BEFORE THE 1 FLORIDA PUBLIC SERVICE COMMISSION 2 **DOCKET NO. 000121-TP** 3 In the Matter of: 4 INVESTIGATION INTO THE ESTABLISHMENT OF OPERATIONS 5 SUPPORT SYSTEMS PERMANENT PERFORMANCE MEASURES FOR 6 INCUMBENT LOCAL EXCHANGE TELECOMMUNICATIONS COMPANIES. 7 8 **ELECTRIC VERSIONS (WORDPERFECT AND PDF** FORMAT) OF THIS TRANSCRIPT ARE CONVENIENCE 9 COPIES ONLY AND NOT THE OFFICIAL TRANSCRIPT. THE WORDPERFECT VERSION OF THE TRANSCRIPT 10 DOES NOT CONTAIN PREFILED TESTIMONY 11 **VOLUME 6** PAGES 941 THROUGH 1124 12 13 PROCEEDINGS: **HEARING** 14 CHAIRMAN E. LEON JACOBS, JR. **BEFORE:** 15 COMMISSIONER J. TERRY DEASON **COMMISSIONER LILA A. JABER** 16 **COMMISSIONER BRAULIO L. BAEZ** COMMISSIONER MICHAEL A. PALECKI 17 Friday, April 27, 2001 18 DATE: Commenced at 9:30 a.m. TIME: 19 **PLACE: Betty Easley Conference Center** 20 **Room 148** 4075 Esplanade Way 21 Tallahassee, Florida 22 JANE FAUROT, REPORTED BY: Official FPSC Reporter 23 (As heretofore noted.) 24 APPEARANCES: 25 DOCUMENT NUMBER - DATE

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PROCEEDINGS 1 2 (Transcript follows in sequence from Volume 5.) 3 CHAIRMAN JACOBS: Good morning. We'll go ahead and get 4 5 started. The first witness is up. Good morning. 6 Mr. Prescott. 7 8 CHERYL BURSH was called as a witness on behalf of AT&T Communications of the 9 10 Southern States, Inc., and, having been duly sworn, testified as 11 follows: 12 DIRECT EXAMINATION 13 BY MR. PRESCOTT: 14 Q Good morning. Good morning. 15 Α Would you please state your name and address, please. 16 Q My name is Cheryl Bursh, and my address is 1200 17 Α 18 Peachtree Street, Atlanta, Georgia 30309. And how are you employed? Where are you employed? 19 Q I am employed with AT&T Communications of the Southern 20 Α 21 States, Incorporated. 22 And in what capacity are you employed? Q 23 Α District Manager in Law and Government Affairs. 24 Q Ms. Bursh, did you cause to be prepared and filed 41 25 pages of direct testimony and 24 pages of rebuttal testimony in

1	this pro	oceed	ding?
2	A	,	Yes.
3	Q)	Do you have any changes or corrections to make to your
4	prefiled	d dire	ect testimony?
5	A		Yes, I do. The changes, proposed changes have
6	Q)	Would you explain the changes?
7	A		been passed out. The changes pertain to Exhibit
8	CLB-11	, Sec	tion G, or Attachment G. On Page 46, if you look down
9	the tab	le, tł	ne dollar amount that corresponds to 1.0 is 0. Also
10	on Pag	e 48,	the dollar amount that corresponds with 95.0 percent
11	is 0. A	nd if	you turn to Page 52, 92.5 percent corresponds to 0
12	dollars	. An	d each of those changes have been highlighted.
13	Q)	With those changes and corrections, if asked the same
14	questic	ons to	oday would your answers be the same?
15	A	,	Yes, they would.
16			MR. PRESCOTT: Commissioner, I would ask that the
17	testimo	ony b	e entered into the record as if read.
18		į	CHAIRMAN JACOBS: Without objection show the direct and
19	rebutta	al tes	timony of Ms. Bursh is entered into the record as
20	though	read	d.
21	BY MR.	PRES	SCOTT:
22	C	Į	Ms. Bursh, were there attached to your direct testimony
23	three e	xhib	its labeled 3LB-1 through 3LB-3?
24	А		Yes.
25	C)	And did you have any exhibits attached to your rebuttal

1	testimony?	
2	A	No, I did not.
3	Q	Have you prepared a summary of your testimony?
4		Yes, I have.
5	Q	Would you please
6		CHAIRMAN JACOBS: Do you want to go ahead and mark
7	those exhi	bits? We will mark those as Composite Exhibit 25.
8		MR. PRESCOTT: Okay.
9		(Composite Exhibit 25 marked for identification.)
10		CHAIRMAN JACOBS: You may proceed.
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1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Cheryl Bursh. My business address is 1200 Peachtree
3		Street, Atlanta, Georgia.
4		
5	Q.	PLEASE DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL
6		BACKGROUND.
7	A.	I am employed by AT&T as a Senior Policy Witness. My area of
8		expertise is the development of an effective methodology for
9		measuring BellSouth's performance in providing services to ALECs.
0		My responsibilities include developing Performance Measurements
1		testimony and affidavits for regulatory proceedings, as well as
12		representing AT&T in performance measurements workshops and
13		hearings, including those held in Georgia, Louisiana, Florida, and
14		North Carolina. I have held a variety of management positions at
15		AT&T over the last 19 ½ years, including the sale of large business
16		systems and telecommunications services, systems development for
17		operation support systems, and product marketing and technical
18		support for computer systems. I have a Bachelor of Science Degree
19		from Johnson C. Smith University and a Master of Science Degree
20		from George Washington University.
21		

Q.	PLEASE	SUMMARIZE YOUR	TESTIMONY.
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A. My testimony focuses on the ALEC Coalition's Joint Performance Incentive Plan that is designed to ensure that ALECs receive the level of service from BellSouth that will enable them to successfully compete in the provision of local telephone service in Florida. I describe why the remedy plan proposed by the ALECs is the appropriate plan for this Commission to adopt in order to ensure that (1) BellSouth is providing service to ALECs that is in parity with that it provides to its own retail operations and affiliates, (2) the telephone industry in Florida is open to competition in the provision of local service, and (3) Florida's telephone industry remains open to competition in the event BellSouth obtains 271 approval. Specifically, my testimony covers Issues 2.A, 2.B, 3.A, 3.B, 4.A, 4.B., 4.C, 5.A, 5.B, 6.A, 6.B, 7, 8, 9, 10, 11.A, 11.C.3 – 5, 12.A, 12.C.3 – 5, 13, 14.A, 14.B, 15, 16, 17, 18, 19.A, 19.B, 20, 21, 22 & 23.

Q. WHAT DO YOU MEAN BY SELF-EXECUTING PERFORMANCE

REMEDIES?

A. Self-executing remedies are monetary and non-monetary
consequences that are automatically triggered against BellSouth
upon an objective demonstration that BellSouth has failed to provide
service at the level required by a specific performance standard.

1 ISSUE 8: WHEN SHOULD THE PERFORMANCE

2 ASSESSMENT PLAN BECOME EFFECTIVE?

Q. WHY IS THERE A NEED FOR A REMEDIES PLAN?

A. The ALECs believe that the only way for BellSouth to establish that its local market is irreversibly open to competition as required by the Telecommunications Act of 1996 (the "Act"), 1 is by demonstrating that it provides ALECs with non-discriminatory access to its services and facilities. BellSouth's level of performance is determined through the use of a set of comprehensive measures. A remedies plan is needed to incent BellSouth and any other Incumbent Local Exchange Carrier ("ILEC") to provide nondiscriminatory service to ALECs, to enforce the market opening provisions of Section 251 of the Act, 2 and also to prevent any deterioration in BellSouth's provision of service to ALECs subsequent to Section 271 approval. 3

Q. IS A PERFORMANCE INCENTIVE PLAN NECESSARY FOR

OPENING LOCAL MARKET?

¹ 47 U.S.C Section 251 c (2) c and (d).

² In order to enforce the market opening provisions of Section 251 Texas, Pennsylvania, and Massachusetts have implemented self-executing remedy plans that became effective prior to an ILEC obtaining 271 approval.

³ See Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region InterLATA Service in the State of New York, Memorandum Opinion And Order, (BA-NY Order) Federal Communications Commission, CC Docket No. 99-295, para. 429.

Yes. Self-enforcing consequences are equally useful in assuring the 251 requirements relating to non-discrimination are met, regardless of whether a section 271 application has been made or approved. With respect to performance measures, it is reasonable to presume that the performance measurements that provide the basis for self-enforcing consequences be consistent with those employed for evaluating a Section 271 application.

A.

Α.

Q. WHY ARE REMEDIES IMPORTANT TO ENSURING LOCAL

COMPETITION?

Remedies are important to ensuring local competition because
BellSouth is in the unique position of being the main supplier of
services to ALECs and also their main competitor. As the testimony of
the ALECs demonstrates, BellSouth has the capability to seriously
affect an ALEC's ability to enter the local market and successfully
serve its customers. BellSouth has much to gain by providing poor
service to ALECs. Therefore, a remedy structure must be established
which makes it more economical for BellSouth to cooperate and
provide quality service, than to discriminate against competing
providers to the detriment of local competition.

Developing appropriate performance standards is only the first step to
ensuring that ALECs receive parity service from BellSouth as required
by the Act. If there is no incentive for BellSouth to abide by the

performance standards, then those standards are useless. The remedies provide the incentive for BellSouth to comply. Therefore, remedies must be significant enough to ensure that it is more beneficial for BellSouth to comply with the performance standards than to pay the remedies for non-compliance. If remedies are not sufficient to incent BellSouth to provide ALECs parity service, sufficient competition will not develop and BellSouth will continue to hold a monopoly in the local telephone market in Florida.

Q. WHAT PRINCIPLES DO THE ALEC COALITION CONTEND ARE THE FOUNDATION OF AN EFFECTIVE REMEDIES PLAN?

- **A.** There are several principles that the ALEC Coalition contend provide 13 the foundation of an effective remedies plan. They are:
 - 1. Remedies must be set at a level high enough to incent
 BellSouth to meet its obligations under the Act to provide
 nondiscriminatory access to services and facilities. The ALECs' plan
 provides for remedies for poor performance that increase with the
 level of ALEC activity. The ALECs' plan is "scalable" according to the
 size of the market in the state. Under the ALECs' plan, the more harm
 that is done to competition, the greater the remedy payment.
 - 2. Enforcement mechanisms must not produce remedies so large that an ALEC is more desirous of receiving discriminatory

performance and collecting large remedies than receiving non discriminatory performance.

- 3. The structure of a remedies plan should be based on a verified (audited) system with verifiable data and processes. There should be a thorough audit of the performance measurements system by a recognized neutral party who utilizes a disclosed and industry-reviewed methodology before it is officially implemented for the industry. For example, there should be a validation of BellSouth's processes and systems used for data collection, reporting, storage, and retrieval. An effective plan should provide reasonable assurances that the reported data is accurate. See BA-NY Order, at ¶.433.
 - 4. Remedies must be self-executing no delay, no expense to the harmed ALEC; no litigation required to invoke remedies. ALECs should not be required to undergo costly and time-consuming litigation when the performance measurement systems shows discrimination. The FCC has stated that an effective enforcement plan shall "have a self-executing mechanism that does not leave the door open unreasonably to litigation and appeal." See BA-NY Order, at ¶433.
 - 5. Remedies must escalate according to the duration and magnitude of poor performance.
 - 6. The remedies plan should be structured so that it is simple to implement and administer. This is especially important in light of the complexity of BellSouth's proposal.

1		7. Interest must accumulate on monetary payments that are not
2		paid in accordance with the remedies plan.
3		
4	Q.	DO THE ALECS HAVE A JOINT PROPOSAL FOR REMEDIES IN
5		FLORIDA THAT MAKE IT MORE ECONOMICAL FOR BELLSOUTH
6		TO PROVIDE COMPLIANT SUPPORT THAN TO DISCRIMINATE
7		AGAINST COMPETING PROVIDERS?
8	A.	Yes. That proposal, the Performance Incentive Plan, Version 2.0, is
9		attached to this testimony as Exhibit CLB-1. By adopting the
10		Performance Incentive Plan, this Commission can be assured that
11		there is a sound remedy plan in place to protect the end user - the
12		Florida consumer. This remedy plan will also assist in the rapid and
13		sustainable development of a competitive local telecommunications
14		market in Florida.
15		
16	Q.	DOES THE FLORIDA PUBLIC SERVICE COMMISSION STAFF
17		HAVE ANY REMEDY PLAN PREFERENCE?
18	A.	No. Paul Stallcup stated that it was not his intent in preparing the
19		Strawman Proposal to express any preference for a particular remedy
20		plan. He conveyed that he was merely attempting to provide a
21		conceptual framework for the parties to identify issues and make their
22		case about how different components of the plan should be
23		specified.(Stallcup Deposition, pp. 8-10)

1		ISSUE 2A: WHAT ARE THE APPROPRIATE ENFORCEMENT
2		MEASURES TO BE REPORTED BY BELLSOUTH FOR TIER I AND
3		TIER II?
4		
5		ISSUE 2B: WHAT ARE THE APPROPRIATE LEVELS OF
6		DISSAGREGATION FOR COMPLIANCE REPORTING?
7		
8		ISSUE 9: WHAT ARE THE APPROPRIATE ENFORCEMENT
9		MEASUREMENT BENCHMARKS AND ANALOGS?
10		
11		ISSUE 11.A: WHAT IS THE APPROPRIATE METHODOLOGY
12		THAT SHOULD BE EMPLOYED TO DETERMINE IF BELLSOUTH
13		IS PROVIDING COMPLIANT PERFORMANCE TO AN INDIVIDUAL
14		ALEC? (TIER I)
15		
16	Q.	DESCRIBE THE STRUCTURE OF THE ALECS' PROPOSED
17		REMEDIES PLAN.
18	A.	Generally, the ALEC Plan is structured to evaluate, (1) the quality of
19		service BellSouth delivers to each individual ALEC as compared to its
20		own retail operations, and (2) the quality of service BellSouth delivers
21		to the ALEC industry as a whole when compared to its own retail
22		operations.

In the ALEC Plan, BellSouth's service to ALECs and to its own retail operations is gauged using a comprehensive set of performance measurements, referred to in the Plan as "sub-measures." These sub-measures cover the full panoply of BellSouth's activities that ALECs must rely upon in order to deliver their retail service offerings in the local market place. Every sub-measure is designed to identify and measure a key area of activity that affects ALEC and BellSouth customers, and consequently, the development of competition in Florida's local telecommunications market. In order for the Commission and ALECs to monitor BellSouth's performance for a particular sub-measure, and impose remedies in a case where BellSouth performance is discriminatory, any remedy plan must first set performance standards that will be used to determine whether BellSouth's performance is compliant. The performance standard for each sub-measures included in the ALEC remedy plan are divided into two categories, retail analogs and benchmarks. Retail analogs are for those measures for which the performance standard requires BellSouth to provide service to ALECs that is in parity with service it provides to its own retail operations. In order to make a parity determination, a retail analog is established for each submeasure being compared. A direct comparison is then made between BellSouth's performance data for its retail operations and an

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ALEC's performance data. A statistical methodology is then used to determine if any observed differences in the data are significant. The ALEC Plan advocates the use of the modified Z-statistic to determine whether BellSouth's performance is parity with the analog set for a particular sub-measure. Dr. Bell's direct testimony will addresses the details of the statistical methodology in the ALEC Plan. There is no statistical test needed or applied to measures using a benchmark as the performance standard. Measures for which the performance standard is a benchmark require BellSouth to meet an absolute level of required performance. For example, if a benchmark for a particular order requires BellSouth to complete ninety-five percent of the orders within 3 days, but BellSouth completed only seventy percent of the orders for a given month in 3 days only. BellSouth's performance would not be compliant. The measures proposed in the ALEC remedy plan are set forth in of the direct testimony of Karen Kinard (including disaggregation, benchmarks and retail analogs). In the ALEC Plan, because the submeasures monitor key areas of ALEC and BellSouth activity, all submeasures proposed by the ALECs are included in the determination of remedy payments. Remedy consequences for discriminatory performance by BellSouth or any other ILEC operate on two tiers. Tier I addresses the consequences for non-compliant performance delivered to an

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individual ALEC. Tier I remedies are paid to the individual ALECs for the harm suffered by the ALEC and its customers. Under Tier I of the ALEC Plan, however, remedies are only generated for an individual ALEC if that ALEC's business activity touches upon a particular submeasure. For example, an ALEC who does not sell port and loop combinations (UNE P) would not have compliance determinations made for the submeasure Missed Installation Appointment – UNE P. Tier II addresses the consequences for non-compliant performance delivered to the ALEC industry as a whole. Tier II remedies are paid to the state for harm done to the competitive market and consumers as a whole.

Α.

Q. SHOULD REMEDIES APPLY TO PERFORMANCE MEASURES THAT ARE SHOWN TO BE DUPLICATIVE OF OR "HIGHLY CORRELATED" WITH OTHER MEASURES?

No. However, data and methods are lacking to omit any measures at this time. The decision whether or not to apply a remedy depends on the strength of the correlation between measures. Because two measures appear to be similar does not mean they are duplicative or correlated enough to warrant exclusion of either. An analysis of the performance data is required to make a determination. The data-dictated degree of correlation will determine whether remedies are appropriate. Without data, there cannot be any correlation

determination. If a thorough and appropriate data investigation discloses that two measures are highly correlated, then they are in effect measuring the same thing. In this case, applying penalties to each of them could double the consequences and remedies are not appropriate for both measures. If the correlation is determined to be small to moderate, the metrics are not measuring the same thing and remedies should apply. An industry-developed correlation analysis should be developed to make valid correlation determinations.

HAS AN INDUSTRY-DEVELOPED CORRELATION TEST BEEN

Q.

Α.

APPLIED TO MEASURES RECOMMENDED IN THE STAFF
TESTIMONY OR MEASURES SPECIFIED IN BELLSOUTH'S SQM?

No. The industry (ALECs, BellSouth & FL PSC) has not agreed upon or implemented correlation tests to assess the possibility of correlation of BellSouth measures in Florida. Currently, there is no agreed upon basis for exempting measures from remedies due to correlation.

Therefore, any comments relating to measure overlap are non-substantiated and it is premature to exclude any measures from the remedy plan based on claims that the excluded measure is correlated. An industry-developed correlation analysis needs to be developed and implemented.

1	Q.	SHOULD REMEDIES APPLY TO MEASURES THAT REFLECT
2		MANUAL AND PARTIALLY MECHANIZED PROCESSING
3	A.	Yes. Discriminatory performance can occur no matter what the level
4		of mechanization. Manual orders can represent key aspects of a
5		ALEC's business. Moreover, in some cases, for example, some xDSL
6		services, and other UNEs, or branded OS/DA, etc. ALECs have no
7		choice but to use non-mechanized ordering. BellSouth should not be
8		able to discriminate against an ALEC who uses non-mechanized
9		ordering. Accordingly, remedies should be applied to sub-measures
10		that report on manual and partially mechanized order processing.
11		
12	Q.	WHAT IS DISAGGREGATION?
13	A.	Disaggregation is the process of breaking down performance data into
14		sufficiently specific categories or dimensions so that like-to-like
15		comparisons can be made. For example, BellSouth retail offerings
16		contain a number of varying products. In order to compare
17		BellSouth's performance for its own retail customers to its
18		performance for ALECs, it is necessary for UNE analog loops product
19		to be compared separately with BellSouth retail POTS product.
20		Therefore, appropriate disaggregation which compares like-to-like is
21		an essential component to a remedy plan.
22		
23		

1	Q.	WHY IS DISSAGREGATION CRITICAL TO AN EFFECTIVE
2		REMEDY PLAN?
3	A.	Disaggregation is critical to an effective remedy plan because it
4		prevents poor performance in one area (such as xDSL) from being
5		obscured by being lumped together with dissimilar performance data.
6		For example, comparing central office provisioning work to field
7		dispatch provisioning work masks discriminatory performance.
8		Sufficient disaggregation is absolutely essential for accurate
9		comparison of results to expected performance. This is true
10		regardless of whether a retail analog or a benchmark serves as the
11		performance standard.
12		
13	Q.	IS THE DISAGGREGATION PROPOSED BY ALECS FOR
14		PERFORMANCE REPORTING THE SAME LEVEL OF
15		DISAGGREGATION REQUIRED FOR COMPLIANCE
16		DETERMINATIONS?
17	A.	Yes. The reporting would provide the documentation necessary to
18		provide understanding and supporting documentation for the
19		compliance determination.
20		
21	Q.	WHAT DISAGGREGATION IS PROPOSED BY THE ALECS?
22	A.	Disaggregation should be required by interface type, pre-order query
23		type, product, volume category, work activity type, trouble type, trunk

1		design and type (for trunk blockage measurements), maintenance and
2		repair query type and collocation category. The required
3		disaggregation for each specific measure is included in the direct
4		testimony of Karen Kinard.
5		
6		ISSUE 11.C: WHAT IS THE APPROPRIATE STRUCTURE:
7		3. What is the appropriate remedy calculation?
8		4. What is the appropriate benchmark table for small
9		sample sizes?
10		5. Should there be a floor on the balancing critical
11		value?
12		
13	Q.	WHAT REMEDY CALCULATION IS PROPOSED IN THE ALECS'
14		PERFORMANCE INCENTIVE PLAN FOR TIER I MEASURES?
15	A.	The ALECs' plan contains two calculation methods. The first remedy
16		calculation methodology is applied to parity submeasures. The
17		second remedy calculation methodology is applied for benchmark
18		submeasures.
19		
20	Q.	WHAT IS THE REMEDY CALCULATION USED FOR PARITY
21		MEASURES?
22	A.	For parity submeasures, Tier 1 payments are paid to individual ALECs
23		if the difference in a given month between BellSouth's performance for

itself or affiliates and that which it provides to a particular ALEC exceeds the gap specified in the ALECs' remedy plan. Tier I has three categories of violations, depending upon how big the gap in performance between what BellSouth provides for itself or its affiliates and the performance it provides to ALECs. Once a submeasure failure is determined, the calculated remedy should be a continuous function of severity of the failure. Severity is represented by the magnitude of the gap between the modified z and the balancing critical value. As specified in Table I, the consequences are a function of severity of the failure.

TABLE I⁴

Range of modified z-statistic	Performance	Applicable Consequence
value (z)	Designation	(\$)
greater than or equal z*	Compliant	0
less than z* to 5z*/3	Basic Failure	
less than 5z*/3 to 3z*	Intermediate Failure	$a(z/z^*)^2 + b(z/z^*) + c$
less than 3z*	Severe Failure	25,000

Q. WHAT IS THE REMEDY CALCULATION USED FOR BENCHMARK DETERMINATIONS?

⁴ z represents the modified z-statistic value and z* represents the balancing critical value. The coefficients of the consequence function are a=5625, b=-11250, & c=8125.

Α. When the benchmark serves as the performance standard, the measurement establishes a performance failure directly and assesses the degree to which performance departs from the standard. For benchmark measures, the performance is expressed as "B% meet or exceed the benchmark" where B% is a proportion figure set less than 100%. Accordingly, a performance failure should be declared if the calculated performance is not equal to or greater than the "B%" level. As performance becomes increasingly worse as compared to the benchmark, additional 10 consequences will be incurred as reflected in Table 2. The 11 consequences depend on the magnitude of non-compliance.

TABLE 25 12

Range of Benchmark Result	Performance	Applicable Consequence (\$)
(x)	Designation	
Meets or exceeds B%	Compliant	0
Meets or exceeds (1.5B-	Basic Failure	
50)%		$d[x/(100-B)]^2 + eB[x/(100-B)^2]$
but worse than B%		$+ f[B/(100-B)]^2 + g$
Meets or exceeds (2B-	Intermediate	
100)%	Failure	
but worse than (1.5B-50)%		
Worse than (2B-100)%	Severe	25,000
	Failure	

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7	Q.	HOW ARE HER I PAYMENTS CALCULATED FOR BENCHMARK
2		MEASURES WHEN MEASUREMENT SETS ARE SMALL?
3	A.	Benchmark measures are "pass/fail". However, the ALECS recognize
4		that in some instances the number of transactions (e.g., in a particular
5		geographic area) may be small. In those situations, BellSouth could
6		have a harder task to meet the benchmark.
7		Consider this example:
8		The benchmark for a particular submeasure requires BellSouth to
9		perform a function in 2 hours, 95% of the time. Due to disaggregation
10		there could be a situation where there are only 4 transactions for
11		which to determine BellSouth's performance. With only 4
12		transactions, BellSouth fails this benchmark if it misses the measure
13		only one time. The ALECs' remedy plan allows for adjustments to be
14		made when the size of the data set is very small, such as in the
15		example above. ⁶ The Benchmark Adjustment Table is specified in
16		Exhibit CLB-2.
17		
18	Q.	ARE ADDITIONAL TIER I REMEDIES INCURRED BASED ON THE
19		DURATION OF A FAILURE? IF SO, HOW IS THE ADDITIONAL
20		AMOUNT DETERMINED?

⁵ In Table 2, the quantity x is the actually measured proportion and the coefficients are d=25000, e=-45000, f=22,500, and g=2500.

⁶ The Benchmark Adjustment Table that is used to adjust for small data sets is attached as Exhibit CLB-2.

1	Α.	res, the ALECS plan calls for a \$25,000 payment to the ALEC for
2		"chronic" or recurring performance failures. The \$25,000 payment is
3		levied beginning with the third month that a particular submeasure is
4		missed. The \$25,000 monthly payment continues for every month
5		until the performance for that submeasure returns to the "compliant".
6		One month of compliant performance resets the clock. Chronic
7		failures are remedied at the same rate as severe violations.
8		
9	Q.	IS THERE A NEED FOR A FLOOR ON THE BALANCING CRITICAL
10		VALUE AS APPLIED IN THE ALEC REMEDY CALCULATION? IF
11		SO, WHY?
12	A.	No. You do not need the floor on the Balancing Critical Value in the
13		ALEC remedy plan because the balancing is based on a materiality
14		that is reasonable.
15		
16		ISSUE 23: SHOULD THE PERFORMANCE ASSESSMENT PLAN
17		INCLUDE A COMPETITIVE ENTRY VOLUME ADJUSTMENT, AND
18		IF SO HOW SHOULD SUCH AN ADJUSTMENT BE
19		STRUCTURED?
20		
21	Q.	DOES A TRANSACTION-BASED PLAN REQUIRE SPECIAL
22		ADJUSTMENTS BECAUSE OF SMALL TRANSACTION
23		VOLUMES?

1	A.	Yes. For a transaction-based plan, payments on a per transaction
2		basis will be too small to incent BellSouth to behave in a
3		nondiscriminatory manner. As a result, nascent services or embryonic
4		ALECs would be most negatively affected by a transaction-based
5		plan. In an attempt to address this inadequacy, some type of
6		adjustment is necessary.
7		
8	Q.	IS THE COMPETITIVE ENTRY VOLUME ADJUSTMENT A
9		FEATURE IN A TRANSACTION-BASED REMEDY PLAN?
10	Α.	Yes. This feature attempts to compensate for the inadequate
11		remedies generated by the transaction-based plan.
12		
13	Q.	IS THE COMPETITIVE ENTRY VOLUME ADJUSTMENT A
14		REQUIRED FEATURE IN A MEASURE-BASED PLAN SUCH AS
15		THE ALECS' PERFORMANCE INCENTIVE PLAN?
16	A.	No. By design, a measure-based plan will generate sufficient
17		remedies to motivate compliant behavior by BellSouth even though
18		the transaction volumes for embryonic ALECs and nascent services
19		are very low. Regardless of transaction volumes, the Performance
20		Incentive Plan is effective without the complexity of a competitive entry
21		volume adjustment
22		

1		ISSUE 12.A: WHAT IS THE APPROPRIATE METHODOLOGY
2		THAT SHOULD BE EMPLOYED TO DETERMINE IF BELLSOUTH
3		IS PROVIDING COMPLIANT PERFORMANCE ON A STATEWIDE
4		ALEC-AGGREGATE BASIS?(TIER II)
5		
6		ISSUE12.C: WHAT IS THE APPROPRIATE STRUCTURE:
7		3. What is the appropriate remedy calculation?
8		4. What is the appropriate benchmark table for small
9		sample sizes?
10		5. Should there be a floor on the balancing critical
11		value?
12		
13		ISSUE 22: SHOULD THE PERFOMANCE ASSESSMENT PLAN
14		INCLUDE A MARKET PENETRATION ADJUSTMENT, AND IF SO
15		HOW SHOULD SUCH AN ADJUSTMENT BE STRUCTURED?
16		
17	Q.	ARE THE RULES FOR MAKING TIER II PERFORMANCE
18		DETERMINATIONS SIMILAR TO THOSE THAT APPLY FOR
19		TIER I?
20	A.	Yes. The same business rules apply under Tier II to aggregate data
21		of the individual ALECs as are employed for the individual ALEC data
22		under Tier I, except that a different consequence threshold is used.

Therefore, a modified consequence table, which is specified as Table
3, is applied for Tier II calculations.

A.

4 Q. WHAT IS THE TIER II REMEDY CALCULATION FOR PARITY

SUBMEASURES?

For parity submeasures, Tier II payments are paid to a public fund identified by the Commission if the difference in a given month between BellSouth's performance for itself or affiliates and that which it provides to the aggregate of ALECs exceeds the gap specified in the ALECs' remedy plan. Once a submeasure failure is determined, the calculated remedy should be a continuous function of severity of the failure. Severity is represented by the magnitude of the gap between the modified z and the balancing critical value calculated based on the aggregate data of the individual ALECs. The form of consequences as a function of severity is most simply accomplished by the use of a quadratic function specified below:

Range of modified z-	Performance	Applicable Consequence (\$)
statistic value (z)	Designation	
greater than or equal	Indeterminate	0
5z*/3		
less than 5z*/3 to 3z*	Market Impacting	$n [a(z/z^*)^2 + b(z/z^*) + c]$
less than 3z*	Market	n25,000
	Constraining	

TABLE 37

4 Q. WHAT IS THE REMEDY CALCULATION USED FOR BENCHMARK

MEASURES?

A. When the benchmark serves as the performance standard, the measurement establishes a performance failure directly and assesses the degree to which performance departs from the standard. For benchmark measures, the performance is expressed as "B% meet or exceed the benchmark" where B% is a proportion figure set less than 100%. Accordingly, a performance failure should be declared if the calculated performance for the entire industry is not equal to or greater than the "B%" level. As with measurements that are judged against a parity standard, those compared to a benchmark standard should be subject to additional

⁷ z represents the modified z-statistic value and z* represents the balancing critical value. The coefficients of the consequence function are a=5625, b=-11250, & c=8125. The quantity n is the market penetration factor.

- consequences as the performance becomes increasingly worse
 compared to the benchmark as specified below:
 The following describes when a Tier 2 payment is triggered with
- 4 benchmark submeasures:

Range of Benchmark Result (x)	Failure Designation	Applicable Consequence (\$)
Meets or exceeds (1.5B-50)%	Indeterminate	0
Meets or exceeds (2B-100)% but worse than (1.5B- 50)%	Market Impacting	n $\{d[x/(100-B)]^2 + eB[x/(100-B)^2]$ + $f[B/(100-B)]^2 + g\}$
Worse than (2B- 100)%	Market Constraining	n25,000

All violations count. Tier 2 payments are paid directly into a state designated fund. BellSouth should have no direct or indirect interest in this fund. An example of this fund is the State Treasury.

10 Q. IS THE TIER II REMEDY AMOUNT BASED ON ALEC MARKET

11 PENETRATION LEVELS?

A. Yes. "n" corresponds to the number of ALEC-served lines in the state of Florida.

1 Q. WHAT IS THE "n" FACTOR USED IN THE TIER II REMEDY 2 **CALCULATION FOR BENCHMARK AND PARITY MEASURES?** 3 Α. The Tier II remedy calculation includes a factor "n" in the calculation. This multiplier depends upon the openness of the local market to 4 5 competition. In other words, "n" is based on ALEC market penetration 6 levels. The value of "n" decreases as the number of ALEC served 7 lines increases. This results in Tier 2 payments decreasing as the 8 ALEC market penetration increases. The following table illustrates how the market penetration adjustment is determined: 9 10

Tier II – Determinining "n"

Lines provided to CLECs	Value of "n"
more than or equal to 40%	1
less than 50%	
more than or equal to 30%	2
less than 40%	
more than or equal to 20%	4
less than 30%	
more than or equal to 10%	6
less than 20%	
more than or equal to 5%	8
less than 10%	
0% to less than 5%	10

12

11

13

1	Q.	HOW ARE TIER II PAYMENTS CALCULATED FOR BENCHMARK
2		MEASURES WHEN MEASUREMENT SETS ARE SMALL?
3	A.	The application of the Benchmark Adjustment Table for Tier I remedy
4		calculations is also appropriate for Tier II remedy calculations.
5		
6	Q.	IS THERE A NEED FOR A FLOOR ON THE BALANCING CRITICAL
7		VALUE AS APPLIED IN THE ALEC REMEDY CALCULATION? IF
8		SO, WHY?
9	A.	No. You do not need the floor on the Balancing Critical Value in the
10		ALEC remedy plan because the balancing is based on a materiality
11		that is reasonable.
12		
13		ISSUE 18: WHAT LIMITATION OF LIABILITY, IF ANY, SHOULD
14		BE APPLICABLE TO BELLSOUTH?
15		
16		ISSUE 19A: WHAT TYPE OF CAP, IF ANY, IS APPROPRIATE
17		FOR INCLUSION IN THER PERFORMANCE ASSESSMENT PLAN?
18		
19		ISSUE 19B: WHAT IS THE APPROPRIATE DOLLAR VALUE OF A
20		CAP IF APPLICABLE?
21		
22		ISSUE 20: WHAT PROCESS, IF ANY, SHOULD BE USED TO

1		DETERMINE WHETHER PENALTIES IN THE EXCESS OF THE
2		CAP SHOULD BE REQUIRED?
3		
4		ISSUE 21: IF THERE IS A CAP, FOR WHAT PERIOD SHOULD
5		THE CAP APPLY?
6		
7	Q.	WHAT IS AN ABSOLUTE CAP?
8	A.	An absolute cap represents a limit on BellSouth's liability for providing
9		non-compliant service to ALECs.
10		
11	Q.	WHY IS AN ABSOLUTE CAP UNACCEPTABLE?
12	A.	An absolute cap provides ILECs with the means to evaluate the cost
13		of market share retention through the delivery of non-compliant
14		performance. Second, absolute caps send the signal that once the
15		ILEC's performance deteriorates to a particular level (i.e. reaching the
16		absolute cap) then further deterioration in performance is irrelevant.
17		
18	Q.	DOES THE ALECS'S REMEDY PLAN INCLUDE AN ABSOUTE
19		CAP?
20	A.	No. ALECs do not support an absolute cap on remedy payments.
21		However, a review threshold (procedural cap)—which allows for a
22		regulatory hearing when a certain level of remedy payments are
23		exceeded—may be appropriate. Procedural caps establish a preset

1		level at which the ILEC could seek regulatory review of the
2		consequences that are due. However, the procedural cap would not
3		automatically absolve an ILEC of liability for a consequence.
4		Procedural caps, therefore, avoid both the problems of absolute caps.
5		They do not provide ILECs with the opportunity to evaluate the "cost"
6		of retaining share through non-compliance. Likewise, they do not
7		absolve an ILEC from consequences for unchecked performance
8		deterioration.
9		If a procedural cap is adopted, it should not stop Tier 1 payments to
10		ALECs because Tier 1 payments are intended to at least partially
11		compensate ALECs for the harm incurred because of the performance
12		failure. Absolute caps also create complexity and ambiguity for how to
13		allocate a portion of the legitimate remedies among the ALECs and
14		the state.
15		
16	Q.	WHAT WOULD HAPPEN ONCE THE PROCEDURAL CAP IS
17		REACHED?
18	A.	If the procedural cap is reached, BellSouth should continue to make
19		Tier 2 payments into an interest-bearing registry or escrow account
20		that earns a minimum interest rate as approved by the Commission.
21		BellSouth would have the burden of showing that the amount due for
22		poor performance to the ALECs in aggregate do not merit the
23		remedies invoked. The Commission would then decide whether and

7		to what extent the amount in excess of the procedural cap should be
2		paid out. The procedural cap needs to be set sufficiently high enough
3		so as not to negate the benefits of self-executing remedies.
4		
5	Q.	SHOULD AN ANNUAL OR MONTHLY PROCEDURAL CAP BE
6		ESTABLISHED?
7	A.	The procedural cap should apply on a rolling twelve month basis.
8		The 39% procedural cap in the Strawman Proposal is reasonable.
9		
10		ISSUE 3A: WHAT PERFORMANCE DATA AND REPORTS
11		SHOULD BE MADE AVAILABLE BY BELLSOUTH TO ALECS?
12		
13		ISSUE 3B: WHERE, WHEN, AND IN WHAT FORMAT SHOULD
14		BELLSOUTH PERFORMANCE DATA AND REPORTS BE MADE
15		AVAILABLE?
16		
17	Q.	SHOULD PERFORMANCE REPORTS PROVIDE SUFFICIENT
18		INFORMATION FOR MAKING PERFORMANCE
19		DETERMINATIONS?
20	A.	Yes. BellSouth's reporting should be sufficient for making
21		performance determinations. The reports should include BellSouth's
22		provision of:
23		 a. Services to BellSouth's retail customers in aggregate;

1		 Services and facilities provided to any BellSouth local
2		exchange affiliate purchasing interconnection,
3		unbundled network elements or resale;
4		c. Services and facilities provided to carriers purchasing
5		interconnection, unbundled network elements or resale
6		in aggregate; and
7		d. Services and facilities provided to individual carriers
8		purchasing interconnection, unbundled network
9		elements or resale.
10		The reports should reflect the outcome of statistical procedures
11		applied to each sub-measure for which a parity determination will be
12		made. Additionally, benchmark results should be reported.
13		
14	Q.	IS IT POSSIBLE TO VALIDATE THE ACCURACY AND IMPACT OF
15		THE ILECS' REPORTED PERFORMANCE WITHOUT ACCESS TO
16		THE RAW DATA THE ILEC USES TO CREATE REPORTS?
17	A.	No. Access to raw data used to create performance reports is
18		essential to report validation.
19		
20	Q.	IF ERRORS IN DATA AND PERFORMANCE REPORTS ARE
21		IDENTIFIED, SHOULD THEY BE CORRECTED AND THE ALECS
22		NOTIFIED?

1	A.	Yes. If an ILEC or ALEC discovers that raw data records or
2		performance reports exclude data, omit data, are calculated
3		incorrectly, or contain an error of any type, the ILEC should be
4	•	required to immediately notify affected ALECs. The ILEC should then
5		make arrangements to correct the raw data raw data or performance
6		reports and submit the corrected report to the ALECs. If an ILEC or
7		ALEC discovers a data error after the report is no longer accessible to
8		ALECs, the ILEC should remain responsible for correcting the error
9		and immediately notifying the ALECs of the error and the measures
10		taken to make the correction. The obligation to correct errors after
11		access to the reports has ended should remain for 12 months after the
12		date the report is no longer accessible to ALEC.
13		
14	Q.	WHEN AND WHERE SHOULD PERFORMANCE DATA AND
15		REPORTS BE MADE AVAILABLE?
16	A.	Performance data and reports should be made available in a readily
17		accessible manner on an Internet web site. The data and reports
18		should be made available on the 15 th day of each month. If any data
19		are excluded, the ILEC must be required to justify all exclusions
20		before they are made.
21		
22	Q.	SHOULD ADDITIONAL SUPPORT BE PROVIDED TO ENABLE
23		INTERPRETATION OF THE DATA?

7	A.	Yes. The ILEC should maintain a current and accurate user's manual
2		to support ALECs in accessing and interpreting the raw data. The
3		user's manual should include detailed descriptions of what the data
4		means, i.e., beginning and ending parameters for fields, and include
5		definitions for the codes use by the ILEC. The ILEC should also
6		provide a knowledgeable single point of contact with whom ALECs
7		can confer to resolve questions about accessing the raw data
8		including, but not limited to, explanations of the fields, parameters,
9		code definitions, file column purposes and headings.
10		
11	Q.	HOW SHOULD PERFORMANCE REPORTS AND DATA BE MADE
12		AVAILABLE?
13	A.	The performance reports should be specified in a summarized
14		spreadsheet format and include, at a minimum, those fields of
15		information specified on the attached spreadsheet. See Exhibit CLB-3
16		for an illustrative example of this format. The performance data
17		should be provided in format that can be readily utilized by standard
18		database management tools such as Excel, Access, or Oracle.
19		
20		ISSUE 5a.: SHOULD BELLSOUTH BE PENALIZED WHEN
21		BELLSOUTH FAILS TO POST THE PERFORMANCE DATA AND
22		REPORTS TO THE WEB SITE BY THE DUE DATE?
23		

1		ISSUE 5b.: IF SO, HOW SHOULD THE PENALTY AMOUNT BE
2		DETERMINED, AND WHEN SHOULD BELLSOUTH BE REQUIRED
3		TO PAY THE PENALTY.
4		
5		ISSUE 6.a.: SHOULD BELLSOUTH BE PENALIZED IF THE
6		PERFORMANCE DATA AND REPORTS PUBLISHED ON THE
7		BELLSOUTH WEBSITE ARE INCOMPLETE OR INACCURATE?
8		
9		ISSUE 6.b.: IF SO, HOW SHOULD THE PENALTY AMOUNT BE
10		DETERMINED, AND WHEN SHOULD BELLSOUTH BE REQUIRED
11		TO PAY THE PENALTY.
12		
13	Q.	ARE THERE OTHER PERFORMANCE FAILURES TO WHICH THE
14		ALECS' REMEDY PLAN APPLIES.
15	A.	Yes. The ALECs' remedy plan calls for payments to be made when
16		BellSouth posts performance data and reports late. If performance
17		data and associated reports are not available to the ALECs by the
18		due day, the ILEC should be liable for payments of \$5,000 to a
19		state fund for every day past the due date for delivery of the
20		reports and data. The ILECs' liability should be determined based
21		on the latest report delivered to an ALEC.
22		

1	Q.	SHOULD REMEDIES BE INCURRED FOR INCOMPLETE OR
2		INACCURATE PERFORMANCE DATA AND REPORTS?
3	A.	Yes. If performance data and reports are incomplete, or if
4		previously reported data are inaccurate, then the ILEC should be
5		liable for payments of \$1,000 to a state fund for every day past
6		the due date for delivery of the original reports.
7		
8		ISSUE 17: WHAT IS THE APPROPRIATE MECHANISM FOR
9		ENSURING THAT ALL PENALTIES UNDER TIER I AND TIER II
10		ENFORCEMENT MECHANISMS HAVE BEEN PAID AND
11		ACCOUNTED FOR?
12		
13	Q.	SHOULD TIER I AND TIER II REMEDIES PAID BY BELLSOUTH BE
14		VALIDATED?
15	A.	Yes. On a random basis, the Commission should have an
16		independent auditing and accounting firm certify that all the
17		penalties under Tier I and Tier II Enforcement Mechanisms are
18		properly and accurately assessed and paid in accordance with
19		Generally Accepted Accounting Principles.
20		
21		ISSUE 10: UNDER WHAT CIRCUMSTANCES, IF ANY, SHOULD
22		BELLSOUTH BE REQUIRED TO PERFORM ROOT CAUSE
23		ANALYSIS?

1	Q.	SHOULD BELLSOUTH BE REQUIRED TO PERFORM ROOT-CAUSE
2		ANALYSIS?
3	A.	Yes. Root cause analysis is a useful procedure for building action
4		plans for unacceptable performance and should be incorporated within
5		a performance measurement system, but it cannot serve as a vehicle
6		for delaying or otherwise avoiding payment of identified performance
7		failures.
8		
9	Q.	HAS ROOT-CAUSE ANALYSIS BEEN PREVIOUSLY ORDERED IN
10	•	THE BELLSOUTH REGION?
11	A.	Yes. The Georgia Public Service Commission Order stated that
12		BellSouth must perform a "root cause analysis" and file with the
13		Commission a corrective action plan within 30 days of the failure.
14		The root cause analysis would be triggered if any measure fails twice
15		in any 3 consecutive months in a calendar year.
16		
17		ISSUE 7: WHAT REVIEW PROCESS, IF ANY, SHOULD BE
18		INSTITUTED TO CONSIDER REVISIONS TO THE PERFORMANCE
19		ASSESSMENT PLAN THAT IS AOPTED BY THIS COMMISSION?
20		
21	Q.	SHOULD THE PERFORMANCE ASSESSMENT PLAN APPROVED
22		BY THIS COMMISSION BE REVIEWED EVERY 6 MONTHS?

7	A.	Yes. A collaborative work group, including ALECs, the Florida Public
2		Service Commission and BellSouth, should be established to review
3		the Performance Assurance Plan for additions, deletions and
4		modifications. A review cycle should start six months after the date of
5		the Florida Public Service Commission order. BellSouth and the
6		ALECs should file any proposed revisions to the Performance
7		Assessment Plan one month prior to the beginning of each review
8		period. BellSouth may be ordered by the Florida Public Service
9		Commission to modify or amend the Service Quality Measurements or
10		Enforcement Measures. Nothing should preclude either party from
11		participating in any proceeding involving BellSouth's Service Quality
12		Measurements or Enforcement Measures or from advocating that
13		those measurements be modified.
14		In the event a dispute arises regarding the ordered modification or
15		amendments the parties will refer the dispute to the Florida Public
16		Service Commission.
17		
18		ISSUE 8: WHEN SHOULD THE PERFORMANCE ASSESSMENT
19		PLAN BECOME EFFECTIVE?
20		
21	Q.	SHOULD A REMEDY PLAN GO INTO EFFECT AS SOON AS IT IS
22		ORDERED?

1	A.	Yes. The remedy plan should go into effect as soon as it is ordered
2		by the Commission so that the benefits of its effect on the marketplace
3		can be realized. The plan can be used to measure compliance, so
4		that the state regulators can make the appropriate recommendation to
5		the FCC. Also, the systems can be tested and burned in prior to
6		acceptance, so backsliding can be disincented. It would illustrate to
7		regulatory authorities that BellSouth is committed to irreversibly
8		opening the local market to competition.
9		
10		ISSUE 13: WHEN SHOULD BELLSOUTH BE REQUIRED TO
11		MAKE PAYMENTS FOR TIER I AND TIER II NONCOMPLIANCE,
12		AND WHAT SHOULD BE THE METHOD OF PAYMENT.
13		
14		ISSUE 14A: SHOULD BELLSOUTH BE REQUIRED TO PAY
15		INTEREST IF BELLSOUTH IS LATE IN PAYING AN ALEC THE
16		REQUIRED AMOUNT FOR TIER 1?
17		
18		ISSUE 14B: IF SO, HOW SHOULD THE INTEREST BE
19		DETERMINED?
20		
21		ISSUE 15: SHOULD BELLSOUTH BE FINED FOR LATE
22		PAYMENTS OF PENALTIES UNDER TIER II? IF SO, HOW?
23		

1		ISSUE 16: WHAT IS THE APPROPRIATE PROCESS FOR
2		HANDLING TIER I DISPUTES REGARDING PENALTIES PAID TO
3		AN ALEC?
4		
5	Q	SHOULD THE COMMISSION HANDLE DISPUTES REGARDING
6		TIER I PENALTIES PAID TO AN ALEC?
7	A.	Yes. When the ALEC and Bellsouth are unable to reach a mutually
8		agreeable settlement pertaining to the penalties paid, the Commission
9		should settle the dispute.
10		
11	Q.	SHOULD BELLSOUTH BE PENALIZED WHEN BELLSOUTH FAILS
12		TO REMIT A CONSEQUENCE PAYMENT BY THE DUE DATE? IF
13		SO, HOW SHOULD THE PENALTY AMOUNT BE DETERMINED,
14		AND WHEN SHOULD BELLSOUTH BE REQUIRED TO PAY THE
15		PENALTY.
16	A.	Yes. If the ILEC fails to remit a consequence payment by the 15th
17		business day following the due date of the data and the reports
18		upon which the consequences are based, then it should be liable
19		for accrued interest for every day that the payment is late. A per
20		diem interest rate that is equivalent to the ILEC's rate of return for
21		its regulated services for the most recent reporting year should
22		apply.
23		

1	Q.	ARE THERE REMEDIES THAT THE ALECS SUPPORT IN
2		ADDITION TO THE TIER 1 AND TIER 2 PAYMENTS?
3	A.	Yes. The ALECs reserve their right to seek individual legal and
4		regulatory remedies for harm they incur due to BellSouth's
5		performance. This Commission also retains its authority to monitor
6		BellSouth's performance and initiate proceedings to investigate the
7		status of competition within this state. In addition, the FCC retains its
8		ability under the Act to suspend or revoke authority that BellSouth may
9		attain in the future to provide in-region, interLATA long distances
10		services.
11		
12	Q.	SHOULD THIS COMMISSION ADOPT THE PERFORMANCE
12 13	Q.	SHOULD THIS COMMISSION ADOPT THE PERFORMANCE INCENTIVE PLAN, VERSION 2.0?
	Q. A.	
13		INCENTIVE PLAN, VERSION 2.0?
13 14		INCENTIVE PLAN, VERSION 2.0? Yes, I urge this Commission to order the remedy plan, Performance
13 14 15		INCENTIVE PLAN, VERSION 2.0? Yes, I urge this Commission to order the remedy plan, Performance Incentive Plan (PIP) Version 2.0, proposed by the ALECs. The PIP
13 14 15 16		INCENTIVE PLAN, VERSION 2.0? Yes, I urge this Commission to order the remedy plan, Performance Incentive Plan (PIP) Version 2.0, proposed by the ALECs. The PIP should be adopted for the following reasons:
13 14 15 16 17		INCENTIVE PLAN, VERSION 2.0? Yes, I urge this Commission to order the remedy plan, Performance Incentive Plan (PIP) Version 2.0, proposed by the ALECs. The PIP should be adopted for the following reasons: 1. PIP is a comprehensive plan crafted on sound principles;
13 14 15 16 17		INCENTIVE PLAN, VERSION 2.0? Yes, I urge this Commission to order the remedy plan, Performance Incentive Plan (PIP) Version 2.0, proposed by the ALECs. The PIP should be adopted for the following reasons: 1. PIP is a comprehensive plan crafted on sound principles; 2. The multi-tiered structure serves to incent BellSouth to provide
13 14 15 16 17 18		 INCENTIVE PLAN, VERSION 2.0? Yes, I urge this Commission to order the remedy plan, Performance Incentive Plan (PIP) Version 2.0, proposed by the ALECs. The PIP should be adopted for the following reasons: 1. PIP is a comprehensive plan crafted on sound principles; 2. The multi-tiered structure serves to incent BellSouth to provide compliant service by escalating consequences for continued

1	4. Consequences under the plan escalate with increased level of
2	severity of violation;
3	5. The Plan provides for two separate evaluations: (1) the quality
4	of support delivered to each individual ALEC, and (2) the
5	quality of support delivered to the ALEC industry in the
6	aggregate;
7	6. The Plan includes consequences payable to individual ALECs
8	and consequences payable to a public fund identified by this
9	Commission;
10	7. The Plan includes a sound statistical methodology to make
11	performance determinations when measures have a retail
12	analog;
13	8. Benchmarks are established for measures that do not have
14	retail analogs;
15	9. The Tier II consequence calculation takes ALEC market
16	penetration levels into consideration; and
17	10. The consequences are applied at the submeasure level.
18	
19	By adopting the ALEC's proposed Performance Incentive Plan
20	Version 2.0, this Commission can be assured that there is a sound
21	remedy plan in place to protect the end user - the Florida consumer.
22	This remedy plan will also assist in the rapid and sustainable

1		development of a competitive local telecommunications market in
2		Florida.
3		
4		ISSUE 4A: DOES THE COMMISSION HAVE THE LEGAL
5		AUTHORITY TO ORDER IMPLEMENTATION OF A SELF-
6		EXECUTING REMEDY PLAN?
7		ISSUE 4B: WITH BELLSOUTH'S CONSENT?
8		ISSUE 4C: WITHOUT BELLSOUTH'S CONSENT?
9		
10	Q.	DOES THE COMMISSION HAVE THE LEGAL AUTHORITY TO
11		ORDER A REMEDY PLAN IN FLORIDA?
12	A.	I am not an attorney, however, it is the ALEC Coalition's position that
13		the Commission does have authority under the Telecommunications
14		Act of 1996 to order the implementation of a self-executing remedy
15		plan without BellSouth's consent. This position will be fully discussed
16		in the post-hearing briefs filed by the parties.
17		
18	Q.	DOES THAT CONCLUDE YOUR TESTIMONY?
19	A.	Yes.

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Cheryl Bursh. My business address is 1200 Peachtree Street,
3		Atlanta, Florida.
4		
5	Q.	PLEASE DESCRIBE YOUR PROFESSIONAL AND EDUCATIONAL
6		BACKGROUND.
7	A.	I am employed by AT&T as a Senior Policy Witness. My area of expertise is
8		the development of an effective methodology for measuring BellSouth's
9		performance in providing services to ALECs. My responsibilities include
10		developing Performance Measurements testimony and affidavits for
11		regulatory proceedings, as well as representing AT&T in performance
12		measurements workshops and hearings, including those held in Florida,
13		Louisiana, Florida, and North Carolina. I have held a variety of management
14		positions at AT&T over the last 19 ½ years, including the sale of large
15		business systems and telecommunications services, systems development for
16		operation support systems, and product marketing and technical support for
17		computer systems. I have a Bachelor of Science Degree from Johnson C.
18		Smith University and a Master of Science Degree from George Washington
19		University.
20		
21	Q.	PLEASE STATE THE PURPOSE OF YOUR TESTIMONY.

The purpose of my testimony is to describe the deficiencies of BellSouth's

Self Effectuating Enforcement Mechanism (SEEM) and to discuss the

A.

22

23

ļ		reasons it is not an appropriate remedy plan to ensure that the competitive
2		local telecommunications markets envisioned by the 1996 Act will develop
3		and survive in Florida. This testimony does not specifically target concerns
4		relating to the Staff Proposal (Strawman) given that Mr. Stallcup, the
5		Commission's Supervisor of the Economics and Forecasting Section in the
6		Division of Economic Regulation, has made clear that the Strawman does not
7		serve as a specific proposal for a performance plan, but a starting point for
8		the discussion as to what a performance plan should look like.
9		
10	Q.	HAS THE FEDERAL COMMUNICATIONS COMMISSION (FCC)
11		PROVIDED ANY GUIDANCE FOR DETERMINING IF AN
12		ENFORCEMENT PLAN IS ADEQUATE?
13	A.	Yes. The FCC has identified the following key characteristics ¹ for an
14		effective enforcement plan which are as follows:
15		• potential liability that provides a meaningful and significant incentive to
16		comply with the designated performance standards;
17		clearly articulated, pre-determined measures and standards, which
18		encompass a comprehensive range of carrier-to-carrier performance;
19		a reasonable structure that is designed to detect and sanction poor
20		performance when it occurs;

FCC Memorandum Opinion And Order in the Matter of Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region InterLATA Service in the State of New York, CC Docket No. 99-295, p. 214, ¶ 433, December 21, 1999.

1		 a self-executing mechanism that does not leave the door open
2		unreasonably to litigation and appeal; and
3		• reasonable assurances that the reported data is accurate.
4		
5	Q.	DOES BELLSOUTH'S SEEM COMPLY WITH EACH OF THE KEY
6		REQUIREMENTS SET FORTH BY THE FCC?
7	A.	No. BellSouth's SEEM does not meet each of the key FCC requirements.
8		
9	Q.	HOW IS BELLSOUTH'S SEEM DEFICIENT WITH RESPECT TO
10		THE KEY REQUIREMENTS SPECIFIED BY THE FCC?
11	A.	BellSouth's SEEM does not provide for potential liability that is a
12		meaningful and significant incentive to comply with the designated
13		performance standards.
14		BellSouth's SEEM does not adequately sanction and detect poor
15		performance.
16		BellSouth's measures and performance standards do not encompass a
17		comprehensive range of carrier-to-carrier performance derived from a
18		collaborative process with ALECs.
19		BellSouth's SEEM does not provide reasonable assurances that the reported
20		data is accurate.
21		
22	Q.	DOES BELLSOUTH'S SEEM PROVIDE FOR POTENTIAL
23		LIABILITY THAT IS A MEANINGFUL AND SIGNIFICANT

INCENTIVE TO COMPLY WITH THE DESIGNATED

PERFORMANCE STANDARDS?(ISSUES 11.A, 11.C3, 12.A, 12.C3)

- 3 A. No. The potential liability is reduced for the following reasons:
 - SEEM's remedy calculation uses a factor that inappropriately reduces BellSouth's liability.
 - SEEM uses an inappropriate calculation methodology.
 - SEEM includes an absolute cap.

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• SEEM determines remedy amount based on transactions.

First, as a component of the SEEM design, the remedy calculation uses a factor that inappropriately reduces BellSouth's liability. Use of this factor, which is a slope of ¼ for even gross violations of parity, results in BellSouth paying only a fraction of the maximum penalty amount. In other words, the volume of transactions to which remedies would be applied is reduced. Second, the actual remedy calculation methodology specified in BellSouth's SEEM is inappropriate. This methodology, which determines violations at the aggregate level and applies remedies at the disaggregated level, is biased toward BellSouth. The SEEM calculation methodology improperly excludes failed transactions from the cells with positive z scores, even though these cells have already contributed to the aggregate z. The result is that BellSouth will make smaller payments than if the volume proportion, which is calculated from the state aggregate-z, is applied to all cells. Therefore, BellSouth avoids paying remedies on all transactions that represent a violation. BellSouth has included a number of steps in its

1		calculation which do no more than eliminate transactions which are subject to
2		remedies.
3		
4	Q.	DO ADDITIONAL CALCULATIONS IN SEEM REDUCE THE
5		REMEDY AMOUNT PAID BY BELLSOUTH? (ISSUE 11.C.3, 12.C.3)
6	A.	Yes. The Benchmark Adjustment Table in BellSouth SEEM is not consistent
7		with the ALECs. BellSouth's Benchmark Adjustment Table allows for
8		additional mitigation that is unnecessary and inappropriate. What this means
9		is that BellSouth can fail more transactions before a non-compliance
10		determination is made.
11		
12	Q.	CAN SEEM PROVIDE A MEANINGFUL AND SIGNIFICANT
13		INCENTIVE FOR BELLSOUTH TO COMPLY WITH THE
14		DESIGNATED PERFORMANCE STANDARDS IF SEEM INCLUDES
15		AN ABSOLUTE CAP? (ISSUES 19.A, 19.B, 20)
16	A.	No. The inclusion of an absolute cap decreases BellSouth's incentive to
17		comply with required performance standards. This is because absolute caps
18		serve to wrongfully limit BellSouth's liability. BellSouth's SEEM includes
19		an absolute cap of 36% of BellSouth's net operating revenue for Florida.
20		Regardless of how severe BellSouth's discriminatory performance might be,
21		BellSouth would pay no further remedies once the cap is reached. (Coon Dir
22		p. 49) Consequently, BellSouth has no continuing incentive to correct its

performance deficiency. With an absolute cap, BellSouth has the opportunity to evaluate the "cost" of retaining its market share through non-compliance. In order for a remedy plan to be a meaningful and significant incentive for compliant behavior, the procedural cap specified in the Staff proposal would be more appropriate. The procedural cap would avoid the problems of an absolute cap and would not provide BellSouth with the opportunity to evaluate the "cost" of retaining share through non-compliance. Moreover, unlike absolute caps, procedural caps do not absolve BellSouth from consequences of performance deterioration.

Under a procedural cap, BellSouth would continue paying remedies into a state fund until the Commission determines whether there is justification for exceeding the procedural cap. Thus, contrary to Mr. Coon's testimony any payment made during the show cause hearing would be easily recovered. Moreover, contrary to Mr. Coon's testimony the procedural cap is not the beginning of the process for setting absolute caps. Rather, the procedural cap affords BellSouth the opportunity to present the Commission with evidence as to why it should not be required to continue paying remedies beyond the procedural cap even though its performance continues to deteriorate.

Q. IF SEEM DETERMINES REMEDIES BASED UPON TRANSACTION VOLUMES, CAN SEEM PROVIDE FOR A MEANINGFUL AND

SIGNIFICANT INCENTIVE FOR BELLSOUTH TO COMPLY WITH THE REQUIRED PERFORMANCE? (ISSUES 11.C.3, 12.C.3, 22)

A.

No. Accruing remedies on a per transaction basis as set forth in SEEM minimizes BellSouth's liability because a significant number of ALECs are currently at embryonic level of activity. The transaction volumes would be very small and will not generate sufficient remedies to motivate compliant behavior by BellSouth.

Remedies should accrue on a per measure basis.² As characteristic of a measures-based plan, remedies should accrue at the level in which the comparisons are made (i.e. at the measure/submeasure level). The remedy amount is a direct function of the performance's departure from parity. The measure-based plan does generate more remedies as the severity of the discriminatory performance increases. Therefore, remedies should be applied at the measure/submeasure level.

SEEM does not provide for potential liability that is a meaningful and significant incentive to comply with designated performance standards. At a time when ALECs are struggling to get into the local market, there would be insufficient incentives to motivate non-discriminatory support. For this reason, critical considerations such as Market Penetration Adjustments are even more essential for ALECs to enter the market with new and advanced services. Low ALEC penetration in the local market can be a good indication that market suppression behaviors are occurring.

² The New York plan which was approved by the FCC does accrue remedies on a per measure basis.

1 Low ALEC market penetration warrants the need for special incentives 2 (consequences for market suppression) to open local markets. BellSouth has strong business incentives and means to maintain its current monopolies 3 through the delivery of inadequate levels of operations support for ALECs. If the consequences are inadequate, then market entry by the ALECs will 5 definitely be suppressed due to discriminatory support by BellSouth. 6 7 8 Q. ARE THERE OTHER RECOMMENDATIONS BY BELLSOUTH THAT LIMIT THE POTENITAL LIABILITY THAT IS A 9 MEANINGFUL AND SIGNIFICANT INCENTIVE TO COMPLY 10 WITH THE DESIGNATED PERFORMANCE STANDARDS? (ISSUE 11 12 18) Yes. BellSouth supports limitations of liability for such events as the 13 A. submission of orders in unreasonable quantities or times. The ALECs are 14 unclear as to what constitutes "unreasonable quantities". Additionally, 15 BellSouth's OSS (i.e. gateway abnormalities) may be the cause of orders 16 submitted in what is perceived by BellSouth to be "unreasonable quantities." 17 BellSouth's OSS's may also dictate the time when orders can be sent and 18 thereby received by BellSouth. As an example, the gateway may experience 19 20 an abnormality on Thursday and Friday which causes the orders to actually be received in large sums on Saturday. BellSouth's liability should not be 21 limited in this scenario. The ALEC is not the cause of the problem. 22 23 BellSouth also highlights a force majeure event as rationale to limit their

1 liability. While this may in fact occur, there is no particular reason to 2 believe that such events would result in disproportionate impacts on ALEC customers as opposed to BellSouth customers. Therefore, force majeure 3 events do not warrant automatic exclusion from otherwise applicable 4 consequence. If such events occur, BellSouth should be permitted to pursue 5 relief, but relief should not be automatic. Regardless of BellSouth's excuse, 6 7 it is inappropriate to have automatic exclusion from otherwise applicable consequences in a self-effectuating remedy plan. 8 9 10 Q. DO THE MEASURES AND STANDARDS UPON WHICH SEEM IS BASED ENCOMPASS A COMPREHENSIVE RANGE OF CARRIER-11 12 TO-CARRIER PERFORMANCE AS A RESULT OF A COLLABORATIVE PROCESS WITH ALTERNATIVE LOCAL 13 **EXCHANGE CARRIERS? (ISSUE 2.A)** 14 15 A. No. The measures in SEEM are not the result of a comprehensive collaborative proceeding. The FCC has stated that an effective enforcement 16 plan should have clearly articulated, pre-determined measures and standards, 17 which encompass a comprehensive range of carrier-to-carrier performance. 18 BellSouth inappropriately excludes many of the BellSouth SQM measures 19 from its remedy plan. The narrow scope of measures will result in critical, 20 customer-impacting areas not being monitored or subject to remedies. 21 22

1 The measures in BellSouth's SEEM are a subset of the BellSouth SQM and BellSouth independently selected this subset of measures for inclusion. This 2 is unlike what the FCC supported in the Bell Atlantic Plan: 3 We also believe that the scope of performance covered 4 by the Carrier-to-Carrier metrics is sufficiently 5 comprehensive, and that the New York Commission 6 reasonably selected key competition-affecting metrics 7 from this list for inclusion in the enforcement plan.³ 8 In the 1999/2000 Louisiana Workshops, BellSouth, independent of 9 the ALECS, selected measures for inclusion in VSEEM III (upon which 10 SEEM is based) from its SQM, which the ALECs previously objected to as 11 being too narrow in scope. As an example, BellSouth ignored ALEC 12 requests for critical hot cut measures which can contribute to negative 13 customer impacts such as whether the FOC was issued in time to allow the 14 ALEC to perform essential activities 15 16 ARE THE 13 ADDITIONAL MEASURES REFERENCED IN MR. 17 Q. COON'S TESTIMONY INCLUDED IN THE ENFORCEMENT PLAN? 18 No. Mr. Coon states that BellSouth has expanded the SQM to include 13 19 20 additional measures not specified in the Florida Staff proposal. Mr. Coon does not, however, convey that fact that all of the 13 measures were not 21 included in SEEM. Mr. Coon neglects to mention, however, that BellSouth 22

independently selected only a subset of those measures to be included in 1 SEEM as Enforcement measures. BellSouth did not allow the ALECs to 2 specify measures for inclusion in SEEM. The additional measures which 3 BellSouth decided to omit from their remedy plan include the following: 4 Coordinated Customer Conversion – Average Recovery Time 5 Meantime to Notify ALEC of Network Outage 6 Recurring Charge completeness 7 Non-Recurring Charge Completeness 8 Database Update Interval 9 Database Update Accuracy 10 NXX and LRNs Loaded by LERG Effective Date 11 Notification of Interface Outages 12 BellSouth continues to imply that the measures in SEEM are patterned after 13 those used in New York and Texas. However, BellSouth has fewer than 82 14 submeasures subject to remedies while Texas has nearly 3000 submeasures 15 subject to remedies.⁴ Mr. Coon states in his Georgia testimony that the New 16 York and Texas Commissions charged the ALECs with communication of 17 the measurement set that is most "customer impacting." BellSouth did not 18 allow the Florida ALECs to make a similar determination for SEEM. Again, 19 BellSouth made the decisions concerning measures included in BellSouth's 20 remedy plan. 21

³ FCC Memorandum Opinion And Order in the Matter of Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region InterLATA Service in the State of New York, CC Docket no. 99-295, p. 218, para. 439, December 21, 1999.

1	Q.	DOES BELLSOUTH EXCLUDE CRITICAL MEASURES IN ITS SQM
2		FROM SEEM?
3	A.	Yes. BellSouth's SEEM limits monitoring of critical, customer-impacting
4		areas ⁵ of performance. As an example, SEEM does not specify LNP-FOC
5		Timeliness or LNP- Reject Interval as Enforcement measures. Without a
6		FOC, ALECs cannot provide their customers with an expected date of
7		service. End user customers are not willing to rely on providers who cannot
8		provide something as simple as a service due date in a timely manner. SEEM
9		will not allow BellSouth's performance to be monitored in this area. For
10		many facilities-based ALECs, LNP orders are a critical aspect of their
11		business and therefore monitoring Bellsouth's performance in this area is
12		critical to ALECs.
13		
14	Q.	DOES BELLSOUTH INAPPROPRIATELY EXEMPT SOME
15		ENFORCEMENT MEASURES FROM TIER I CONSEQUENCES?
16	A.	Yes. BellSouth's SEEM inappropriately excludes the following Enforcement
17		measures ⁶ from Tier I remedies:
18		■ Invoice Accuracy
19		Mean Time To Deliver Invoice
20		 Usage Data Delivery Accuracy
21		Reject Interval

 ⁴ BellSouth Telecommuncations, Georgia Public Service Commission, June 29, 2000, Dave Coon's Direct Testimony, page17.
 ⁵ See Additional Measures specified in Karen Kinard's Direct testimony.
 ⁶ Enforcement Measures are SQM measures selected by BellSouth for inclusion in SEEM.

•	FOC	Timeliness
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This means that an individual ALEC can experience excessively long intervals before receiving FOCs from BellSouth and BellSouth would not incur any remedy. In other words, BellSouth can hinder an individual ALEC's ability to provide their customers with timely notice of service without a consequence to BellSouth. This is attributed to the fact that FOC Timeliness for individual ALECs would not be monitored in SEEM. Unlike a collaborative process for developing a remedy plan, BellSouth did not include ALECs in Florida in making Tier I or Tier II measure designations.

A.

Q. DOES SEEM HAVE THE ABILITY TO ADEQUATELY DETECT AND SANCTION POOR PERFORMANCE?

No. The level of disaggregation is insufficient. The retail analogs are inappropriate. The measures are inadequate and therefore can hinder the ability to detect discrimination. Additionally, SEEM includes an absolute cap and a questionable methodology for invoking Tier II remedies which decrease sanctions incurred by BellSouth.

The structure of the BellSouth SEEM can allow non-compliant performance to be masked and not even subject to remedies. An effective enforcement plan should have a reasonable structure that is designed to detect and sanction poor performance when it occurs.

CAN YOU ELABORATE ON HOW INSUFFICIENT 1 Q. DISAGGREGATION HINDERS THE ABILITY TO DETECT POOR 2 PERFORMANCE? 3 (ISSUE 2.B) 4 Yes. The level of disaggregation in SEEM is inadequate and facilitates 5 Α. consolidation of dissimilar products for comparisons. Disaggregation should 6 proceed to a level where like-to-like comparisons can be made. BellSouth 7 states that its position endorses "like-to-like" comparisons. However, 8 BellSouth's position is contradicted by the inadequate product disaggregation that continues to be a characteristic of SEEM. Within SEEM, 10 BellSouth continues to aggregate some UNE loops together even though the 11 processes (i.e. intervals) for the various loops differ from one another. For

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In his testimony, Mr. Coon emphasizes that BellSouth has more disaagregation than that represented in the Staff Proposal. He further expresses this by stating that Staff Proposal had 7 levels of disaggregation for Reject Interval and that BellSouth had 17. What he failed to state is that

example, the interval for one DS1 Loops is 23 days and the interval for one

2-Wire Analog Loops is 4 days.⁷ This level of disaggregation is insufficient

and does not contribute to "like-to-like" comparisons. Likewise, the product

disaggregation for enforcement measures in Staff's proposal is insufficient.

⁷ BellSouth Products & Services Interval Guide - Network And Carrier Services, Customer Guide CG-INTL-001, Issue 3b-December 2000

1 these 17 levels of disaggregation are absolutely meaningless to the remedy plan. Specifically, the remedy plan only specifies one level of disaggregation 2 for the Reject Interval. 3 BellSouth proposes to rely upon overly aggregated results. Such 4 aggregation masks differences and makes detection of inferior performance 5 less likely. As discussed earlier, insufficient product disaggregation will 6 allow BellSouth to mask discrimination and thereby influence the type and 7 pace of developing competition. In SEEM, discrimination of high-8 revenue/low volume products such as DS1s or DS3s can easily be concealed 9 given that they are consolidated with a dissimilar high volume product such 10 as Analog Loops. 11 12 Q. CAN YOU ELABORATE ON HOW INAPPROPRIATE RETAIL 13 ANALOGS HINDER THE ABILITY TO DETECT POOR 14 PERFORMANCE? (ISSUE 9) 15 Yes. On a measure such as Order Completion Interval, BellSouth can actually 16 A. report compliant support even though they are providing discriminatory 17 support in reality. As an example, the retail analog for OCI - UNE Loops are 18 Retail Residence & Business Dispatch. A significant percent of the UNE 19 Loop observations could be UNE Analog Loops which are all dispatch-in. 20 Dispatch-in signifies that the work is done within the Central Office. 21 22 Dispatch usually refers to service where the work is done in the field or outside of the Central Office. Clearly, work done within the Central Office

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has a shorter interval than work done away from the Central Office. Given the retail analog is designated as Retail Residence & Business Dispatch,

BellSouth would always appear to be providing longer intervals for itself (compliant support) for this example primarily because the retail analog is inappropriate.

A.

Q. CAN YOU ELABORATE FURTHER ON HOW SEEM FAILS TO 8 SANCTION POOR PERFORMANCE?

Yes. First, as stated earlier in my testimony, SEEM has an absolute cap that limits the amount of remedies paid by BellSouth for discriminatory performance. An absolute cap sends the signal that once BellSouth's performance deteriorates to a particular level, then further deterioration is irrelevant and results in no consequences if an absolute cap is established. An absolute cap also provides BellSouth with the means to evaluate the cost of market share retention through the delivery of non-compliant performance. Thus, once BellSouth's performance deteriorates to a level where it reaches the absolute cap, any further deterioration in Bellsouth's performance will not generate remedy payments and will go unsanctioned, thereby removing the incentive for BellSouth to provide compliant performance.

Second, BellSouth's SEEM bases compliance at the ALEC aggregate level on 3 months of data. This 3-month aggregation of data will mask discriminatory performance and will also allow non-compliance to occur without a consequence. BellSouth could potentially have 2 consecutive

1		months of industry-wide, non-compliant performance and not incur any
2		consequences if the third month was complaint and the third month's
3		transactions were a larger volume than the previous 2 months. It is
4		unacceptable for ALEC customers to receive deplorable service for two
5		consecutive months and BellSouth not face some consequences. Industry
6		level performance should be assessed for each month's activities.
7		Aggregating results across ALECs within a single month already makes
8		detection of discrimination more difficult, due to likely greater variation in
9		the underlying data. To further dilute the ability to detect discrimination with
10		the possibility of additional averaging across 3 months is simply an attempt
11		by BellSouth to avoid the application of otherwise appropriate consequences.
12		Additionally, it appears that there are no special consequences for chronic
13		violations at the industry level in SEEM.
14		
15	Q.	ARE THE MEASURES IN SEEM SUFFICIENT IN SCOPE TO
16		MONITOR FOR BACKSLIDING?
17	A.	No. BellSouth proposes an inadequate set of measures and, as a result,
18		backsliding can occur in many operational areas without any consequence.
19		The measures set forth by BellSouth do not cover the full scope of ILEC
20		support required for unfettered local market competition to develop. Many
21		potentially important aspects of performance will not be examined due to the
22		inadequate set of measures represented in the BellSouth proposal.
23		BellSouth's SEEM measures are inadequate to determine discriminatory

performance and should be augmented by the measures requested by the ALECs and included in Ms. Kinard's direct testimony. BellSouth's current SEEM proposal only includes a subset of measures reflected in the BellSouth February 2001 SQM filed in Florida.

BellSouth's SEEM omits measurements that are critical to assuring non-discrimination. Any remedy plan must cover all forms of operational support required by the Act. Both blatant (directly and immediately customer observable) and subtle discrimination (ALEC operational support) will ultimately impact customers. Due to the many omitted measures, BellSouth's SEEM does hinder sanctions for non-compliance.

A.

Q. DOES SEEM PROVIDE REASONABLE ASSURANCES THAT THE REPORTED DATA IS ACCURATE.

No. SEEM incorporates an audit to certify the current year aggregate level reports for both BellSouth and the ALECs. SEEM, however, does not require a comprehensive audit of BellSouth's performance measurement data collection, storage, retrieval and reporting processes, along with end-to-end tracking of orders through BellSouth's systems and processes to ensure that reported performance is accurate. An effective enforcement plan would require a comprehensive performance measurement audit to provide reasonable assurances that the reported data and performance are accurate.

BellSouth states that an auditing firm will certify that the Tier I and Tier II remedies were paid. It is even more critical that an auditing firm confirm that BellSouth has indeed appropriately calculated remedies and

1		properly invoked remedies that would be commensurate with the performance
2		rendered to each ALEC and the industry at large.
3		
4	Q.	ARE REMEDIES FOR LATE, INCOMPLETE AND INACCURATE
5		PERFORMANCE REORTING INCLUDED IN OTHER REMEDY
6		PLANS APPROVED BY THE FCC? (ISSUES 6.A, 6.B, 5.A, 5.B)
7	A.	Yes. The SWBT remedy plan includes a payment for late and incomplete
8		performance reports. Specifically, the SWBT plan includes a payment of
9		\$5000.00 per day past the due date and \$1000.00 per day for each missing
10		performance report. Remedies should be assessed and paid by BellSouth to
11		the Commission for late, inaccurate and incomplete reports. ALECs have
12		already experienced late submission of performance reports by BellSouth.
13		Additionally, the performance reports have even been inaccurate and
14		incomplete.
15		
16	Q.	WHEN SHOULD BELLSOUTH BE REQUIRED TO MAKE
17		PAYMENTS FOR TIER I AND TIER II NONCOMPLIANCE?
18		(ISSUE 13)
19	A.	Payment should be on or before the 15 th business day following the due date
20		of the reported performance results upon which consequences are based.
21		Waiting an additional forty-five days, as recommended by BellSouth, seems
22		completely unreasonable.
23		

1	Q.	DOES BELLSOUTH INHIBIT THE ALECS' ABILITY TO	
2		VALIDATE REP	ORTED PERFORMANCE? (ISSUES 3.A, 3.B)
3	Α.	Yes. Even BellSou	th admits to not providing all the raw data needed by
4		ALECs to validate	BellSouth's reported performance. (Coon Direct
5		Testimony, p.16).	BellSouth is currently not providing access to raw data for
6		a number of measu	res such as the following:
7		Ordering	
8		•	LNP_PCT_Reject_Interval_Service_Requests_Total_Me
9			ch.txt
10		•	LNP_PCT_Reject_Interval_Service_Requests_Partial_
11			Mech.txt
12		•	LNP_PCT_Reject_Interval_Service_Requests_Fully_Me
13			ch.txt
14		•	LNP_Reject_Interval_Service_Requests_Total_Mech.txt
15		•	LNP_Reject_Interval_Service_Requests_Partial_Mech.t
16			xt
17		•	LNP_Reject_Interval_Service_Requests_Fully_Mech.tx
18		•	LNP_Firm_Order_Confirmation_Total_Mech.txt
19		•	LNP_Firm_Order_Confirmation_Partial_Mech.txt
20		•	LNP_Firm_Order_Confirmation_Fully_Mech.txt
21		Provisioning	
22		•	LNP Total Order Cycle Time Mechanized.txt

1		• L	NP_Total_Order_Cycle_Time_Mechanized_with_App
2		o	intment_codes.txt
3		• L	.NP_Percent_Missed_Installation_Appointments.txt
4		• I	.NP_Disconnects.txt
5		Billing	
6		• I	nvoice Accuracy CLEC(Region)
7		• N	Mean Time to Deliver Invoices CLEC(Region)
8		• U	Jsage Data Delivery Accuracy CLEC
9		• (Jsage Timeliness & Completeness CLEC
10			
11		For many facilities-ba	ased ALECs, LNP orders are a critical aspect of their
12		business. Therefore,	BellSouth prohibits ALECs from validating the reported
13		performance due to in	nhibiting access to LNP data. An effective remedy plan
14		should provide perform	mance reports and the supporting raw data for all
15		measures in the plan.	
16			
17	Q.	IS ROOT CAUSE A	ANALYSIS USEFUL? (ISSUE 10)
18	A.	Yes. Root cause ana	lysis is a useful procedure for building actions plans for
19		unacceptable perform	nance and should be incorporated within a performance
20		measurement system	, but should not serve as a vehicle for delaying or
21		otherwise avoiding p	ayment of identified performance failures. Performance
22		failures can have det	rimental effects on Florida's consumers. Procedures,
23		such as root cause an	alysis, which could potentially remedy recurrence of

1		failures, are definitely essential. Root cause analysis can and should be
2		implemented such that the self-effectuating aspect of the remedy plan is not
3		impacted.
4		
5	Q.	SHOULD IMPLEMENTATION OF A REMEDY PLAN ADOPTED BY
6		THIS COMMISSION BE DELAYED UNTIL AFTER BELLSOUTH
7		RECEIVES 271 APPROVAL? (Issue 8)
8	A.	No. The remedy plan should go into effect as soon as it is ordered by this
9		Commission so that the benefits of its effect on the marketplace can be
0		realized. The plan can be used to measure compliance, so that the state
11		regulators can make the appropriate recommendation to the FCC. Also, the
12		performance measurement systems should be tested prior to 271 approval, so
13		that any backsliding can be deterred. Further, putting the remedy plan in
14		effect immediately would illustrate to regulatory authorities that BellSouth is
15		committed to irreversibly opening the local market to competition.
16		
17	Q.	WAS SEEM CREATED THROUGH AN INDUSTRY
18		COLLABORATIVE?
19	A.	No. BellSouth did not request that ALECs contribute their ideas in the
20		establishment of SEEM which is based on VSEEM III. Many of the
21		components, such as measures, remedy calculation and even the parameter
22		delta value, of SEEM were decided independently by BellSouth. As an
23		example, the workshops during the Louisiana proceeding did not address the

value of parameter delta. It is obvious that SEEM components are a BellSouth decision since ALEC coalitions through out the region have consistently disagreed with BellSouth's position on the value of parameter delta, transaction-based nature of SEEM and the absolute cap contained in SEEM.

A.

7 Q. SHOULD THE THIS COMMISSION ADOPT BELLSOUTH'S SEEM

No. BellSouth's SEEM proposal will not provide adequate incentives, as their cap implies, to prevent or correct "backsliding" performance. The measures included in SEEM do not provide the necessary information regarding support activities essential to the development of competition. In the few instances where BellSouth proposes to permit examination of its performance, it offers inadequate levels of disaggregation that afford BellSouth the opportunity to mask discrimination. Further, BellSouth's SEEM includes a cap on remedies which allows BellSouth to escape consequences for discriminatory performance. BellSouth also applies a calculation methodology that eliminates failed transactions which are subject to remedies.

The FCC has set forth a framework for analyzing the reasonableness of a proposed enforcement plan, which included 5 key aspects that a performance assurance plan should include. BellSouth's SEEM clearly falls outside this prescribed zone of reasonableness. Therefore, this Commission should not adopt BellSouth's SEEM.

- 1 Q. DOES THIS CONCLUDE YOUR TESTIMONY?
- **A.** Yes.

1 BY MR. PRESCOTT:

Q Would you please provide the Commission with a summary of your testimony?

A Yes, I will. Good morning, Commissioners. I am here today to discuss the self-executing remedy plan that this Commission should adopt in this docket to ensure that BellSouth provides ALECs with support that is in parity with performance it provides to its own retail operation. This Commission can best protect the Florida consumers by adopting the remedy plan proposed by the ALECs. The ALEC remedy plan will also assist in the rapid and sustainable development of a competitive local telecommunications market in Florida. BellSouth's remedy plan will not allow this Commission to meet these goals.

BellSouth is in the unique position of being both the supplier and main competitor of ALECs. Consequently, BellSouth has a strong business incentive and the means to maintain its current monopoly on the local market through the delivery of inadequate and unlawful levels of operational support to ALECs.

BellSouth has the capability of seriously affecting an ALEC's ability to enter the local market and successfully serve its customers. Thus, an appropriate self-executing enforcement mechanism is absolutely necessary to assure that the competitive local telecommunications market envisioned by the Telecommunications Act of 1996 will be able to not only develop, but also thrive in Florida.

The objective of any remedy plan adopted by this Commission is to establish appropriate incentives to motivate BellSouth to provide ALECs with a level of service that allows them to compete equally with BellSouth for customers in the local market. Therefore, the incentives must cover the full landscape of BellSouth activities upon which ALECs must rely to deliver their own retail offerings and be set at a level such that the economic consequences to BellSouth for providing noncompliance service exceeds any benefit BellSouth may derive by inhibiting competition.

My testimony explains that BellSouth's self-executing enforcement mechanism, SEEM, is deficient in a number of ways that should preclude this Commission from adopting this plan. The six key deficiencies of SEEM include, first, BellSouth uses an inappropriate methodology to calculate remedies. The BellSouth methodology allows BellSouth to violate the standard for a measure and yet not subject the transactions in violation to a remedy. Stated differently, BellSouth has a transaction based plan, but BellSouth does not pay for all the failed transactions for a submeasure that is determined to be non-compliant.

Second, the plan inappropriately caps BellSouth's liability. This means that regardless of how bad BellSouth misses the mark, and regardless of how bad a level of service BellSouth provides to ALECs and their customers, BellSouth will

never pay over the capped amount. A cap does not incent
BellSouth to change its performance to meet the benchmark or
retail analog. Rather, it inappropriately allows BellSouth to
make a business decision on whether or not improving performance
is financially more viable than paying the preset capped penalty.

Third, the plan allows BellSouth to provide non-compliant support to all of the ALECs and not even be subject to remedies for a given month. When a non-compliant determination is made based on the aggregate of all ALEC data for a particular submeasure, that non-compliant determination is considered an industry violation. BellSouth could potentially pay no remedies for industry violations even though they have been in violation at the industry level for eight months of the year.

Fourth, the performance measurements that are included in BellSouth's plan are insufficient to fully reveal if BellSouth's performance to ALECs is nondiscriminatory. This Commission would therefore not have what it needs to make accurate performance determinations.

Fifth, BellSouth's plan does not provide for a continuing audit of the performance measurement data upon which the remedies are based. Thus, there would be no independent review of the actual processes that produce source data ultimately used for performance determinations, reporting and remedy calculations.

Sixth, and finally, BellSouth's plan would not apply until after 271 relief is granted. As shown by the testimony of Mpower, COVAD, and e.spire, the ALECs need assistance now. ALECs should not have to file a complaint with the Commission, wait to prefile testimony, wait to have a hearing, wait to submit briefs, and wait for a decision on customer impacting issues when BellSouth is currently not performing as required by applicable performance standards. Because of these deficiencies, I urge this Commission to adopt the performance incentive plan proposed by ALECs.

The ALEC plan, which is explained in my prefiled direct testimony, should be adopted for the following reasons: First, the ALEC plan is a comprehensive plan crafted on sound principles that comply with the FCC guidelines for an effective enforcement plan. Second, the ALEC plan has several tiers which escalate consequences for continued violations. This structure appropriately incents BellSouth to comply with the standards set by this Commission. The ALEC performance incentive plan includes all measures needed to allow this Commission as well as ALECs to measure BellSouth's performance with regard to all parts of customer experiences.

Fourth, the ALECs' plans consequences escalate with increased level of severity of violations. This is very important because extreme violations are even more damaging to ALEC customers and should be remedied at a higher level. The

ALEC performance incentive plan provides for two separate
evaluations, the quality of support delivered to each individual
ALEC, and the quality of support delivered to the ALEC industry
in aggregate. The ALEC plan includes consequences payable to
individual ALECs and consequences payable to a public fund
identified by this Commission. This is important because it
alleviates any concerns relating to ALECs gaming the system.

Sixth, the ALEC performance incentive plan includes a sound statistical methodology to make performance determinations when measures have a retail analog. Therefore, the possibility of random variation is addressed in making performance determinations.

Seventh, benchmarks are established for measures that do not have retail analogs. Not all measures have established retail analogs. However, monitoring is still essential.

Providing benchmarks provides BellSouth with the performance standards that will allow ALECs a meaningful opportunity to compete.

Eighth, the Tier 2 consequence calculation takes ALEC market penetration levels into consideration. This specifically provides extra incentives for BellSouth to provide compliant support when ALEC market penetration is very low and eliminates special incentives when ALEC market penetration reflects levels that demonstrate the existence of a true competitive local market in Florida.

By adopting the ALECs' proposed incentive plan, this 1 2 Commission can be assured that there is a sound remedy plan in 3 place to protect the end user, the Florida consumer. This remedy plan will also assist in the rapid and sustainable development of 4 a competitive local telecommunications market in Florida. You. 5 6 MR. PRESCOTT: The witness is available for questions. 7 CHAIRMAN JACOBS: Any cross, JALECs? Mr. Carver. 8 MR. CARVER: Yes, sir, thank you. 9 CROSS EXAMINATION BY MR. CARVER: 10 Good morning, Ms. Bursh. 11 Q 12 Good morning. Α 13 My name is Phil Carver and I represent BellSouth. O 14 First of all, I want to understand how the ALEC testimony is 15 being presented. As I understand it, Ms. Kinard, who testified 16 earlier, is supporting the ALECs' proposed measures, the 17 submeasures, and the disaggregation. And your portion of this is 18 that you are supporting the penalty plan, is that correct? 19 Yes. Α 20 Q In the context of the penalty plan, would you agree with me that the same failure by BellSouth should not be 21 22 penalized twice? 23 Α Yes. 24 And it is your position, I believe, that all of the Q measures that are proposed by the ALECs are in areas that affect 25

1	customers	i, is that correct?
2	А	Yes. All the measures that are proposed, being
3	proposed	do have customer affecting impacts.
4	Q	And in some cases, however, there is no direct affect
5	on the cus	stomer, would you agree?
6	А	No, I think customers are impacted directly.
7	Q	In every instance?
8	A	Yes.
9	Q	All right. What about with invoice accuracy, do you
10	believe cu	stomers are directly impacted in that instance?
11	А	Yes, I do.
12	Q	Do you have a copy of your deposition with you from
13	last week?	
14	Α	Yes.
15	Q	Please turn to Page 11 of your deposition. Do you see
16	at Line 18	there is a question from staff. Are you there?
17	Α	I'm searching for it now.
18	Q	Okay.
19	А	Okay.
20	Q	There is a question by staff, and this is just sort of
21	the setup	so we can identify the subject area. It says could you
22	please ex	plain why invoice accuracy should be included in the
23	enforcem	ent mechanism. Do you see that?
24	A	Yes, I do.
25	Q	Now, let's go to the next page, 12, Line 13. Question

by Mr. Fudge, "So this is one of those measures that impacts 1 customers indirectly." 2 "Answer: You could say that." 3 Is that the testimony you gave last week? 4 Yes, it is the testimony. 5 Α 6 Now, I want to understand your position on correlation. Q 7 As I understand it, it is your position that without an industry developed evaluation process that would take place at some point 8 in the future, you really can't know whether particular measures 9 10 are correlated or not, is that correct? Yes. Without the proper analysis done there is no way 11 Α 12 to substantiate correlation amongst measures. 13 Q Okay. So I guess your position is that until that process is gone through in the future, measures would be treated 14 in the interim as though they are not correlated, correct? 15 No. Our position is that we, as an industry, need to 16 Α 17 jointly develop a correlation analysis mechanism by which we can 18 appropriately determine whether or not measures are, in fact, correlated so that we will have an effective and appropriate 19 20 performance plan here in Florida. I understand that. But by question is until that 21 Q 22 happens at some point in the future, is it your position that all 23 of the measures should be considered to not be correlated until 24 that determination is made? Well, as I stated previously, no determination on 25 Α

correlation can be made until such time as we engage in that analysis.

Q Let me ask -- I'm sorry, I didn't mean to interrupt.

A No. Which it would impact the effectiveness and appropriateness of any plan that is decided upon. So I think it is critical that that particular process be engaged in.

Q Did you hear Mr. Stallcup testify Wednesday in response to a question by Mr. Lackey that the measurements for mean held order interval for average completion interval and for total service order cycle time are correlated, did you hear him say that?

A I don't recall it.

Q In response to a series of questions that I asked Ms.
Kinard, did you hear her also state that these three measures are correlated?

A I just don't recall everything I heard on Monday, I'm sorry.

Q Well, the record will reflect what they testified, but rather than our debating it, let me just put it this way. For purposes of my question, assume that we have three measures and assume that BellSouth believes they are correlated, and the staff believes they are correlated, and the ALEC expert on measurements believes they are correlated. Is it your position that we still can't treat those as correlated until there is some sort of an industry process that would occur in the future?

A Yes, that is still my position. Because even though measures can't -- the analysis that we would engage in once we develop this mechanism would also include us determining what level of correlation is significant enough to say that you are measuring the same thing. So just because there is some correlation, it may not be a significant enough level of correlation to warrant not having remedies being subjected to each of those measures.

Q Well, what if the degree of correlation is sufficient enough so that if one measure has failed there will automatically be a failure of a second measure in every single instance, is that enough correlation to decide that there should be some adjustment made?

A I have no expertise in developing correlation analysis mechanisms, so I would prefer not to respond to that question.

Q Okay. In the ALEC plan, penalties are applied at the submeasure level, is that correct?

A Yes, they are.

Q And in the ALEC plan, every single submetric carries with it a penalty, correct?

A No. Every submeasure does not carry a penalty if there is no activity associated with that particular submeasure.

Q Okay. Well, let me clarify my question. If every single submeasure, if there is activity and if there is a violation, there would be a penalty for that violation, correct?

sit in traffic probably two hours trying to get home. But they establish the HOV lane, but the key is you can only get in the HOV lane and bypass the traffic if you carpool. It has to be at least two people, two or more people in the car.

And what the State of Georgia did was they set a fine that if I, Cheryl, if I get in the HOV lane and I am not car pooling, I don't have any other passengers in the car with me, I incur a \$500 fine. And so that \$500 fine, it doesn't cost the State of Georgia \$500 for me to get in the HOV lane, but what -- but they know that \$500 is enough -- knowing that you may have to pay \$500 if you get in that lane inappropriately is enough to convince people not to get in the that lane unless they are car pooling. Because, of course, car pooling is what they are trying to motivate.

And I think if you think of that particular analogy you can think of what the ALECs were going through as we try to develop an amount to incent BellSouth in the case, \$25,000 for the most severe level of violation. It was thought to be enough of an incentive to get BellSouth to provide compliant support. It may not be enough, because if you go back to the HOV illustration for me as a worker in Georgia, \$500 is a lot of money to pay just because I was trying to get in this HOV lane. But for Ted Turner maybe \$500 is not enough. So in the case of BellSouth, maybe 25,000 is not enough. But we were looking for an amount that we thought would be significant enough to incent

1	proper be	havior.
2	Q	In Georgia is a violation for driving in the HOV lane
3	\$500 or is	it \$150?
4	Α	500 was what I understood it to be.
5	Q	Okay. You're sure it's not 150?
6	Α	I was just told 500.
7	Q	Okay.
8		COMMISSIONER DEASON: Mr. Carver, do you have any
9	evidence 1	that it is 150? I mean, did you get caught?
10		MR. CARVER: I have never been caught in those
11	instances	when I have driven in the HOV lane. So, no, I don't.
12	But I was curious. I mean, if traffic gets heavy, I wanted to	
13	know.	
14		(Laughter.)
15	BY MR. CA	ARVER:
16	Q	As I understand your position, you are saying that
17	\$25,000 i	s what you think is sufficient to motivate BellSouth, is
18	that corre	ect?
19	А	We are hopeful that it is.
20	Q	So you are not claiming that \$25,000 corresponds to
21	some eco	nomic harm to the ALEC, are you?
22	А	No.
23	Q	How did you pick \$25,000 as opposed to 20,000, or
24	28,000, c	or 32,000?
25	Α	As I mentioned earlier, we just collectively decided

1	that 25,000 would be the amount. Again, it may be that the
2	25,000 is enough and it may not be enough.
3	Q Did you do any sort of a study, or analysis, or a
4	calculation to arrive at 25,000 specifically?
5	A No.
6	Q So, basically, the ALECs just kind of got together and
7	said, well, 25,000 sounds good, let's try that. Is that
8	basically the process?
9	A No. The ALECs looked at what was happening to their
10	business, and we are all being impacted negatively, and
11	collectively thought that 25,000 may be enough to incent
12	BellSouth to provide compliant support.
13	Q But what I'm getting at is 25,000 is basically just
14	your opinion. You have no analysis to support the idea that
15	25,000 is exactly the right amount, correct?
16	A Correct.
17	Q And well, I think I asked this question in regard to
18	25,000, but let me ask you generally as to all of the various
19	penalties in your plan. You are not claiming that any of these
20	reflect the economic loss to the ALEC in any specific way, are
21	you?
22	A No. And I think that is because the economic cost to
23	us is almost impossible to pinpoint. So it's not a fixed amount
24	per person per violation.
25	Q And I'm just using this as an example, but one of the

measures that I believe proposed by the ALECs is timeliness of response to request for BellSouth to CLEC trunks. And it's on Page 11 of Ms. Kinard's Exhibit 4. And the standard that is listed there is a benchmark. It's 95 percent in seven days. And so I can just understand the way your plan would work, for a particular transaction if BellSouth responded in seven days and five minutes, that would be a miss?

- A Hold on one second, I'm trying to find the measure.
- Q Okay. It's Exhibit KK-4, Page 11.
- A Just let me read it, please, if you don't mind.
- Q Okay. And if you look at the very bottom, that is where the benchmark is.
 - A The question?
- Q Yes. The measure is 95 percent in seven days. So my question is if in one particular instance it took BellSouth seven days and five minutes to provide this information, under your plan that would be a miss, correct?
- A Yes, it would. But BellSouth would have had seven days to provide the response, and we may have had a large customer account that we need -- a large customer account at stake, and we wouldn't want to be committing that we would have capacity for a customer like a Delta unless we had some assurance that we could get our -- build our capacity to support their need.
- Q Well, if BellSouth provides you that assurance in seven days and five minutes as opposed to seven days, do you believe

that causes you some sort of harm?

A I think we are always harmed when we don't get commitments responded to in a timely fashion. When we wait an extensive period of time for just basic information so that we could determine whether or not we can provide customers -- service to a customer, or give a customer something as basic as a due date.

Because to most customers -- I mean, I have been in sales most of my career. I am a software developer also, but was in sales probably for 12 or 15 years between AT&T and IBM. And I just can't imagine not being able to give a customer something as simple as a due date. It is already competitive in the marketplace trying to provide -- you know, sell with different competitors in the marketplace, and then you can't even give something as basic as a due date. It would be surprising that any of them would do business with any of us ALECs because we have to wait so long for just a minimal piece of information like a due date.

Q But in this particular instance the ALECs have made the determination that seven days is an appropriate amount of time. So I assume that if you can get -- if you can get the advice of the due date in seven days then you could serve your customers. So my question is if it is seven days and five minutes, do you believe that is going to have some negative impact on your ability to serve your customer?

A Yes.

Q So that extra five minutes makes all the difference?

A Well, what made the difference was BellSouth not providing the response in the committed time frame.

Q Okay. But if they had provided the response in 6 days, 23 hours, and 55 minutes that would have been fine, it wouldn't have harmed your customer, and you would have been able to conduct your business, correct?

A But benchmarks are set at a level that provides ALECs with a meaningful opportunity to compete. And so by not meeting the commitment, basically BellSouth has put the ALECs in a position of not being able -- not being able to compete in the marketplace.

Q Well, my question doesn't go to the benchmark. I'm not asking about the 95 percent, I'm asking about the interval. And I just want to be sure I understand your position. Since the ALECs are proposing seven days, your position is that if we complied and gave you the information in five minutes less than seven days, you could conduct your business. But if we are five days (sic) over the seven day limit, then that is going to create some inability for you to serve your customers, is that your position?

A Yes. And it's probably impacting our business to not get it in five days versus having to wait seven, but we are having to just do the best we can with the intervals that we

Q So in your view you have proposed an interval that is already going to cause a negative impact on your business?

A Well, it could.

Q Okay. The general point I'm getting to is that in the ALEC plan there is a very bright line. If there is a particular interval, if there is a particular performance standard, if it is missed by any small amount, that counts as a miss. There is no forgiveness, correct?

A That's not true, because the very nature of the benchmark, you are getting forgiveness. It wasn't 100 percent of the responses provided in seven days, it was 95 percent. So five percent of those are not even provided in seven days.

Q Okay. Well, again, we are not talking about that part, we are at an earlier stage in the process. We will get to the benchmark in just a moment. But what I'm talking about now is the way you count hits or misses, if you will. Acceptable performance and unacceptable. And across the board in the ALEC plan, let's say you have got an interval of three hours. If BellSouth performs in three hours and five seconds, that is a miss, correct?

A Would you repeat that again, I'm sorry.

Q Yes. Again, we are not talking about the benchmark, we are talking about the part in which we are tabulating particular events and whether BellSouth meets the standard or not. And the

1	question I	m asking you is under the ALEC plan if an interval,
2	for examp	le, is three hours and it takes BellSouth three hours
3	and five se	econds, that counts as a miss for that particular
4	transactio	n, correct?
5	Α	Yes.
6	Q	Now, in your plan, the minimum penalty is \$2,500,
7	correct?	
8	А	Yes.
9	Q	And did you do any sort of study or calculation that
10	allowed yo	ou to reach the conclusion that any violation by
1 1	BellSouth will necessarily result in \$2,500 of harm to the ALEC?	
12	Α	As I had stated previously, we had set specific dollar
13	amounts b	pased on what we felt would be an amount that would
14	incent or	motivate BellSouth to provide compliant support.
15	Q	And is \$2,500 then just the ALECs' opinion as to where
16	it should be?	
17	А	Probably it would be the Commission who would set the
18	final dolla	r amount. But the ALECs view that 2,500 could, in
19	fact, incer	nt BellSouth to provide compliant support. It may not
20	be enougl	1.
21	Q	Okay. But at this point it is the ALECs' best guess,
22	right?	
23	А	It is the ALECs' best representation of what may be
24	appropriate to motivate BellSouth to provide compliant support so	
25	we can satisfy our customers.	

1	Page 15?	
2	Α	Yes, you would.
3	Q	Okay. Now, you came up with that 2,500 number pretty
4	quickly. [Did you go through that whole formula in your head that
5	is listed t	here under applicable consequences?
6	Α	No, I looked at another table.
7	Q	Okay. Well, as I understand your testimony from your
8	depositio	n last week, to determine the amount of a penalty, you
9	would hav	ve to apply this formula that takes up two lines in the
0	box on Pa	ige 15, is that correct, that formula would have to be
1	applied to	determine the penalty?
2	Α	Yes, the formula is applied to determine penalties.
3	Q	Okay. So, 2,500 you just took from a chart somewhere
4	that has a	already applied the formula?
15	A	Well, again, two things. One, I could look at a chart
16	that we h	ad that is in the form, but you actually determine the
17	penalty a	mount by applying the formulas that are in the remedy
18	calculatio	n tables.
19	Q	Okay. We are still assuming a 95 percent benchmark.
20	If BellSou	th delivers performance to the ALEC at 90 percent, that
21	is a sever	e failure, correct?
22	А	Yes, it is.
23	Q	And that would prompt a \$25,000 penalty, correct?
24	Α	Yes, it would.
25	Q	Now, on Wednesday did you hear Ms. Kinard tell us that

as a result of disaggregation that there will likely be some 1 submetrics with very small numbers in them? 2 I don't recall her specifically saying that, but that 3 Α could be true. 4 Yes. I think what she said in response to a question 5 0 was that there might be some submetrics with no activity at all, 6 there might be some with one or only two measurable events. Does 7 that refresh your recollection about what she said? 8 I remember there may be some with no activity at all. 9 Α Okay. The small amounts of activity, that is the part 10 Q you don't remember her saying? 11 She testified I think it was on Tuesday, I just can't 12 Α remember everything she said verbatim. 13 Okay. Well, the record will reflect what she said, and 14 Q I'm not trying to test your memory. So take this next question 15 as a hypothetical if you want. We are still using a 95 percent 16 benchmark. In any submetric with four events or less, a single 17 failure by BellSouth will result in BellSouth failing that 18 submetric and paying a penalty, correct? 19 20 Α That is not correct. 21 It's not? Q 22 Α No. Okay. Well, you have told me that each penalty, each 23 Q 24 event -- you told me the submetrics are going to have -- if there is one event in the submetric and BellSouth fails it would pay a 25

1	penalty, correct?	
2	Α	Would you repeat the statement?
3	Q	Okay. Let me try it a different way. If we have four
4	events and	BellSouth fails one of them, then that is a
5	performan	ce level of 75 percent, correct?
6	Α	Yes.
7	Q	And with a 95 percent benchmark, 75 percent is going to
8	be a failure	e, correct?
9	Α	Not in our plan because of the benchmark adjustment
10	table.	
1	Q	You are referring to the table on Page 14 of 52 in
12	Exhibit 1?	
13	А	Yes, I am.
14	Q	Okay. Now, as I read that table it appears that the
15	benchmark	k, regardless of sample size, would only be adjusted down
16	to 80 perc	ent, is that correct?
17	A	No. In this particular one it was adjusted for a
18	sample siz	e of five it was adjusted to 80 percent.
19	Q	Well, on the table on Page 14 it begins with five,
20	correct?	
21	Α	Yes.
22	Q	There is nothing indicated for four, or three, or two,
23	or one, is	there?
24	Α	It's not contained here, but BellSouth would be allowed
25	to miss on	e.

Q Okay. So what you are telling me is that this chart doesn't accurately reflect the way your plan would work?

A I didn't say that.

Q Okay. But that's what I'm asking you. Because in the chart it appears that the lowest adjustment would be to 80 percent. So -- well, let me ask you to confirm that first of all. In this chart there is no number here smaller than 80 percent, is there?

A There is no number smaller than 80 percent because with a sample size of five, having missed one you wouldn't need to go any lower than 80 percent. But had you put a sample size of 4 here and 75 percent, it would have been appropriate.

Q Okay. Well, the chart doesn't list anything for one, or two, or three, or four, does it?

A No, it does not.

Q Okay. Are you saying -- I want to make sure I understand what you are saying. You are saying that under your plan there would be adjustments to below 80 percent for one, or two, or three, or four, it's just that this chart doesn't reflect that, is that right?

A BellSouth -- what our plan provides is for BellSouth at the lowest sample sizes, even though a given benchmark percent has been set, if meeting that particular benchmark can only be accomplished by BellSouth having perfect performance, meaning not missing one, then we would always adjust down such that they can

meet the benchmark without having had perfect performance.

I wanted to try to see if I can align what you are saying with what this chart shows. So, again, let me ask you. The chart shows five events, it doesn't go below that. And it shows 80 percent, it doesn't go below that. So are you saying that your plan really does have greater levels of adjustment, if you will, for one, or two, or three, or four, but it's just not reflected on the chart, is that what you are saying?

A Yes.

would be 75 percent?

Q Okay. So if the sample size is four, what would you adjust the benchmark down to?

A Probably 75 percent.

Q You say probably; are you sure about that?

A I mean, it's a matter of just doing -- I would have to do the math.

Q Okay. Well, the reason I ask is because, again, the evidence that you have submitted ends at 80 percent. So if you are telling us that there is more forgiveness for even smaller sample sizes, then I would like to know precisely what that is. And if you can't tell us, that's fine. But I just want to be

sure that if you are going to give us numbers that you are

certain about them. So, with that understanding, for four it

A I think what is important to note is that -- and I said

1	it previous	ly, but I will say it again. If obtaining the
2	benchmarl	c percent can only be done by BellSouth having perfect
3	performan	ce, meaning missing have no failed transactions, then
4	there will b	oe an adjustment made so that BellSouth can miss one
5	and still be	e considered compliant. I think that is really the
6	rule.	
7	Q	Yes, ma'am. And I think we understand the rule. What
8	I'm asking	you is since your chart doesn't cover it, exactly how
9	you would	apply that rule, because I think we need to know what
10	the standa	ards are. Now, again, are you able for one, two, three,
11	and four t	o tell me what the percentages would be?
12	А	Not sitting here, no, I cannot.
13	Q	Okay. Can you describe to me the calculation that you
14	would go	through to do that? Is there a formula, for example?
15	А	I would divide the sample size by one, the sample size
16	into one.	
17	Q	Okay. And is that formula stated anywhere in the plan?
18	А	No, it's not. You mean the verbiage?
19	Q	Yes. I mean, and again, you are describing to me
20	something	that is not on the chart that is attached to your
21	testimony	, so I'm just asking you
22	A	I think the chart is illustrative of a method, and it
23	is the met	hod I have tried to articulate.
24	Q	I understand. And you have given us the formula for
25	smaller si	zes. So what I'm asking you is is that formula set

forth in any of the documents that you have filed? 1 2 Give me one second, please. The information is not expressed, per se, as I have conveyed it, but is implicit in what 3 4 is contained on Page 14 that is entitled applying adjustment for small data sets where necessary. 5 Okay. And you're talking specifically about this first 6 Q 7 paragraph that is labeled Number 2 on Page 14? 8 Α Yes. 9 That is the part that you believe it is implicit in? 0 10 Yes. Α 11 Okay. I believe you testified in your deposition that Q you personally have gone through the process of determining the 12 number of submeasures in the ALEC plan. Do you recall that? 13 Yes, I do. 14 Α And I think what you told me was that by your 15 Q calculation the total number of submetrics is 10,000 exactly. Do 16 17 you recall that? 18 Α I recall saying that. Did you create a document to show how you arrived at 19 Q that number, the 10,000? 20 21 There was no formal document prepared. Α 22 Okay. So you didn't do anything like Mr. Coon's Q Exhibit DACR-1, for example, of the chart that would show what 23 24 you multiply by what to get that? 25 I may have had some scratch information, but not a Α

1	formal doc	ument that was
2	Q	And you don't have any sort of notes or any sort of
3	written rec	ord of how you did that calculation, is that correct?
4	Α	No.
5	Q	Did you hear Ms. Kinard say on Wednesday that for some
6	types of di	saggregation she wouldn't know the number of
7	categories	without getting the information from BellSouth?
8	Α	I think I recall her saying that.
9	Q	And did you hear her say specifically that for volume
0	she would	n't know how many categories to use without looking to
1	BellSouth's	product interval guide?
2	Α	Yes.
3	Q	Okay. When you did your calculation, what process did
4	you use to	determine the appropriate number for volume?
15	Α	I looked at the product interval guide.
16	Q	So you have a copy of BellSouth's product interval
17	guide?	
18	Α	Yes, I do.
19	Q	And what number did you use?
20	Α	I used three.
21	Q	And for the trouble type, did you hear her say
22	Wednesda	y that for trouble types she would have to look to the
23	trouble co	des that BellSouth uses?
24	А	Yes, I recall that.
25	Q	And you did your calculation, I guess, sometime before

1	your deposition last week, correct?	
2	А	Yes.
3	Q	And when you did your calculation, did you have a copy
4	of the shee	ets that show BellSouth's trouble disposition codes?
5	Α	No, I did not.
6	Q	Okay. So, how did you determine how many trouble codes
7	to use?	
8	А	I had omitted that, so it was not included.
9	Q	Okay. So you just left that one out?
10	Α	Inadvertently.
11	Q	Are there any others that you inadvertently left out?
12	Α	Yes.
13	Q	Okay. Which ones?
14	А	MSA.
15	Q	That would be geography?
16	А	Yes.
17	Q	What else?
18	A	I can't remember everything, but I did determine that
19	there were	e some omitted.
20	Q	Okay. Well, I think there are seven more categories
21	that we ha	ven't discussed, so let me just go through each one and
22	if you can	tell me the number you used. Interface type?
23	A	I believe I used three.
24	Q	Preorder query type?
25	А	This is difficult to do because I don't have the sheet
	II	

that I was working with in front of me, but I --1 If you don't remember what you did, that's fine, but 2 Q 3 I'm trying to see how someone could come up with 10,000. And I understand you don't have the written documents or any notes, but 4 5 to the extent you remember what you did, I would appreciate it if you could tell me. Again, if you can't, that's fine. So for 6 7 preorder query type? I think what I did with preorder query type was to take 8 Α 9 the gueries that were in BellSouth's SQM. 10 Q You just don't remember the number? Not off the top of my head. I think it was seven, but 11 Α I can't remember. I can't be exact. 12 13 Okay. Let's go back to geography for a second. If you 14 were going to do geography, you would use 13, correct? 15 I thought it was 11, but if you say 13 --Α Well, there are 11 MSAs, but I assume you would want 16 Q 17 something for all of the areas in the state that aren't in an 18 MSA, so that would be 12. I mean, you would want that kind of 19 information, wouldn't you? 20 Well, we had specified MSA, so I thought there were 11 Α MSAs. 21 22 Okay. Well, MSA, of course, stands for metropolitan Q 23 service area. So if you only take the 11 MSAs, you are only going to know what kind of service you are getting in the 24 metropolitan areas. So my assumption is you might want to serve 25

1	some rura	I customers, so you might want to know what is happening
2	outside of	the major cities. Now, if I'm wrong about that, if
3	you don't	need that, I guess it would be 11. But is that
4	informatio	on you would want?
5	А	I'm sure it's information that would be necessary.
6	Q	So that is 12. And you would probably also want one
7	that has tl	ne state total?
8	A	I'm sorry?
9	Q	Would you also want by geography something that had all
10	the state (or would you just want the breakdowns?
11	А	Beyond MSA, I'm not familiar with the others. There
12	have not been any other areas that we have been	
13		MR. CARVER: I'm sorry. I just had a severe failure
14	here. I will work around it.	
15		CHAIRMAN JACOBS: It must be catching.
16		MR. CARVER: It must be. I'm going to move to the left
17	of the puo	ldle and I will continue.
18	BY MR. CA	ARVER:
19	Q	Product. How many categories did you use for product?
20	А	It depends on the measure, but 41.
21	Q	And for service order activity, how many did you use?
22		MR. PRESCOTT: Chairman Jacobs, if I might impose an
23	objection at this point. I think Ms. Bursh has made clear that	
24	in her calculation she omitted certain things that should have	
25	been inclu	ıded. And there is no dispute that that number

excuse me, the number that she initially provided omitted things 1 2 and is therefore inaccurate. So I think to continue along this line is just a waste 3 4 of our time. I think it's clear that she has indicated there was 5 error in her initial calculation, that she omitted certain things that should have been included. And this is just redundant. 6 7 MR. CARVER: Well, I didn't realize they were taking 8 that position, so I was trying to find out exactly what she did. 9 At this point if they are basically saying that they will 10 stipulate that her 10,000 number is inaccurate, then I will 11 accept that. 12 THE WITNESS: Yes, uh-huh. 13 MR. PRESCOTT: We will. 14 MR. CARVER: Very well. Thank you. Then I have nothing further. 15 16 CHAIRMAN JACOBS: Very well. Staff. 17 CROSS EXAMINATION BY MR. FUDGE: 18 Good morning, Ms. Bursh. 19 Q 20 Good morning. Α 21 Were you here yesterday when Mr. Allen enumerated Q 22 several specific examples of the problems COVAD was having with 23 BellSouth? 24 Α Yes. And do you remember that Commissioner Palecki asked 25 Q

1 BellSouth and COVAD to work together to see what the penalty 2 payments would be under BellSouth's plan for those specific 3 examples? Yes. 4 Α 5 Q Do you think that if you were to work with BellSouth, that you could develop how much the penalties would be under the 6 ALEC plan? 7 8 Α Yes. If BellSouth will make available the entry data points we would need, we would be glad to do it. But they have 9 the critical data. You need to know the BellSouth results as 10 11 well as the COVAD results. 12 MR. LACKEY: Mr. Chairman, on behalf of BellSouth we 13 are already committed to getting whatever information we can. We 14 are still trying to determine what is available, I'm assuming. 15 THE WITNESS: Does that mean that BellSouth will provide us the data points we would need so that we could apply 16 17 the calculations to determine the remedies? 18 MR. LACKEY: BellSouth is committed to providing all the data necessary, assuming we have it. We just don't know yet 19 what is available. We understand what the exercise is and we are 20 21 going to cooperate. Anything we have got, anything anybody needs 22 to make the calculation. 23 CHAIRMAN JACOBS: Staff, is this going to be an exhibit you are going to request? 24 25 MR. FUDGE: Yes, sir. We would like to have a

1	ate-filed exhibit designated as Exhibit 26.	
2	CHAIRMAN JACOBS: It sounds like the exhibit is going	g
3	to be prepared by the witness, but requires information from	
4	BellSouth?	
5	MR. FUDGE: Yes, sir.	
6	CHAIRMAN JACOBS: Can we get timetables? It sound	s
7	like you've got to come back and tell us	
8	MR. LACKEY: Mr. Coon went back to Atlanta on the 6	:00
9	o'clock flight this morning, and they are trying to figure out	
10	right now what it is going to take to do it and how long we can	
11	get it done. As I told you last evening, one of the problems we	
12	have is that one of the key players left to get married today.	
13	So I can't get him and can't get an answer. But they have	
14	promised to have me some sort of a response before the end of	the
15	day about what we have got and what we can do.	
16	CHAIRMAN JACOBS: Very well. So we will identify this	S
17	as Late-filed Exhibit 26. And we will saddle back up at the end	
18	of the day and figure out the scheduling on it. Do you want to	
19	give it a title?	
20	MR. FUDGE: ALEC penalty plan for COVAD examples.	
21	(Late-filed Exhibit 26 marked for identification.)	
22	CHAIRMAN JACOBS: Okay.	
23	BY MR. FUDGE:	
24	Q Ms. Bursh, will you please turn to Page 38 of your	
25	direct testimony?	

Q You were asked earlier about small sample sizes. Were small sample size -- or if sample sizes are small, compliance for measures with benchmarks should be determined using the adjustment table for a 95 percent confidence interval, is that correct?

A No. That particular approach which I think you are referring to as the BellSouth adjustment table, the ALECs feel that it provides for an additional level of mitigation. They are allowed to fail more, provide more noncompliance support before a remedy would be incurred.

Q Do you agree that the ALEC sample benchmark adjustment table is not a statistical appropriate?

A Yes.

Q Why is a nonstatistical approach superior to a statistical approach?

A Well, we feel that the approach presented by the CLECs or the one contained in the CLEC plan does not provide for additional levels of mitigation because we feel that mitigation has already been provided for in the setting of the benchmark itself. For instance, you are not asking for 100 percent of orders to be completed in two days, you are asking for 95 percent. So five percent are going to be allowed to not meet that interval anyway.

Q In BellSouth's proposed penalty payment mechanism, do you agree that the penalty is based on some estimate of the

1	number o	f discriminatory transactions?
2	А	Could you repeat that one more time?
3	Q	Sure. In BellSouth's proposed penalty payment
4	mechanis	m, do you agree that the penalty is based on some
5	estimate (of the number of discriminatory transactions?
6	А	To be honest, I'm not sure what it is based on. I just
7	know that	they pay on very few transactions are in violation.
8	Q	Does BellSouth propose to estimate the total number of
9	transactio	ons that did not receive parity service or only the
0	portion of	f transactions for which disparate service was detected?
1	А	Could you say that one more time?
2	Q	Sure. Does BellSouth propose to estimate the total
3	number o	f transactions that did not receive parity service or
4	only the p	ortion of transactions for which disparate service was
5	detected?	
6	Α	For some reason I need could you read it a little
7	bit slower	just one more time. I'm trying for whatever reason
8	l'm missir	ng the point of the question.
9	Q	Okay. Does BellSouth's plan propose to estimate the
20	total num	ber of transactions that did not receive parity service
21	or only th	e portion of transactions for which disparate service
22	was detec	cted?
23	А	There is something in that question, I'm not able to
24	respond.	I can't I'm not understanding the question. Could
25	vou resta	te it maybe a different way, if you would, please.

discrimination in a particular measure where the greater 1 penalties as the statistical certainty of discrimination 2 3 increases? CHAIRMAN JACOBS: Could I get you to slow down just a 4 little bit, Mr. Fudge. 5 MR. FUDGE: I'm sorry. 6 7 BY MR. FUDGE: 8 In the ALECs' proposed penalty payment mechanism, do Q you agree that the payments -- that the penalties are based on 9 10 the presence of discrimination in a particular measure with 11 greater penalties as the statistical certainty of discrimination 12 increases? 13 Α Yes. The previous question that I asked about how the 14 Q calculation needs to be changed, who would be best able to answer 15 that question? 16 17 18 19 20

21

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A I don't think that just here in the hearing room we could formulate that kind of a recommendation. I think it would take some time and thought and engage some technical people into what that modification would need to be. I do know that it is inappropriate, because when I look at the effect on this particular sheet that 96 of the -- that there were 96 violations, and of the 96 violations only 29 were remedied. There is something terribly inappropriate about that. As to how it should be changed, that would be something, again, that couldn't be done

here in this particular forum, but in a different venue. 1 2 MR. FUDGE: Thank you, Ms. Bursh. THE WITNESS: Thank you. 3 4 CHAIRMAN JACOBS: Questions, Commissioners. Redirect. 5 I'm sorry, Commissioner Palecki. MR. PRESCOTT: Ms. Bursh, can you --6 7 CHAIRMAN JACOBS: Commissioner Palecki has some 8 questions. 9 MR. PRESCOTT: Oh, I'm sorry. COMMISSIONER PALECKI: On the issue of disputes 10 11 regarding penalties, you believe the Commission should settle all 12 of these disputes. And I'm concerned that there may be very many 13 of them and that this might occupy the Commission on a full-time 14 basis handling disputes between the ALECs and BellSouth. Do you have any other type of dispute resolution mechanism that might 15 save this Commission from making resolution of disputes on these 16 17 measures a full-time business? 18 THE WITNESS: Well, I definitely don't want this to be a full-time business for you, because I know your time can be 19 20 better spent attending to other matters. I would think the only 21 proactive thing we can do is just to make sure that the plan is 22 as close to self-executing as possible and that we put the time 23 and effort into a plan that would take away some of the disputes. I think, you know, if you have a good solid plan maybe that could 24

eliminate the disputes, because it would be clear to all parties

that the remedy that was incurred or not incurred was, in fact, correct. So I think having a more -- having a plan be approved by this Commission that is, in fact, a truly effective remedy plan is going to be probably the only proactive -- or the most proactive thing that we can do.

COMMISSIONER PALECKI: I guess what I'm concerned about is there are some areas, provision of incorrect information, for example, that might not fit into an exact category for one of the measures. And I can anticipate that there could be many disputes. Would you have any objection to a process that would have an impartial third party make the first determination prior to the Commission itself being asked to resolve these issues?

THE WITNESS: Well, since I am representing the ALEC coalition, I probably would need to go back and -- and we meet on a regular basis, but take it to the coalition.

COMMISSIONER PALECKI: And there is already in place for consumer complaints a process where there are first informal dispute mechanisms where the Commission staff will hear a dispute prior to the Commission itself making a resolution. Would that be a possible means of working through disputes without asking the Commission to make these decisions?

THE WITNESS: Just speaking for myself, and I would think for AT&T, that seems reasonable. But, again, I hope that we can have a plan that is going to eliminate some of the disputes. And another thing we can do is begin to as we have

disputes, and hopefully they will be very few, begin to document them and, you know, retain information on kind of once we see them, we have one, figure out how did it come about so that we can go in and incorporate something in our remedy plan such that we could eliminate that happening in the future.

So I think we can -- we can learn from the disputes as we go forward so that we don't continue to have the same disputes. And we could also learn from also what is happening in other parts of the region and share that information, you know, amongst the different states. I think that will be helpful, too, because we will all be at different points.

COMMISSIONER PALECKI: Thank you. Now, if this
Commission wanted to approve a plan that was somewhere between
the BellSouth plan and the ALEC plan, what are the most important
areas that the Commission should look at? And limit it to three
or four. I don't want to hear a laundry list of all of them.

THE WITNESS: First of all, I think -- I know the dollar amount for missing a measure, and I'm not talking about a particular measure, but missing a measure, it needs to be correct and appropriate enough to eliminate the inappropriate or noncompliant behavior. I think that just has to happen. That no matter what you fail, the key is not failing any measures, not plan to fail these two because they don't cost me as much. But the ones that maybe impact me the most, I won't fail there.

That's not going to help us as CLECs. But I think ensuring that

we have incentive amounts per measure that are enough to deter BellSouth from providing noncompliant support. I think that is essential, otherwise it's going to be chaos.

And, secondly, covering all the areas upon which the ALECs rely upon BellSouth. I mean, they are really our competitor, but yet we are dependent on them and we can't deliver quality service without using part of that infrastructure. So, making sure that the measures cover the right scope of activities upon which the CLECs must rely.

COMMISSIONER PALECKI: Having worked for a utility, I have concerns with regard to customer retention. When I worked for the utility I worked with, which was a small natural gas utility, we had certain customers we considered key customers and we would retain those customers at all cost.

Now, I guess I'm concerned about where there are very large customers that are important to the utility, that there will be a conscious decision to take the penalty in order to retain the customer. In order to make sure the ALEC isn't able to serve the customer. What sort of remedy would you have in mind under a circumstance like that?

THE WITNESS: Well, I am equally concerned because I supported national accounts when I was in sales, and it only takes one major disaster to lose a Delta Airlines or a Georgia Power. It's kind of difficult, because if you lose --

COMMISSIONER PALECKI: Well, I guess what I'm saying,

if you have a million-dollar-a-month customer, as a utility you might very well be willing to pay several thousand dollars or ten of thousands of dollars in penalties in order to retain that customer. And is there a possible solution to that problem?

THE WITNESS: As I sit here I can't devise one that will keep the plan self-executing and also keeping in mind that -- you know, I'm sure staff wants one that is not too complex to administer. But, I mean, that is the situation.

Because when you lose those big customers, everybody knows about it. So you didn't really lose just -- and I use Delta, it didn't have to be a Delta, but it could be Macy's for that matter. But when I lose that customer, it's all other major accounts that may leave me because they feel that I'm unreliable. But just through my experience with -- I'm sorry, you were talking.

COMMISSIONER PALECKI: I was just saying those are the customers that all of the ALECs as well as BellSouth are going to be fighting for.

THE WITNESS: Well, I hope we are competing for all the customers. Not just the big ones, but all of them. Because all of them are important, but some clearly once you lose that business it is more impacting.

COMMISSIONER PALECKI: I'm sorry, I interrupted you. Could you finish your answer, please.

THE WITNESS: I forgot, I'm sorry. Oh, I know what I was going to say. I just remember when I was in sales and I used

to implement -- well, PBXs and those kind of things, also. But at that time we didn't ever put customers out of service and things like that. That was just unheard of. Although it is being more prevalent now because of the situation that we currently find ourself in. But one thing I know for sure, this is why I think we should have -- I mean, each measure needs to be equally weighted in terms of the penalty for missing it is significant. It's one thing to make a mistake with a big customer, but when do you it over and over they are not going tolerate it. They don't have to. And that is the thing.

It's not like you can do it one time, it may be that you made the mistake in doing, you know, provisioning, maybe put somebody out of service, which is awful. But, anyway. But then let's say that happened, two months later they finally halfway trust you, then they decide to migrate the rest of their facilities over and something happens in the migration. And sometimes in migrations you have a D and an N order, a disconnect and a new. And you did the migration and the disconnects happened, but lo and behold, the new order -- not the new, but the part of the order that reestablishes the service gets lost. Then we are definitely out. They are not going to do business with us. They are going to get rid of us as fast as they can.

COMMISSIONER JABER: Before Commissioner Palecki leaves that question about the large customer, explain to me the Department of Justice's role. It seems to me that if any Bell

1	company 1	targets the large customer like that and makes a decision
2	that migh	t indicate willful behavior to be anticompetitive, isn't
3	that where	e the Department of Justice would kick in?
4		THE WITNESS: I'm not sure, but I think that, again,
5	there are	subtle and I'm not being negative or whatever, but I
6	just know	from being in that market and being in tech support and
7	being in tl	ne market fulfilling service provisioning service
8	for custon	ners, the way that you can discriminate is so subtle.
9	lt's not lik	e you it's very overt. So maybe that does kick
10	in. But by	the time you get it to the Department of Justice I
11	can imagi	ne that you have lost at least half of your customers.
12	lt's just no	ot enough time. That process is too extensive to be
13	beneficial.	
14		COMMISSIONER PALECKI: Thank you.
15		THE WITNESS: I'm sorry I couldn't given you a good
16	answer fo	r the last question.
17		CHAIRMAN JACOBS: Redirect.
18		REDIRECT EXAMINATION
19	BY MR. PR	ESCOTT:
20	Q	Ms. Bursh, will you turn to Page 14 of your first
21	exhibit.	
22	Α	I'm on 14.
23	Q	Do you remember Mr. Carver questioning you about the
24	benchmar	k chart?
25	А	Yes.

1	Q	And he asked you some questions about where it was
2	indicated 1	that it would be sample sizes smaller than five
3	would be 1	aken into consideration?
4	Α	Yes.
5	Q	And on the line above the table, there is an indication
6	for a footr	note?
7	А	Yes, Footnote 16.
8	Q	Could you read that footnote, please?
9	А	Footnote 16 on Page 15 reads, "The table can be
10	expanded	to include all possible data set sizes from one upward."
11	Q	And is that what you were trying to explain in
12	reference	to the sample size of four that he proffered?
13	Α	Yes.
14		MR. PRESCOTT: I have nothing further.
15	:	CHAIRMAN JACOBS: Exhibits.
16		MR. PRESCOTT: I would move Exhibit 25 into the record.
17		CHAIRMAN JACOBS: Without objection show Exhibit 25 is
18	admitted.	And 26 is late-filed. Thank you, Ms. Bursh. You are
19	excused.	Next witness.
20		Why don't we take ten minutes while we are transition.
21		(Exhibit 25 admitted into the record.)
22		(Brief recess.)
23		CHAIRMAN JACOBS: Go back on the record. Mr. Prescott,
24	you may c	all your next witness.
25		ROBERT MICHAEL BELL

1	was called as a witness on behalf of AT&T Communications of the	
2	Southern S	States, Inc., and, having been duly sworn, testified as
3	follows:	
4		DIRECT EXAMINATION
5	BY MR. PRI	ESCOTT:
6	Q	Would you state your name for the record, please?
7	А	My name is Robert Michael Bell.
8	Q	And what is your address?
9	А	180 Park Avenue, Florham Park, New Jersey 07932.
10	Q	And by whom are you employed?
11	А	By AT&T.
12	Q	In what capacity?
13	A	I work at AT&T Labs Research in the statistics research
14	departmer	nt. And I guess my title is principal member of
15	technical s	staff.
16	Q	Doctor Bell, did you cause to be prepared and filed 15
17	pages of direct testimony and 9 pages of rebuttal testimony?	
18	A	Yes, I did.
19	Q	Do you have any changes or corrections to make to your
20	prefiled di	rect testimony?
21	A	No.
22	Q	Do you have any changes to your rebuttal testimony?
23	А	No.
24	Q	If I asked you the same questions today, would you
25	answer \	would your answers be the same as in your prefiled
	•	

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1	direct and	rebuttal testimony?
2	Α	Yes.
3		MR. PRESCOTT: I would request that the testimony be
4	entered in	the record as if read.
5		CHAIRMAN JACOBS: Without objection show his testimony
6	entered ir	the record as though read.
7		MR. PRESCOTT: Thank you.
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1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Robert M. Bell. My business address is AT&T Labs-
3		Research, 180 Park Avenue, Florham Park, New Jersey 07932.
4		
5	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL
6		BACKGROUND.
7	A.	I received a Ph.D. in Statistics from Stanford University in 1980. From
8		1980 to 1998, I worked as a statistician at RAND, a non-profit
9		institution that conducts public-policy analysis. While at RAND, I
10		supervised the design and/or analysis of large multi-site evaluations in
11		the fields of preventive dentistry, drug prevention, and depression
12		care. I also headed the RAND Statistics Group from 1993 to 1995
13		and taught statistics in the RAND Graduate School from 1992 to 1998.
14		Since 1998, I have worked in the Statistics Research Department at
15		AT&T Labs-Research. I have authored or co-authored 50 refereed
16		articles on statistical analysis that have appeared in a variety of
17		professional journals. I am a fellow of the American Statistical
18		Association. I currently serve on the Panel to Review the 2000
19		Census organized by the National Academy of Sciences.
20		
21	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
22	A.	My testimony describes the statistical methodology the Florida Public
23		Service Commission should adopt for use in comparing BellSouth's

performance provided to itself and its affiliates with the performance it provides to Alternative Local Exchange Companies (ALECs). I also recommend an appropriate range for the parameter delta used in connection with the statistical methodology. (Issues 11.C.1 and 2; 12.C.1 and 2)

Α.

Q. WHY ARE STATISTICAL TESTS USEFUL TOOLS?

Merely reporting averages of performance measurements alone, without further analysis, does not indicate whether differences in performance results for ALEC customers versus a retail analog reflect actual discrimination or simply random variation. Once appropriate measures and comparison samples have been established, statistical tests compare the size of observed differences with the amount that could be expected to occur by chance under conditions of true parity of service. These comparisons help to determine quantitatively whether BellSouth has provided nondiscriminatory treatment to ALECs for measures with a retail analog. The FCC supported the use of statistical comparisons in its Bell Atlantic Order for New York. See In the Matter of Application of Bell Atlantic for Provision of In-Region InterLATA Services In New York, CC Docket No. 99-295 (December 23, 1999), Appendix B, Para. 2&4, where FCC stated:

When making a parity comparison, statistical analysis is a useful tool to take into account random variations in

1		the metrics. In the Second BellSouth Louisiana Order,
2		we encouraged BOCs to submit data allowing us to
3		determine if any detected difference between the
4		wholesale and retail metrics is statistically significant.
5		
6	Q.	WHAT SHOULD THIS COMMISSION ORDER CONCERNING THE
7		STATISTICAL METHODOLOGY TO BE USED IN EVALUATING
8		PARITY?
9	A.	There are two things that should be included in the Commission's
0		order. First, the Commission should select the appropriate statistic for
11		making parity determinations. My testimony explains that the modified
12		z is the most appropriate statistic for this purpose. Second, the
13		Commission should set the value of a parameter "delta," which is
14		needed to compute a balancing critical value, at no higher than 0.25
15		for all submeasures. The modified z statistic compared with a
16		balancing critical value based on a parameter delta no higher than
17		0.25 for all submeasures will enable this Commission to detect lack of
18		parity in BellSouth's performance to ALECs.
19		
20		Issue 11. a. What is the appropriate methodology that
21		should be employed to determine if BellSouth is providing
22		compliant performance to an individual ALEC? (Tier 1)
23		c. What is the appropriate structure?

1	1. What is the appropriate statistical methodology?
2	
3	Issue 12. a. What is the appropriate methodology that
4	should be employed to determine if BellSouth is providing
5	compliant performance to an individual ALEC? (Tier 2)
6	c. What is the appropriate structure?
7	1. What is the appropriate statistical methodology?
8	
9	Q. WHAT STATISTICAL METHODOLOGY DO THE ALECS
10	RECOMMEND?
11	A. The ALECs recommend use of the modified z statistic. This test
12	statistic is described in a paper attached to this testimony as Exhibit
13	RMB-1. ¹ For each parity submeasurement (a disaggregated
14	measure), BellSouth's performance for its retail operation (or that of its
15	affiliates) is compared with the performance it provides to a given
16	ALEC to create a z score (the modified z statistic), which then can be
17	used to determine whether BellSouth's performance for an ALEC is in
18	parity with its performance for its retail operation. For small sample
19	sizes (30 or fewer observations in either of the data sets to be
20	compared), permutation analysis is used to compute the z score.
21	Permutation analysis is a computer-intensive method that compares
22	the observed results for the ALEC customers with the distribution of

¹ See Exhibit RMB-1, "Statistical Tests for Local Service Parity", Version 1.0, February 6, 1998, Local Competition Users Group.

results that would be observed if ALEC had been drawn at random
from the pool of ALEC and BellSouth customers (see Exhibit RMB-2,
"Permutation Analysis Procedural Steps").

Out-of-parity performance occurs when the z score falls below a pre-specified critical value that depends on the two sample sizes.

Values of z that fall below the critical value are taken as indications of discrimination. The ALECs use a principle called "balancing" to determine the critical value.

Q

IS MODIFIED Z AN APPROPRIATE COMPONENT OF THE STATISTICAL METHODOLOGY FOR MAKING PARITY

DETERMINATIONS?

A. Yes. Experience with BellSouth's raw data confirms that the modified z statistic is an appropriate and effective component of the methodology for parity determinations. In its August 31, 1998 order in Docket No. U-22252-C, the Louisiana Public Service Commission required BellSouth to give ALECs access to raw data that underlies BellSouth's reports.² In that proceeding, Dr. Colin Mallows, an AT&T statistician, was able to receive and work with at least some of BellSouth's performance data in order to assess the performance of the statistical test.³ The ability to look at and analyze data is critical to

² Order, In re: BellSouth Telecommunications, Inc., Service Quality Performance Measurements, Docket No. U-22252, Subdocket C, August 31, 1998.

³ Pursuant to a protective agreement, BellSouth provided some of its raw data associated with four measures it includes in its SQM. The measures for which Dr. Mallows received

determining the appropriate statistical test; one cannot be assured that the data characteristics are properly accounted for in the statistical methodology unless one can observe the data and how it behaves over time. The Louisiana Public Service Commission's order provided the opportunity for Dr. Mallows to actually see raw data and, thereby, confirm and refine the statistical methodology. Dr. Mallows analysis of the raw data confirmed that the modified z statistic is an effective component of the methodology for parity determinations.

Α.

Q. WHAT IS THE CRITICAL VALUE AND WHY IS IT IMPORTANT?

The critical value is used, along with the modified z, to determine whether the performance for a particular measure is considered to be in violation. As the modified z statistic is defined in the ALEC plan, negative values of modified z provide evidence than an ALEC's customers are receiving worse service than the corresponding CLEC customers, with large negative numbers providing the most evidence. The value of the modified z statistic is compared with a pre-specified negative number, called the critical value. If modified z is more negative than the critical value, then the measure is determined to be in violation. Otherwise, the measure is not determined to be in violation, even though service for the ALEC customers may have been worse than service received by the retail customers.

some raw data were: Order Completion Interval, Maintenance Average Duration, Missed Repair Appointments, and Missed Installation Appointments.

1	Q.	PLEASE EXPLAIN THE CONCEPT OF "ERROR" IN CONNECTION
2		WITH STATISTICAL TESTING.
3	A.	Because statistical tests are based on finite amounts of data, they are
4		subject to error. For tests of parity, there is some chance that a
5		measure will be determined in violation when, in fact, the two
6		processes were in perfect parity (i.e., any difference was purely due to
7		random variation). Likewise, when the two processes are out of parity
8		such that the ALEC's customers receive systematically worse service,
9		there is a chance that the statistical test will fail to find the measure in
10		violation, again due to random variation.
11		
12	Q.	WHAT IS A TYPE I ERROR?
13	A.	A Type I error occurs if the statistical test indicates that BellSouth is
14		favoring its retail operations when, in fact, parity service exists. Type I
15		errors occur because of random variation.
16		
17	Q.	WHAT IS A TYPE II ERROR?
18	A.	A Type II error occurs if the statistical test fails to indicate that
19		BellSouth is favoring its retail operations when, in fact, a certain
20		degree of disparity does exist. Like Type I errors, Type II errors occur
21		because of random variation. In contrast to Type I errors,
22		determination of the probability of a Type II error requires specification

1		of an alternative hypothesis that quantifies the degree of service
2		disparity.
3		
4	Q.	HOW DOES THE CHOICE OF THE CRITICAL VALUE AFFECT
5		TYPE I AND TYPE II ERRORS?
6	A.	The critical value trades off between the probabilities of Type I and
7		Type II errors. A large negative critical value holds down the
8		probability of a Type I error, but allows the probability of a Type II error
9		to grow larger. A less negative critical value keeps down the
10		probability of a Type II error but allows the probability of a Type I error
11		to grow. Put simply, a large negative critical value reduces the
12		possibility of determining noncompliance when BellSouth is in fact
13		providing parity service, while less negative values reduce the
14		possibility of determining BellSouth is compliant when in fact they are
15		providing noncompliant support.
16		
17	Q.	WHAT IS A BALANCING CRITICAL VALUE AND HOW IS IT
18		DETERMINED?
19	A.	The balancing critical value method explicitly accounts for the
20		probabilities of both Type I and Type II errors. The basic concept is to
21		equate the probability of a Type I error (under parity) with the
22		probability of a Type II error for a specified alternative hypothesis.
23		

1	Q.	HOW SHOULD THE ALTERNATIVE HYPOTHESIS FOR THE
2		BALANCING METHOD BE DETERMINED?
3	A.	The alternative hypothesis should describe the minimum degree of
4		disparity that constitutes a material impact on competition. The
5		balancing method recognizes that small degrees of disparity may not
6		significantly hinder competition, and thereby do not require protection
7		for the ALECs. However, the degree of disparity specified by the
8		alternative hypothesis should not exceed the minimum amount that
9		would constitute a material impact on competition because doing so
10		would deny the ALECs adequate protection against that degree of
11		discrimination.
12		
13	Q.	HOW IS A BALANCING CRITICAL VALUE DETERMINED?
14	A.	Once the alternative hypothesis has been specified, a balancing
15		critical value (BCV) is set by equating the probabilities of Type I and
16		Type II errors. The degree of disparity can be specified in terms of a
17		parameter "delta."
18		
19		Issue 11. a. What is the appropriate methodology that
20		should be employed to determine if BellSouth is providing
21		compliant performance to an individual ALEC? (Tier 1)
22		c. What is the appropriate structure?
23		2. What is the appropriate parameter delta, if any?

1		5. Should there be a floor on the balancing critical
2		value?
3		
4		Issue 12. a. What is the appropriate methodology that
5		should be employed to determine if BellSouth is providing
6		compliant performance to an individual ALEC? (Tier 2)
7		c. What is the appropriate structure?
8		2. What is the appropriate parameter delta, if any?
9		5. Should there be a floor on the balancing critical
10		value?
11		
12	Q.	WHAT IS THE PARAMETER "DELTA" AND WHY IS IT
13		IMPORTANT?
14	A.	The parameter delta defines the degree of violation of parity (i.e., the
15		alternative hypothesis) for which the probability of Type II error is
16		balanced against the probability of Type I error under parity. Delta
17		specifies the difference between the ALEC mean and the BellSouth
18		mean. To account for the fact that performance measures do not
19		share a common scale, the difference between the ALEC and
20		BellSouth means is stated as delta times the standard deviation for
21		BellSouth customers. For example, suppose that the measure Order
22		Completion Interval has a mean of 5.0 days and a standard deviation
23		of 6.0 days for BellSouth customers. Then a delta of 0.25 would yield

1		an alternative hypothesis that the true mean for ALEC customers is
2		6.5 days (5.0 + 0.25 x 6.0).
3		
4	Q.	HAS A VALUE OF THE DELTA PARAMETER BEEN AGREED
5		UPON?
6	A.	No, the ALEC's and BellSouth's statisticians agree on the principle of
7		balancing Type I and Type II errors, but they have not agreed on a
8		value for the delta parameter. The balancing critical value
9		development is incomplete until the value of the delta parameter is
10		specified.
11		
12	Q.	WHY HAS THE DETERMINATION OF THE DELTA PARAMETER
13		NOT BEEN RESOLVED?
14	A.	Resolution of this question cannot be based solely on a theoretical
15		statistical analysis. Ideally, this decision should be based on business
16		judgment, namely by determining the smallest violation of parity that is
17		"material." The parameter delta measures the size of this violation.
18		Once delta is chosen, the formula makes proper allowance for the
19		effect of the sample size. When delta is large, the balancing occurs at
20		a more extreme degree of observed disparity. BellSouth wants a
21		large delta because this means a smaller probability of Type I error
22		and hence, larger probability of Type II errors for any given degree of
23		true disparity. The ALECs want a value of delta that protects them

against any degree of disparity that would pose a material obstacle to competition. If the parameter delta is set too high—such that some smaller violation would present a material obstacle to competition—then the balancing principle would be violated.

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6 Q. WHAT VALUE OF DELTA DO THE ALECS PROPOSE AND WHAT 7 DOES THAT VALUE IMPLY?

The ALECs propose that this Commission adopt 0.25 or less as the parameter delta value for all submeasures. To understand the implications of this and various alternative values of delta, consider what they imply for the counted performance measures. Consider a counted measure indicating a particular service problem that is triggered for 1 percent of BellSouth's own customers. Column 1 of Table 1 (below) shows that the degree of disparity quantified by delta equal to 0.25 implies that 5.0% of ALEC customers would encounter the same problem; that is, the ALEC rate is five times the BellSouth rate. Subsequent rows of the same column show the problem rates for ALEC customers implied by a delta of 0.25 for problems that affect 5, 10, or 20 percent of BellSouth customers. The ALECs judge that disparities of this size pose material obstacles to competition. Therefore, delta should be no more than 0.25. Any larger value of delta would require even greater disparities before balancing takes

1 place. For example, for a problem that occurs for 1 percent of 2 BellSouth customers, a delta value of 0.50 would not balance until the 3 ALEC rate reached 11.8%, nearly a twelve-fold increase. These disparities are highlighted in Table I. 4 5 6 Table 1

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Percentage of ALEC Customers Receiving Bad Service, by BellSouth Percent and Delta

	Delta		
BellSouth Percent	0.25	0.50	1.00
1.0	5.0	11.8	31.9
5.0	11.8	21.0	44.0
10.0	18.7	29.3	53.6
20.0	30.8	42.8	67.4

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Q. WHAT ARE THE CONSEQUENCES IF DELTA IS SET TOO

12 LARGE?

⁴ The table assumes use of arcsin square root transformation to stabilize the variance of proportions. Using this function, transformed proportions have a nearly constant variance across the range of possible true proportions.

A. Suppose that delta is set substantially above the minimum value that represents material impact on competition for a particular measure. Then the ALECs will face greater risk of a Type II error in the face of disparity constituting material impact than BellSouth would face of at Type I error under parity. In other words, proper balancing would not occur. This problem would be magnified for large sample sizes, because balancing can produce unconventionally large, negative critical values. For example, with samples sizes of 2,500 and 250 for BellSouth and a ALEC, respectively, a delta equal to 0.50 yields a balancing critical value of -3.77, corresponding to a Type I error probability of 0.00008 (i.e., 1 in 12,000), far below any conventional significance level used in statistical testing. A delta equal to 1.00 13 would yield a balancing critical value of -7.54, corresponding to a microscopically small Type I error probability. Consequently, 15 compelling statistical evidence of discrimination, e.g., a z score of -16 6.0, might be ignored. Such an outcome would be justified only if one 17 could be certain that delta had not been set too large. If delta is set 18 too large (e.g., delta greater than 0.25), a floor value for the BCV 19 might then be needed. With a delta of 0.25 or less, as recommended 20 by the ALECs, a floor value should be unnecessary.

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Q. WHAT DO ALECS RECOMMEND THAT THIS COMMISSION ORDER CONCERNING THE STATISTICAL METHODOLOGY?

1	A.	I here are two things that should be included in the Commission's
2		order. First, ALECs propose that the Modified Z be the statistic used
3		for making parity determinations. Second, ALECs propose that this
4		Commission order the parameter delta value be set no higher than
5		0.25 for all submeasures.
6		
7	Q.	WHEN THE DELTA VALUE FOR THE BALANCING CRITICAL
8		VALUE IS ESTABLISHED, WILL THE ALECS BE SATISFIED THAT
9		THE RECOMMENDED STATISTICAL METHODOLOGY WILL
10		ACCURATELY EVALUATE BELLSOUTH'S PERFORMANCE?
11	A.	Although no perfect methodology for this purpose can be created, I
12		believe that the methodology proposed by the ALECs will be fair to
13		both sides. We expect to monitor how the methodology works in
14		"production mode", when very large amounts of data are being
15		analyzed. AT&T's statistician will monitor how the methodology works
16		after implementation and will make recommendations for
17		improvements, if necessary.
18		
19	Q.	DOES THAT CONCLUDE YOUR TESTIMONY?
20	A.	Yes.

1	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
2	A.	My name is Robert M. Bell. My business address is AT&T Labs-
3		Research, 180 Park Avenue, Florham Park, New Jersey 07932.
4		
5	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
6	A.	My testimony responds to certain portions of the direct testimony of Dr.
7		Edward Mulrow and describes errors in Exhibit DAC-6 filed by Mr. David
8		Coon. The greatest part of my testimony discusses problems with an
9		example that Dr. Mulrow uses to illustrate how the parameter delta should
10		be specified.
11		
12	Q.	HOW SHOULD THE COMMISSION EVALUATE ALTERNATIVE
13		VALUES FOR THE PARAMETER DELTA REQUIRED TO SET A
		VALUES FOR THE PARAMETER DELIA REGUIRED TO SET A
14		BALANCING CRITICAL VALUE?
14 15	Α.	
	A.	BALANCING CRITICAL VALUE?
15	A.	BALANCING CRITICAL VALUE? Any particular value of the parameter delta implies a specific degree of
15 16	A.	BALANCING CRITICAL VALUE? Any particular value of the parameter delta implies a specific degree of departure from parity between the service received by ALEC customers
15 16 17	A.	BALANCING CRITICAL VALUE? Any particular value of the parameter delta implies a specific degree of departure from parity between the service received by ALEC customers and BellSouth's retail customers. Deciding on the appropriateness of a
15 16 17 18	Α.	BALANCING CRITICAL VALUE? Any particular value of the parameter delta implies a specific degree of departure from parity between the service received by ALEC customers and BellSouth's retail customers. Deciding on the appropriateness of a particular value of delta for a measure should be based on a judgment
15 16 17 18	Α.	BALANCING CRITICAL VALUE? Any particular value of the parameter delta implies a specific degree of departure from parity between the service received by ALEC customers and BellSouth's retail customers. Deciding on the appropriateness of a particular value of delta for a measure should be based on a judgment about the impact that the corresponding disparity of service would have on

1	Q.	ON PAGES 18-19 OF HIS DIRECT TESTIMONY, DR. MULROW
2		PRESENTED AN EXAMPLE TO ILLUSTRATE THE EFFECTS OF TWO
3		DIFFERENT VALUES OF DELTA FOR A SPECIFIC MEASURE.
4		PLEASE SUMMARIZE THIS EXAMPLE?
5	A.	Dr. Mulrow performs calculations for a measure, time to provision a
6		dispatched retail order, which he assumes has a mean of 5.0 days and
7		standard deviation of 0.5 days for BellSouth's customers. He states that a
8		delta of 1.0 implies that the minimum difference between the ALEC and
9		BellSouth means that would be material equals one-half the BellSouth
10		standard deviation (0.25 days or 6 hours). He writes that a delta of 1
11		"means that as long as the average time taken to provide the relevant
12		service to the ALECs did not exceed the BellSouth mean (5 days) plus
13		one-half of the standard deviation I mentioned (half a day), the difference
14		would not be material. That is, if the mean for the ALECs for this period
15		were 5.25 days or less, the difference would not be material." (p. 18, lines
16		15-19). This leads to the question, "Is it material that BellSouth took 6
17		hours longer over a five-day period on average to provide service to the
18		ALEC than to its own retail services?" (p. 19, lines 6-8). A corresponding
19		calculation for delta equals 0.5 led to the question "Is it material that
20		BellSouth took 3 hours longer, on average?" (p. 19, lines 8-9).
21		
22		
23		

Q. IS DR. MULROW'S EXAMPLE USEFUL?

No. There are two problems with the example that result in the statement of misleading questions about material impact. First, Dr. Mulrow incorrectly includes a factor of one half in his calculation of the difference implied by any value of delta. Second, he assumes an implausibly small value for BellSouth's standard deviation for the time-to-provision measure. Consequently, he understates the resulting disparity by a factor of 20 or more.

Α.

Α.

Q. WHAT WAS THE FIRST PROBLEM WITH THE EXAMPLE AND WHY IS IT IMPORTANT?

Dr. Mulrow argues that the parameter delta should be set so that the minimum material difference equals 0.5 x delta x BellSouth's standard deviation. Including the factor of one-half violates the balancing principle because balancing occurs when the true difference in means equals delta x BellSouth's standard deviation. The Louisiana joint statistician's report implicitly defines materiality in terms of the alternative hypothesis, "If a standard of materiality is set by stating a specific alternative hypothesis for the test, ...then a critical value can be determined so that the two error probabilities are equal." (Exhibit EJM-1, page 9 of 39). That is, a material difference must be defined as delta x BellSouth's standard deviation (the difference between the BellSouth mean and the ALEC mean under the alternative hypothesis). If delta is set incorrectly, so that a difference of

one-half that size is material, then proper balancing does not occur. The probability of a Type II error when there is a difference corresponding to one-half delta remains at 50 percent, no matter how low the Type I error falls.

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Q. WHAT WAS THE SECOND PROBLEM WITH THE EXAMPLE AND WHY IS IT IMPORTANT?

Dr. Mulrow's example assumed that BellSouth's standard deviation was 0.5 days—only one-tenth the average time to provision. Because distributions for waiting times tend to have long tails (i.e., some customers may take 30 days or more to provision), these measures would be expected to have standard deviations that exceed their means. For example, in a later example, Dr. Mulrow assumes that the standard deviation of the interval for providing service to BellSouth's retail analog is 4 days, compared with a mean of only 3 days. Real data demonstrate the same relationship (see "Qwest Performance Results (ROC 271 PID 2.0," December 21, 2000). Page 54 of the report shows monthly summary data for the measure OP-4A, "Installation Interval (Average Days) - Dispatches within MSAs" for residences. For nine of the ten reported months (January to October 2000), the CLEC standard deviation exceeds the CLEC mean (the report does not report standard deviations for Qwest customers). The ratios of the standard deviations to the means range

1	from 0.91 to 1.66 with a median of 1.19. Similar results hold for
2	dispatches outside MSAs (measure OP-4B).
3	Consider the consequence of using a more realistic, but still conservative,
4	standard deviation of 5 days in Dr. Mulrow's example. In that cases, a
5	delta of 1.0 would imply a difference of 5 days between the ALEC and
6	BellSouth means—20 times larger than the 6 hours calculated by Dr.
7	Mulrow. Based on the improved calculation, delta equal to 1.0 implies that
8	as long as the average time taken to provide the relevant service to the
9	ALECs did not exceed 10 days, the difference would not be material.
10	The following table shows the correct degree of disparity associated with
11	various values of delta (assuming BellSouth's standard deviation equals 5
12	days). For example, delta = 0.50 (second row from bottom) implies a
13	difference of 2.5 days, so that balancing occurs with for an alternative
14	hypothesis that the ALEC mean equals 7.50 days. Note that the
15	disparities stated in Dr. Mulrow's testimony actually correspond to delta
16	values of 0.025 and 0.05.
17	

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Degree of Disparity Associated with

Selected Values of Delta

Delta	Disparity (in days)	ALEC Mean (in days)
0.025	0.125	5.125
0.05	0.25	5.25
0.10	0.50	5.50
0.25	1.25	6.25
0.50	2.50	7.50
1.00	5.00	10.00

Disparity = difference in means implied

by Delta (Delta x 5 days)

ALEC Mean = ALEC Mean under alternative

hypothesis (BellSouth mean + Disparity)

- 9 VALUE CONCLUDING, "BELLSOUTH WOULD BE PAYING A
 10 PENALTY EVEN THOUGH THE FOUR-DAY THRESHOLD THAT
 11 ACTUALLY REPRESENTS A MATERIAL DIFFERENCE HAS NOT
 12 BEEN MET IN THE FOURTH SET OF OBSERVATIONS." (PP. 21-22).
- 13 DO YOU AGREE WITH HIS CONCLUSION?

Α. No. In the line that Dr. Mulrow cites, the balancing critical value is -12.35. Consequently, unequivocal evidence of non-parity with z scores of -8, -10, or even -12 would fail to trigger a remedy. This decision would only be justified if we could be assured that the observed difference did not hinder competition. However, setting delta is not an exact science. There is no magic point at which disparities suddenly become material. Even if there were, we could not identify that point with any certainty. Consequently, a floor on the balancing critical value provides some protection against failing to trigger a remedy in the face of unequivocal, material disparity for measures with large samples, when delta has been set too high. If delta is set at 0.50 or higher, this risk is clear enough that a floor on the balancing critical value should be used. Although the same danger theoretically exists for delta = 0.25, the value used in the joint ALEC plan, the danger is sufficiently small, at current samples sizes, so that I do not anticipate a floor would be necessary. Even at current sample sizes, however, a delta of 0.50 or 1.00 would be problematic.

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Q. DOES TRUNCATED Z PREVENT PARITY SERVICE IN SOME CELLS FROM CONCEALING DISCRIMINATION IN OTHER CELLS?

A. No. The truncation step, setting $Z_j^* = \min(0, Z_j)$, is designed to keep a single cell where the ALEC's customers receive much better than parity service from canceling out poor service in other cells. However, it does not prevent parity, or better, service in a large number of cells from

concealing very poor service in other cells. Suppose that BellSouth provides very poor service in a few cells (e.g., modified z scores extreme enough to rule out random variation as the explanation) and parity service in other cells being aggregated. The more parity cells that are included the greater the chance is that truncated z will not be significant. The reason is that each cell that is in parity tends to increase the expected value of the truncated z statistic (high values are take as evidence of parity). In addition, each cell that is in parity decreases the balancing critical value that truncated z must fall below to be judged significant. Similarly, parity service in just a few large cells can conceal very poor service in much smaller cells because the truncated z statistics weights the modified z scores according to sample sizes in the cells. This feature of truncated z is not a flaw in the procedure, but it can result in unintended consequences if very heterogeneous cells are aggregated.

Q.

Α.

PROCEDURE, ON PAGES 4-6 OF EXHIBIT DAC-6, CORRECT?

No. The ILEC sample sizes for cells 1-10, which are not provided, would be required to validate exactly the modified z, truncated z and balancing critical values. However, there is enough information available to prove that the balancing critical values shown in the tables are wrong by as much as a factor of 70. The tables all report balancing critical values of –

ARE THE CALCULATIONS ILLUSTRATING THE SEEM REMEDY

0.21. However, for Order Completion Interval (p. 5), if the total ILEC

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- Doctor Bell, attached to your prefiled direct Q testimony, were there two exhibits labeled RMB-1 and RMB-2?
 - Α Yes, there were.
- Did you have any exhibits attached to your rebuttal 0 testimony?
 - Α No.
 - Q Have you prepared a summary of your testimony?
- Yes, I have. Α
 - Would you provide the Commission with a summary of your Q testimony?

Α Yes. Good morning, Mr. Chairman and Commissioners. I am going to summarize the testimony that I provided on statistical components of the joint ALEC and BellSouth plans. I will do my best to use plain English. But if I get too technical, please interrupt me for clarification.

The statistical tests used to determine compliance require decisions about several steps in the procedure. Fortunately, both sides agree on several decisions, use of modified z in large samples and permutation analysis for small samples, as well as use of the balancing critical value methodology.

I will focus this morning on the two most important areas of disagreement, aggregation and the value for delta which is used to set balancing critical values. I'm not here to tell

the Commission what to do, but instead to provide guidance on how to evaluate both side's proposals on these two crucial decisions.

Both plans disaggregate in order to produce like-to-like comparisons. Unlike the JALEC plan, BellSouth uses a method called truncated z to combine large numbers of cells into a single z score that is compared against a balancing critical value. I support use of truncated z as a method for aggregation of homogeneous groups of cells. However, aggregation methods, including truncated z, should not be used to aggregate heterogeneous cells. For example, for services that involve distinct delivery processes.

The reason is that aggregation using truncated z can mask discrimination that would be unequivocal in the absence of aggregation resulting in no remedy payment being used when aggregation is used. No remedy payment being made when aggregation is used. Doctor Ford's rebuttal testimony provided a good example of how severe discrimination for xDSL service might be masked by aggregation with POTS service.

Let me turn to setting the parameter delta. Balancing equates two types of errors, what we call Type I error, deciding that BellSouth has discriminated when, in fact, it is providing parity service. And Type II error, deciding that BellSouth provides parity service when, in fact, there is a systematic disparity of a certain size.

The parameter delta is used to specify the size of that

disparity for which the Type II error is being balanced. This disparity should equal the minimum difference that is judged to be a material obstacle to competition.

Now, the last two days you have heard a lot about delta in abstract terms. Despite that, you do not need to just pick a value of delta out of thin air. In my testimony I have consistently stated that the best way to evaluate alternative values of delta is to look at what they imply for specific measures. I presented the table that is on the easel to my right as Table 1 in my direct testimony to help put the meaning of delta into real terms.

Consider the highlighted row, which would apply to any measure where BellSouth's proportion is .05, or about five percent. To give the row some meaning, suppose that it refers to missed installation appointments. In other words, BellSouth for its own customers misses five percent of installation appointments. The last three columns of the table show the ALEC percentage under the alternative hypothesis that is applied by delta values of .25, .5, and 1.0. For example, a delta of .25 implies that Type I errors would be balanced against Type II errors when the ALEC percentage is 11.8 percent, more than double the rate of misses for BellSouth customers.

If you judge that this size of a disparity is material, then delta should be set no larger than .25 for this particular measure, and perhaps it should be lower.

A value of delta equal to .50 would be justified only if you judge that an ALEC value of 20 percent, that is a four-fold increase in the rate of missed appointments is immaterial. The reason I say 20 percent is that a value of .50 for delta implies balancing at a value of 21 percent. So that we are saying that a value of 20 percent is not material.

A delta equal to 1 would be justified only if the minimum material disparity was about a nine-fold increase. I urge you to also review the table that I present in my rebuttal testimony with a similar example for a mean measure, specifically the time to provision a dispatched residential order. Review of examples like these is the basis for the JALEC recommendation that delta be set no higher than .25. Thank you.

MR. PRESCOTT: The witness is available for questions. Any cross? ALECs?

MR. McGLOTHLIN: I have a few questions relating to the differences in approach taken by Doctor Bell and Doctor Ford.

And for a point of reference, I just want to put up another poster on the easel.

CROSS EXAMINATION

BY MR. McGLOTHLIN:

Q Doctor Bell, in your prefiled testimony and in your summary you alluded to the balancing critical value methodology. Is it fair to state that both you and Doctor Ford are both concerned with the impact of high values of BCV, or balancing

1	critical val	ue, on the significance level of the statistical
2	test?	
3	Α	Yes, I am.
4	Q	Now, is it true that the value of balancing critical
5	value, the	numerical result, is a function of the choice of
6	delta?	
7	Α	Yes.
8	Q	And the higher the delta value, the higher the
9	balancing	critical value, correct?
10	А	That is correct.
11	Q	And the higher the balancing critical value, the
12	greater the impact on the significance level of the test?	
13	Α	Could you restate that last
14	Q	The higher the BCV, the greater the impact on the
15	significand	ce level of the test?
16	Α	Well, the higher the balancing critical value, the
17	lower wou	ld be the Type I error, which is also often known as the
18	significand	ce level.
19	Q	And what is the import of that? What do you mean by a
20	lower sign	ificance level, or lower Type I rate, why does that
21	matter?	
22	Α	A Type I error occurs if BellSouth is providing parity
23	service an	d the test judges they are not providing parity
24	service.	
25	Q	All right. Now, balancing critical value also is a

function of ALEC sample size, is that correct? 1 2 Α Yes. And the larger the sample size, the larger the 3 Q balancing critical value? 4 5 Α Yes. And, again, the lower the significance level or error 6 Q rate, correct? 7 8 Α That is correct. I want to take just a moment and perhaps ask you why 9 0 that is the case. We have behind you the formula for the 10 11 calculation of the Mod z test. And at a very conceptual level, 12 do I understand it correctly that the z score is calculated by 13 first measuring the difference of the means, which are the two X values in the numerator, you find the difference in the means 14 between the ILEC and the ALEC, and then you divide by a function 15 16 which is a calculation of standard deviation, correct? 17 Α Yes. MR. LACKEY: Just a moment. Before he answers that 18 question, I want to object to this line of cross. I know it may 19 be difficult to tell, but this is friendly cross. Mr. 20 McGlothlin's witness has testified in deposition which has been 21 admitted to this record that the only point they disagree on is 22 the selection of delta. And now we have gone the discussion of 23 delta, which is where Mr. McGlothlin started, and off on a 24 different tangent. And as I said, this is nothing but friendly 25

cross, I object to it going on any further. 1 MR. McGLOTHLIN: Well, counsel is mistaken. The 2 difference between the two witnesses is that Doctor Ford proposes 3 4 to have delta vary with sample size, whereas Doctor Bell does 5 not. And we are at issue on that aspect of the choice of delta. And this is simply a quick background to ask Doctor Bell some 6 questions about that difference. 7 CHAIRMAN JACOBS: It has been represented then that you 8 are simply qualifying your line of questioning by this --9 10 MR. McGLOTHLIN: That is correct. CHAIRMAN JACOBS: And you are not really -- proceed 11 with your questions. 12 13 MR. LACKEY: As long as he is talking about delta, 14 that's fine, I just couldn't see it. 15 CHAIRMAN JACOBS: You guys are getting me way out there trying to rule on this kind of an objection. Go ahead. 16 17 BY MR. McGLOTHLIN: 18 Q Is it true, Doctor Bell, that in calculating the z score one divides the difference of the means by a value which is 19 20 a function of ALEC sample size? 21 Yes. Α 22 Now, standard deviation measures the extent to which Q data vary from and around the mean, is that correct? 23 24 Α Yes. Now, is it true that if you have a larger population, 25 Q

as the size of the population increases, the extent of variability away from the mean decreases?

A If you are talking about the measure itself, no. The standard deviation for the population, which is -- or the standard deviation for the sample, which is S sub B in that formula, does not change. What would change is the standard deviation of a sample mean, which is often referred to as a standard error.

Q All right. So as the standard deviation decreases with population, standard deviation of the mean -- that as the population increases, the standard deviation of the mean would decrease, correct?

A As the size of the sample -- as the size of the ALEC or ILEC sample increases, yes.

Q In simpler terms, do I understand correctly that as you increase sample size of the ALEC, you tend to decrease the size of the denominator in the ratio that is used to calculate the z score?

A Yes.

Q All right. So that is why as sample size increases, the balancing critical value increases because balancing critical value is a form of a z score?

A I wouldn't say that it is a form of a z score. The balancing critical value is increasing in some sense at an inverse rate with that denominator. In fact, it has the same

1	functiona	l form. There is a piece of the balancing critical
2	value tha	t looks exactly like the formula that is there in the
3	square ro	oot. And, in fact, it is also in the denominator at the
4	balancing	g critical value.
5	Q	So we have identified two factors that each of which
6	independ	ently tends to increase balancing critical value, right,
7	and delta	is one of those and sample size is the other?
8	А	Yes.
9	Q	Now, you have chosen you propose a delta of .25,
10	have you	not, sir?
11	Α	Yes.
12	Q	And would it be fair to conclude that one reason for
13	that choi	ce is to restrain the impact of the choice of delta on
14	the resul	ting balancing critical value?
15	А	I would say no to that. The reason that the JALECs
16	propose	a value of .25 or less is tied to the issue of
1 <i>7</i>	materiali	ty and how large of a difference between the JALEC mean
18	and the -	- between the ALEC mean and the BellSouth mean would be
19	judged to	o be a material impact on competition.
20	Q	All right. I thank you for that correction on your
21	part. Bu	t would it be fair to say that the effect of that choice
22	would have some limiting effect on the size of balancing critical	
23	value rel	ative to a larger delta choice?
24	А	Yes.
25	Q	You have not chosen to build into the statistical

1	analysis any adjustment for sample size, is that correct?
2	A That is correct.
3	Q Would you agree that even
4	A Excuse me. You mean in the specification of delta?
5	Q That is correct.
6	A That is correct.
7	Q Would you agree that even with a delta of .25 relative
8	to larger ones, the resulting balancing critical value can reach
9	very large values with sample sizes that one would expect to
10	encounter in operation?
11	A Well, I don't I haven't seen the sample sizes that
12	are, in fact, existing, so I can't say that the balancing
13	critical values get large for the sample size that might occur.
14	But there certainly are sample sizes that would lead to very
15	large balancing critical values.
16	Q All right. While you have not individually proposed to
17	vary delta as sample size, do you think it would be appropriate
18	to incorporate some adjustment mechanism to vary delta with
19	sample size so that the balancing critical values do not become
20	extremely large?
21	A As I stated in my direct testimony and perhaps the
22	rebuttal, and also in deposition, I am concerned about what can
23	happen, first of all, if a value of delta is chosen that really
24	is too large. In the example that I had up there, if a value
25	if the appropriate value of delta to calibrate materiality is

.25, but a value is chosen that was .5 or 1, I'm concerned about the impact that has in terms of Type II errors where the probability of not finding discrimination is too large. And that problem is -- that problem is particularly evident at large sample sizes where you could have a situation where there is very strong evidence that parity is not existing, but the test itself still does not find BellSouth out of compliance. So, I stated I am concerned about that.

The JALEC plan does not call for the use of either a floor on the balancing critical value or changing the balancing critical value as a function of delta because the JALECs did not feel that the concern about a value of delta being too large was enough at the particular sample sizes that were likely in order for that to become an issue. However, there certainly could be situations in the future where there are larger sample sizes, or if there was a larger value of delta chosen for some reason, I can definitely see merits in either the floor or changing delta as a function of sample size.

MR. McGLOTHLIN: Those are all my questions.

CHAIRMAN JACOBS: Very well. Mr. Lackey.

MR. LACKEY: Thank you, Mr. Chairman.

CROSS EXAMINATION

23 BY MR. LACKEY:

- Q Doctor Bell, my name is Doug Lackey.
- A Good morning.

- Q I am an attorney representing BellSouth. I understand that you have a Ph.D in statistics and are actually working on a day-to-day basis as a statistician, is that correct?
 - A Yes, that is correct.
- Q And I want to ask you a little bit now about what documents you are familiar with in this case. Are you familiar with the Louisiana statisticians report attached to Doctor Mulrow's testimony as his Exhibit 1?
 - A Yes. I am familiar with it, yes.
 - Q When is the last time you read it?
- A I can't say that I have ever read it from cover to cover. I reviewed pieces of it last week in preparation for my deposition, although what I believe I did was I looked specifically more at places that I maybe had not read previously.
- Q And have you reviewed Mr. Coon's testimony and the exhibits attached to his testimony to see how BellSouth's enforcement plan is going to work as proposed in this case?
- A I reviewed a fraction of his testimony. What I tried to do is review pieces that were related to the statistical testing aspects. I did not review pieces related to the measures. And I reviewed just some of what was related to the remedy payments.
- Q But you have reviewed that part that has allowed you to understand how BellSouth intends to use statistics in the application of its plan, is that correct?

1	improper,	is that correct?
2	А	That is correct.
3	Q	Now, let's talk about delta for a moment. You will
4	agree that	setting delta is not an exact science, correct?
5	А	Yes.
6	Q	And you will agree that there is no magic point at
7	which disp	arities suddenly become material, correct?
8	А	Yes.
9	Q	And you will agree that ideally the decision about what
10	the level o	f delta should be should also be a business judgment,
11	correct?	
12	Α	Yes.
13	Q	Okay. Now, were you here yesterday when Doctor Mulrow
14	testified?	
15	Α	Yes, I was.
16	Q	And were you here specifically during my redirect of
17	him at the	end of his testimony?
18	Α	I believe so. I don't recall what
19	Q	Do you recall that I asked him whether BellSouth would
20	start payin	g penalties when the observed difference between the
21	means rea	ched one-half delta?
22	Α	I believe I recall that.
23	Q	And do you recall that his answer was yes?
24	A	Yes.
25	Q	Do you disagree with that response?

A No.

Q So just so we are clear and everybody understands that whatever delta is selected here, as soon as the observed disparity reaches one-half delta, BellSouth is going to start paying penalties, correct?

A As soon as the observed difference reaches one-half delta. I think the more relevant issue is -- has to do with the actual disparity that would be observed if there was no sampling error. And the idea of balancing is that we are trying to determine -- in picking delta we are trying to determine a delta that defines a material difference, and we are trying to balance the Type I and Type II errors.

In other words, at that material difference which is specified by delta, we would like for the probability of finding BellSouth in compliance to be the same as the probability of finding BellSouth out of compliance if, in fact, they were providing parity.

And the problem about talking about delta over 2 is that although remedies begin when the observed difference is the same as delta over 2, balancing does not occur at that point. Instead of the Type I and Type II errors being the same at delta over 2, the Type II error is approximately one-half, so there is as good a chance if the true -- if the true difference is at that value of delta over 2, there is as good a chance of not finding anything as finding anything. So we don't want to set what the

Commission determines to be a material difference at delta over 1 2, instead we want to set it at delta. 2 3 Well, thank you for that, but the answer to my question Q was yes? 4 5 Α Yes. Thank you. Now, we have agreed -- I mean, the 6 Q 7 BellSouth statisticians and the ALEC statisticians agree that the 8 principle of balancing, critical value balancing should be applied, right, in this case? 9 10 Α Yes. And that is in opposition to something called the fixed 11 Q 12 critical value approach, is that correct? 13 Α Yes. 14 And what this means is is that the balancing critical Q 15 value can float, it can change with sample size and that sort of thing, correct? 16 17 Α Yes. 18 But with the fixed critical value, you just pick a Q 19 number like minus 1.64, and any observed or any calculated statistics that is smaller than that or greater than that -- I 20 21 get confused about my minus signs -- is a violation, right? Yes. More extreme is the way I like to put it. That 22 Α way you don't have to worry about whether it is plus 1.6 or minus 23 24 1.6. Just so we are clear, what I was trying to say is if 25 Q

1	the fixed	critical value is minus 1.64, a violation would occur
2	at minus 2?	
3	Α	Correct.
4	Q	It moves away from zero, correct?
5	А	Yes.
6	Q	Now, one of the problems with a fixed critical value is
7	that in lar	ge sample sizes a fixed critical value might tend to
8	trigger re	medies associated with very small actual differences,
9	correct?	
10	Α	That's correct. That is one of two problems with it,
11	the other	being at small sample sizes.
12	Q	Okay. Now, at least one of the parties in this
13	proceedin	g has recommended a floor on the balancing critical
14	values, co	rrect?
15	Α	Yes.
16	Q	And what that means is that instead of letting the
17	balancing	critical value float according to sample size, that
18	when you	get to a specific level, say minus 3, continuing my
19	example,	that the critical balancing value would become fixed and
20	would not	change anymore, is that correct?
21	A	That is correct.
22	Q	So in that case if a floor is implemented, basically
23	the critica	l balancing value becomes a fixed critical value,
24	correct?	
25	Δ	I mean, that is sort of semantics as to whether to call

1 1	it a fixed	critical value. I think that would be a confusing
2	term.	
3	Q	Well, it's the same thing. I mean, it's minus 3 and it
4	doesn't c	hange anymore. That's what I define as fixed.
5	А	Well, I mean, I guess if one was a little bit more
6	explicit to	o say it is fixed for sample sizes beyond some limit.
7	Q	Okay. Now, let's talk about that chart we have been
8	looking a	t for a day and a half now. It has disappeared. Can I
9	get it put	back up there. This is your chart, right?
10	А	Yes, it is. It's out of my direct testimony.
11	Q	Now, I'm probably going to get this wrong, so you may
12	have to h	elp me. But there has got to be at least three
13	different	kinds of measures, a means difference, a proportional
14	test mea	sure, and a rates measure, is that right?
15	A	Yes.
16	Q	Okay. And the means measure simply measures the
17	differenc	e between the ALEC mean and the ILEC mean, right?
18	Α	Well, that is a piece of it.
19	Q	That is what is implicated in a means measure, right?
20	Α	Yes.
21	Q	You are measuring the difference between two averages?
22	Α	That is correct.
23	Q	Okay. And then a proportional measure is one where
24	like you h	nave on the board, something is 5 percent of something
25	else, or s	omething is 30 percent of something else, correct?

1	Α	Correct.
2	Q	And then the rates test, an example would be the number
3	of trouble	reports per central office would be a rates measure,
4	something	like that?
5	Α	I don't think it would be per central office, but maybe
6	it would be	e, I don't know. It would be the number of trouble
7	reports pe	r something.
8	Q	Like number of trouble reports per hundred or something
9	like that, h	nundred access lines?
10	Α	Yes.
11	Q	Now, you will agree with me, won't you, that what you
12	have got on that chart is a involves a proportion measure,	
13	correct?	
14	А	That is correct.
15	Q	Now, isn't it true that in BellSouth's application of
16	statistical techniques and methods to its enforcement plan that	
17	it did not	use delta in connection with its proportion measures?
18	А	That is correct.
19	Q	So what you have got up there on that chart that is
20	labelled	that has BellSouth's name on it and delta on it does
21	not represent what BellSouth is proposing in this proceeding,	
22	does it?	
23	А	It does not represent what they are proposing for
24	proportion	n measures.
25		MR. LACKEY: That's all I have. Thank you, Mr.

1 Chairman.

CHAIRMAN JACOBS: Staff.

CROSS EXAMINATION

BY MR. FUDGE:

- Q Good morning, Doctor Bell.
- A Good morning.
- Q Do you have an opinion as to the appropriate criteria for determining the appropriate level of disaggregation?

A Yes, I do. The truncated z was developed as a means for summarizing results from a number of different cells, or submeasures, whatever you want to call them, where there is an expectation that what is being measured in each of the cells is fairly homogeneous. Not necessarily perfectly homogeneous. And what I mean when I say what is being measured is the degree of disparity.

It's not a good way to look at a situation where in some cells there may well be -- you would expect that there might be large discrimination in other cells, there might be no discrimination or discrimination in the opposite direction. So that my criteria would be that one would want to aggregate together cells where there was a reasonable expectation that the degree of disparity was relatively constant in all of the cells, and that would suggest to me that one would not want to aggregate cells that had different processes, so to speak, where the service provision was being given in different ways or perhaps by

proposed a value because that is not part of our plan.

Q Is it true that no witness has prefiled testimony on the issue of how to set the value of psi?

A My understanding is that -- I am not aware of anything in the BellSouth plan that does present a value.

Q Would you agree that for small sample sizes compliance for measures with retail analogs should be determined using a permutation test for mean measures and the hypergeometric test, also known as Fisher's Exact Test, for proportionate rate measures?

A I agree that a permutation test should be done for mean measures, and that the hypergeometric, which is a form of permutation test, should be done for proportion measures. For ratio measures, I don't know if the hypergeometric would apply, but there would be a form of permutation test that could be used.

Q Would you agree that for small sample sizes compliance for measures with benchmarks should be determined using the adjustment table for a 95 percent confidence interval?

A I don't believe so. My understanding is, but I'm not certain about this, is that the benchmarks were set at a level that allowed for a certain amount of variation below the ideal level. And this is evidenced by the fact that the BellSouth plan does not call for the use of statistical methods for sample sizes in excess of 30. That is my understanding is that they do not call for statistical methods for sample sizes above 30.

So under this understanding, I don't believe there is a need for statistical methods for sample sizes under 30, although I do agree with the chart that is in the JALEC plan for allowing for essentially rounding up of the number of successes.

Q Would you agree that for purposes of a performance enforcement plan balancing Type I and Type II errors is more critical with small sample sizes than with larger sizes?

A Well, I think to some extent for reasons that I was talking about before, that there are issues that arise at large samples that mean that balancing has some -- has some limitations at large samples that doesn't arise in small samples. So, the answer is yes.

Q In BellSouth's proposed penalty payment mechanism, do you agree that the penalty is based on some estimate of the number of discriminatory transactions?

A No, I don't.

Q All right. Does BellSouth propose to estimate the total number of transactions that did not receive parity service or only the portion of transactions for which disparate service was detected?

A I know you have read this about four times already, but can you do it one more time for me.

Q Sure. Would you agree that BellSouth's plan only proposes to estimate the number of discriminatory transactions while only looking at the portion of transactions for which

1 disparate service was detected?

A What their plan does, I think, certainly does not provide a measure of the number of transactions that are above the number of failures, let me say that are above and beyond parity. I also don't really think it gives a measure of the number that are in excess of compliance, but in some sense it comes closer to that in the follow sense, that if there is — suppose that we are looking at something like missed installations, and the BellSouth percentage is five percent. And let's suppose that however one gets to that, that the decision that they are out of compliance begins at ten percent. So that if for any particular sample we observe 6, 7, 8, or 9 percent in the ALEC sample, that would be judged to be in compliance, but if we observed something in excess of 10 percent it would be judged to be out of compliance.

Let's suppose that we observed a number that was just bigger than 10 percent, like 10.1 percent. The way they compute the parity gap and the affected volume, that affected volume would be very, very small. And as the proportion of ALEC failures gets closer and closure to 10 percent, the affected volume gets closer and closer to zero.

What that says to me is that what the affected volume is measuring is not how big the excess is of ALEC failures to BellSouth failures, which in this case would be five percent of cases, but it is saying something about how much above the cutoff

for BellSouth being found in compliance are they. So that if that is what your question was asking, the latter part of your question was asking about, I think it's closer to that, but even so I don't think it really is a measure of that.

CHAIRMAN JACOBS: Is there is anyway to refine that? Because it sounds like what you have to do is figure out either a better benchmark or a better sensitivity analysis, I guess.

THE WITNESS: Well, I think that what is purported to be affected volume is not affected volume. And that in my particular example that if one really wanted an affected volume it would be something that subtracted the number of BellSouth failure rate from the ALEC failure rate. But I'm not sure that that would really lead to a coherent remedy payment, because one would need to be sure that that was jibing with the transaction amounts that are used to multiply the affected volume. And I don't understand the justification for those at all, so it's not clear to me how to fix the problem that I see with the affected volume calculation.

BY MR. FUDGE:

- Q Are you familiar with Mr. Coon's Exhibit 6 where he provides calculations for various Tier-1 remedies?
 - A Yes.
- Q So are you saying that you do not know how the calculations need to be changed to estimate the total number of transactions that did not receive parity service?

know that there really is a right answer for what the affected

volume should be without understanding the entire calculation, which includes the factor for -- the per unit factor. In the first table there is \$100 per unit, and the real question is what is that unit and what should it be.

CHAIRMAN JACOBS: One of the things -- I'm trying to remember which testimony it was, and it may be totally out of context, but if I recall I believe it was Ms. Marsh's testimony that said at this point you begin to apply some factors, and one of the factors is how long these volumes have been affected and how critical they are to development of competition. Is there a way to get that into this? And this is purely hypothetical, and I don't even know if it works into the formula at this point. But if we come to a point such as this and we are trying figure out -- it sounds like what we are trying to figure out is, okay, we know that there is some disparity, it sounds like.

THE WITNESS: Yes.

CHAIRMAN JACOBS: And now we are trying to figure out whether or not that disparity is significant enough to want to pay attention to it in some way, form, or fashion. And what I understood the rationale would be is then what you want to do is figure out to what extent it -- it has been happening with some level of frequency.

THE WITNESS: Yes.

CHAIRMAN JACOBS: And to what extent it disrupts the emerging competition. That is a very fungible, tangible kind of

a thing, but this seems more esoteric. Is it possible to do some level of blending here to have that reflected in the result that we achieve?

THE WITNESS: Well, I mean, it certainly might be possible. What I'm saying is that I don't understand the rationale of their calculation which they call affected volume, which seems to me to not in any sense be a real attempt to define a number of cases that were in violation. I don't understand the rationale of that and how they came to these numbers like \$100 per unit. And so to try to compute something that I would think could rationally be called an affected volume and then tie it to their dollar amounts doesn't seem like it would necessarily fix the problem.

CHAIRMAN JACOBS: I see.

BY MR. FUDGE:

Q Would you look at Step 4 of the calculations on Mr. Coon's exhibit.

A Yes.

Q Beginning with that step, could you explain whether any changes to that step would need to be made to have the affected volume more accurately reflect the level of disparate service?

A Yes. What this piece of the step computes is something called a parity gap. And the parity gap is equal to the difference between the observed truncated z score and the balancing critical value. So, for instance, let's say that the

balancing critical value was 2 -- was minus 2, and that the 2 truncated z score was for simplicity minus 3. What this does is it computes the difference between those two numbers, which is a 3 4 value of 1, and then in a later step, Step 5 will multiply that 5 by .25. But let's focus in on that difference of 1. It is 6 looking at the difference between the balancing critical value 7 and the truncated z.

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I gave an analogy in the deposition where I said suppose that there was a highway where the speed limit was 65 miles per hour and the highway patrol patrols this highway, but they have a policy of not stopping anybody unless they are going at least ten miles an hour over the speed limit, so unless they are going at least 75 miles per hour. And let's suppose that I make the mistake of going along on this highway at 77 miles per hour and they pull me over. And it turns out that the fine is based upon how fast I was going.

I think it is very unlikely that what they would do is say, well, if you had been going two miles an hour slower we wouldn't have stopped you, so we are going to base your fine on two miles per hour and say multiply that by \$10 and fine you \$20. Instead, I think they would say you were going 12 miles over the speed limit, so you are going to pay 12 times \$10, \$120.

Well, this parity gap calculation to my mind is like saying, well, they were only out of compliance by two miles per hour, that's all they have -- that is all they have to pay for.

A more reasonable calculation to me would say how much out of parity -- now that we have determined that you are out of compliance, how far from parity are you. And that would be something that would be based on the difference between what was observed and parity. In other words, something that would look at the z score directly. And that, in fact, is what the JALEC plan does. It looks at the z score and standardizes it by dividing it by the balancing critical value.

- Q So what would be the parity gap for the example you just gave?
 - A In the example I gave the parity gap is 1.
 - Q But what do you think it should be?

A I wouldn't go through a calculation based on a parity gap. The analogous number I think that should be used instead of 1, I believe is 3, because in standardized units that is the difference between parity and what was observed. I mean, if you are talking about a parity gap, I would assume that should mean a difference between what was observed and parity, and that would be a difference of 3 as opposed to a difference of 1.

Q Following along with your example with the parity gap at 3, would Step Number 5 be appropriate?

A Well, it would seem more appropriate at that point.

But, again, it is part of a whole system, and the rationale -- I

have never seen a rationale for the slope of .25, and exactly how
to determine -- the Step 5 is computing the volume proportion.

How to determine that volume proportion is hard to say.

Q Well, would you agree with your adjustment to Step Number 4 and the parity gap of 3, that the remainder of the calculation would be appropriate? More appropriate?

A Well, I mean, I think my testimony on Step Number 5 was that it didn't necessarily make sense to me, so I'm not sure whether it would make sense to continue.

COMMISSIONER DEASON: Let me ask a question. I'm looking at the exhibit attached to Mr. Coon's testimony, DAC-6.

THE WITNESS: Yes.

COMMISSIONER DEASON: Page 4. Do you have that?

THE WITNESS: Yes.

COMMISSIONER DEASON: I'm trying to understand, are you indicating that the procedure he follows in calculating the parity gap and then dividing that by four is not appropriate and that there should simply be a penalty applied for every instance in which there is a violation, which I think is captured in the column entitled I sub C?

THE WITNESS: I'm not testifying as to what I think an appropriate calculation would be to lead to a transaction-based remedy. My testimony is really about a problem I see in terms of doing a calculation which, in essence, seems to be saying let's pay remedies on the amount above and beyond the limit where we were found out of compliance as opposed to above and beyond parity.

COMMISSIONER DEASON: See, I guess I understand -- and correct me if I'm wrong, because I may very well be, but I understand that the reason for this particular exercise by Mr. Coon is to try to come up with an appropriate remedy amount given that in this example BellSouth itself is missing 9 percent of the time, so we are looking at a disparity between their 9 percent and what is being provided to the ALEC, which is 16 percent.

THE WITNESS: That's right. I'm not saying that all 96
ALEC failures should be paid on. Because if there was parity
there would be some ILEC failure. So I'm not saying that all 96
should be paid on. And, again, because of the problems with this
table, my understanding is that there would be no payments made.
So I don't want to get into too many details on this particular
table because of the problems with it. But, again, I'm not
saying that every ILEC failure is a transaction that should be
paid, just that the formula that is used here does not
necessarily lead to anything approximating a reasonable
definition of affected volume.

COMMISSIONER DEASON: So you don't have a recommended way to improve this?

THE WITNESS: No, I don't. Let me mention one other concern I had about the table, which is that you will notice in the last column there are numbers in seven of the ten rows, and three of the rows have a blank for affected volume. And that

comes about in one of the later steps. I'm not sure, I think it is Step 6 indicates the rule for determining whether or not there should be an entry in the column. I disagree with the rationale for excluding certain cells because those cells -- given that the way they compute the volume proportion takes into account all ten cells, I believe that the affected volume should be computed for all ten cells. In particular, the three cells that are not included there have contributed to a reduction in the volume proportion, and so it seems rational -- it seems mathematically 10 inconsistent to me to exclude them from the computation of 11 affected volume. 12

COMMISSIONER DEASON: But you would agree for those three cells it appears that BellSouth provided a greater degree of service to the ALEC than they provided to themselves.

THE WITNESS: That is correct. However, that has been taken into account by the fact that those three cells would have reduced -- would have made the truncated z less extreme, which would have led to a smaller parity gap and, therefore, a smaller volume proportion. And so BellSouth certainly deserves credit for those three cells, but I believe that they have already received it in the volume proportion, and there is no reason to then use it in the affected volume.

BY MR. FUDGE:

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Doctor Bell, if you look at the second row in that Q table, and you see that the number of ILEC observations is 600,

1	and that t	he number of missed installations is 96. Suppose that
2	there was	a 95 percent benchmark. That would mean that BellSouth
3	would be	able to miss 30 installations, so does that mean that
4	there wou	ld be penalties on the 66 remaining missed
5	installatio	ns?
6	А	So I assume that what you are doing is modifying this
7	example s	o that it is no longer a retail analog. So that we
8	ignore Bel	lSouth data, and we set this as a benchmark where they
9	have to make 95 percent of the installations on time?	
10	Q	Yes.
11	А	Yes. Then the benchmark would under the benchmark
12	you would	expect them to miss only 30, and so there would be an
13	excess of	66.
14	Q	All right.
15	А	Now, that is not that calculation has nothing to do
16	with the JALEC plan.	
17	Q	In the ALECs proposed penalty payment mechanism, do you
18	agree tha	t penalties are based on the presence of discrimination
19	in a particular measure with greater penalties assessed as a	
20	statistical certainty of discrimination increases?	
21	А	Yes.
22	Q	Earlier you were asked by Mr. Lackey about the table
23	that you prepared and whether BellSouth's proposal is accurately	
24	reflected in that table. Do you remember that question?	
25	А	Yes.

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0 Would you please explain how you believe BellSouth's proposal implements the balancing critical value technique for proportion measures?

There is a critical step in -- maybe critical is not Α the right word to use in talking about balancing critical values. There is an essential step in computing the balancing critical value which requires specification of an alternative hypothesis. Let's assume that the BellSouth percentage was five percent. We are going to balance at some ALEC proportion that is assumed to be larger.

There are a number of ways we could come up with that proportion. We could simply specify it based on some knowledge about the business, or we could do it indirectly through a parameter delta that involves a transformation that is described in my testimony, or one could do it, for example, using an odds ratio. If one chose an odds ratio of 2, that would imply an ALEC proportion of almost 10 percent, just slightly less than 10 percent. And then once the alternative hypothesis is determined, the two methods pretty much converge again and would be very similar. Excuse me, once the alternative hypothesis -- yes, they would be very similar.

- Q So are you saying that your table does reflect the methods that you just described?
 - I'm sorry, I couldn't hear. Α
 - Q Are you saying that your table reflects the methods for

using the balancing critical value that you just described?

A No. My table reflects the impact of delta on proportions for the method that the JALECs proposed. It does not reflect the value of psi that might be used in BellSouth's plan. However, I do think it bears some relevance to the BellSouth plan. This same table was presented in Georgia by Doctor Mallows. I believe it was the same table, it may have been. It had slightly different rows.

It was presented by Doctor Mallows for use in helping the Georgia Commission determine a value of delta to be used for means. And I think it does — it can be instructive in that sense, although I will admit that a more appropriate exhibit for understanding the impact of delta for mean measures would be the table that appears and the discussion surrounding it that appears in my rebuttal testimony that looks at a measure called time to provision a dispatched retail or residential order.

Q If your table were to reflect the BellSouth's approach, how would the numbers change?

A Well, the way the table would change is two-fold. Instead of the first row on the right saying delta, it would have an entry called psi, P-S-I, the Greek letter psi. And then under that instead of .25, .5, and 1.0 would be alternative values for the parameter psi. None of these values would make sense for psi. Psi would always be a value greater than 1. So it might have columns for 1.5, 2, and 3. And then the entries in the

1 table would look something like that, but they would all be 2 different than the ones shown here. But the basic format of the table would be similar except delta would be replaced by psi and 3 the values would all change. 4 MR. FUDGE: Thank you, Doctor Bell. 5 CHAIRMAN JACOBS: Questions, Commissioners. Redirect. 6 7 REDIRECT EXAMINATION 8 BY MR. PRESCOTT: 9 Doctor Bell, to your knowledge has the value of psi Q ever been an issue in this docket? 10 11 I have not seen any direct discussion of it. I know Α 12 Doctor Ford mentions it, but I do not believe that he describes a value. Mainly he discusses that there would need to be a 13 decision about it. Doctor Mulrow mentions values of psi, but 14 does not, to my knowledge, advocate any particular value. 15 16 Okay. With respect to the truncated z, is that a Q 17 statistical procedure for determining a test statistic? 18 Α Truncated z is a test statistic, yes. 19 Q And the truncated z operates separate from, would you say, or would you agree that it -- well, does it operate 20 21 separately from the remedy calculation? Is it a separate 22 calculation as opposed to truncated z? 23 Α You mean the remedy calculation? 24 Right. Q 25 The truncated z is separate from the remedy Α

'	calculation. In the JALEC plan, the remedy calculation I m
2	sorry, the JALEC plan does not use truncated z, so we are talking
3	about the BellSouth plan. The BellSouth plan does use the
4	truncated z in its remedy plan specifically in Step 4 of the
5	Exhibit of Mr. Coon's exhibit that we were just talking about in
6	computing the parity gap.
7	Q So there could be a separate remedy calculation used
8	other than the one that is proposed by BellSouth with truncated
9	z?
0	A That's right. I mean, there is this connection that
1	the truncated z from the statistical component is used in the
12	remedy calculation, but each could be done separately.
3	MR. PRESCOTT: Nothing further.
14	CHAIRMAN JACOBS: Very well. Did we mark
5	MR. PRESCOTT: I don't think we marked
16	CHAIRMAN JACOBS: the exhibits, Doctor Bell's
17	exhibits. Why don't we mark Composite Exhibit 27, and those
18	are I think it was the 1 through 2, correct?
19	MR. PRESCOTT: Are we on 27 or 26?
20	MR. CARVER: We are on 27.
21	CHAIRMAN JACOBS: 27. The late-filed was 26, so we
22	will make that Composite Exhibit 27. And without objection
23	MR. PRESCOTT: I would move it into the record.
24	CHAIRMAN JACOBS: show it moved into the record.
25	Thank you, Doctor Bell. You are excused.

1	The next witness, Doctor Ford.
2	(Composite Exhibit 27 marked for identification and
3	admitted into the record.)
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5	(Transcript continues in sequence in Volume 7.)
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1	STATE OF FLORIDA)
2	: CERTIFICATE OF REPORTER
3	COUNTY OF LEON)
4	LIANT FALIDOT, DDD, Chill FDCC Down on & Down of the
5	I, JANE FAUROT, RPR, Chief, FPSC Bureau of Reporting FPSC Commission Reporter, do hereby certify that the Hearing in Docket No. 000121-TP was heard by the Florida Public
6	Service Commission at the time and place herein stated.
7	IT IS FURTHER CERTIFIED that I stenographically
8	reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript, consisting of 184 pages, Volume 6 constitutes a true
9	transcript, consisting of 184 pages, volume o constitutes a true transcription of my notes of said proceedings and the and the insertion of the prescribed prefiled testimony of the
10	witness(s)
11	I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative
12	or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.
13	DATED THIS 2ND DAY OF MAY, 2001.
14	DATED THIS ZIND BAT OF WIAT, 2001.
15	Vine aural
16	JANE FAUROT, RPR FPSC Division of Records & Reporting
17	Chief, Bureau of Reporting (850) 413-6732
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