><td>~~Rate~~</td></tr>
</table></td><td>These changes reflect the fact that there are no rate or ratio measures in BellSouth's proposed SEEM plan. There are no ratio measures in the existing SEEM plan either.</td><td>></td></tr>
<tr><td>19</td><td>~~The calculation of the Truncated Z statistic is described in Appendix A of the "Louisiana Statistician's Report." The methodology described in this document is the same as that described in the "Statistician's Report;" however, this document contains extra technical details to avoid undefined situations when programming the technique.~~

In summary, many covariates are chosen in order to provide meaningful comparison levels below the sub-metric level chosen for the parity comparison. This includes such factors as wire center and time of month, as well as order type for</td><td>These changes are added to make minor corrections and to delete the discussion concerning the Louisiana study, which is not necessary for an understanding of the statistical methodology.</td><td>></td></tr>
</table>

Row #	Proposed Change	BST Reasoning	CLEC Response
	provisioning measures. In each comparison cell, a Z statistic is calculated. The form of the Z statistic may vary depending on the performance measure, but it should be distributed approximately as a standard normal, with mean zero and variance equal to one. Assuming that the test statistic is derived so that it is negative when the performance for the CLEC ~~ALEC~~ is worse than for the ILEC, a positive truncation is done – i.e. if the result is negative it is left alone, if the result is positive it is changed to zero. A weighted ~~sum~~average of the truncated statistics is calculated where a cell's weight depends on the volume of BST and CLEC ~~ALEC~~ orders in the cell. The weighted ~~sum~~average is standardized by ~~the~~ subtracting the theoretical mean of the truncated distribution, and this is divided by the standard error of the weighted sum. Summaries based on measurement type are given for the calculation of the cell Z statistic.		
20	Appendix C Statistical Properties and Definitions C.2.1 **Mean Measures** For mean measures, an adjusted, asymmetric t statistic is calculated for each like-to-like cell that has at least seven BST and seven CLEC ~~ALEC~~ transactions. ~~This statistic is an adjustment to the modified z statistic in order to make the assumption that the statistic is approximately normally distributed more reasonable even for fairly small sample sizes. The adjusted, asymmetric t statistic is part of the methodology described in the "Statistician's Report," and it has been documented for the statistical community in the August 2001 issue of The American Statistician, a peer review statistics journal. The statistic was created for mean performance measure parity tests in order to reduce the number of permutation tests needed for calculating cell statistics. Several sets of BST/CLEC mean measure data from Louisiana were examined in order to determine when the adjustment results give approximately the same results as a permutation test. The result is that a~~A permutation test is used when one or both of the BST and CLEC ~~ALEC~~ sample sizes is less than seven. The adjusted, asymmetric t statistic and the permutation calculation are described ~~below~~in Appendix D. Statistical Formulas and Technical Description.	These changes are added for clarification purposes and to delete the discussion concerning the Louisiana study, which is not necessary for the understanding of the statistical methodology.	>
21	Appendix C Statistical Properties and Definitions C.2.2 **Proportion Measures**	These changes are added for clarification purposes.	>

Row #	Proposed Change	BST Reasoning	CLEC Response
	For performance measures that are calculated as a proportion, in each adjustment cell, the cell Z and the moments for the truncated cell Z can be calculated in a direct manner. In adjustment cells where proportions are not close to zero or one, and where the sample sizes are reasonably large (nijpij(1-pij) > 9), a normal approximation can be used. In this case, the moments for the truncated Z come directly from properties of the standard normal distribution. If the normal approximation is not appropriate, then the Z statistic is calculated from the hypergeometric distribution. ~~Is the exact permutation distribution.~~ In this case, the moments of the truncated Z are calculated exactly using the hypergeometric probabilities.		
22	Appendix C Statistical Properties and Definitions C.2.3 **Rate Measures** ~~The truncated Z methodology for rate measures has the same general structure for calculating the Z in each cell as proportion measures. For the rate measure customer trouble report rate there are a fixed number of access lines in service for the ALEC, b2j, and a fixed number for BST, b1j. The modeling assumption is that the occurrence of a trouble is independent between access lines, and the number of troubles in b access lines follows a Poisson distribution with mean b where is the probability of a trouble per 1 access line and b (= b1j + b2j) is the total number of access lines in service. The exact permutation distribution for this situation is the binomial distribution (the limit for the hypergeometric distribution) that is based on the total number of BST and ALEC troubles, n, and the proportion of BST access lines in service, qj = b1j/b.~~ ~~In an adjustment cell, if the number of ALEC troubles is greater than 15 and the number of BST troubles is greater than 15, and nijqij(1-qij) > 9, then a normal approximation can be used. In this case, the moments of the truncated Z come directly from properties of the standard normal distribution. Otherwise, if there are very few troubles, the number of ALEC troubles can be modeled using a binomial distribution with n equal to the total number of troubles (ALEC plus BST troubles.) In this case, the moments for the truncated Z are calculated explicitly using the binomial distribution.~~	This proposed deletion of the existing language reflects the fact that there are no rate measures in BellSouth's proposed SEEM plan.	>
23	Appendix C Statistical Properties and Definitions C.2.4 **Ratio Measures** ~~The current plan contains no measures that call for the use of a~~	This change reflects the fact that there are no ratio measures in either the existing or the proposed SEEM plan.	>

Row #	Proposed Change	BST Reasoning	CLEC Response
	~~Z parity statistic.~~		