ORIGINAL

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EX PARTE OR LATE FILED

December 15, 1999

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
The Portals
445 12th St. SW
Washington, D.C. 20554

Re: CC Docket No. 98-56 and CC Docket No. 98-121

Dear Ms. Salas:

This is to inform you that on December 14, 1999 Venetta Bridges and I, representing BellSouth, met with Jake Jennings, John Stanley, and Tony Dale of the Common Carrier Bureau. During the meeting we discussed BellSouth"s revised proposal for voluntary self-effectuating enforcement mechanisms to address Commission concerns about backsliding. We also discussed a proposed methodology for identifying lack of parity in trunk blockage. The attached documents formed the basis for that discussion.

Because the Commission has been considering issues related to performance measurements and standards in both proceedings identified above, we are filing notice of this ex parte meeting in both dockets, as required by Section 1.1206(b)(2) of the Commission's rules. Please associate this notice with the record of both dockets.

Sincerely,

Kathleen B. Levitz

Kathleen B. Levitz

Attachments

cc: Jake Jennings (w/o attachments)
John Stanley (w/o attachments)
Anthony Dale (w/o attachments)

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List ABCDE

BLS Proposal on Voluntary Self Effectuating Enforcement Mechanisms (VSEEM III)

FCC Ex-Parte
12-15-99

Voluntary Self Enforcing Remedies Multi-Tiered Structure

- Tier 1 Enforcement Mechanisms
  - Payments (liquidated damages) directly to the CLEC
  - Triggered by one month of significantly poor performance
- Tier 2 Enforcement Mechanisms
  - Fines paid directly to the state Commission or their designated agency
  - Triggered by significantly poor performance by quarter
- Tier 3 Enforcement Mechanisms
  - Voluntary suspension of additional marketing and sales of LD services
  - Triggered by excessive repeat failures (a "tripwire")

Voluntary Self Enforcing Remedies Background

- How BLS's plan compares
  - Less complex, fewer metrics than BA-NY or SBC-TX
  - Proportionally same $$ at risk (per access line basis)
  - BLS statistical method corrects significant flaws in BA-NY and SBC-TX plans
  - No "forgiveness" plan or offsetting credits

Voluntary Self Enforcing Remedies Individual CLECs and CLEC industry

- Tier 1 (Liquidated Damages)
  - Monthly Assessment at State Level for Individual CLEC
    - State level evaluation is consistent with test statistic
    - State level evaluation takes 'random variation' into consideration
    - State level evaluation will not mask discrimination
  - Parity gap will result in payment to the CLEC operating in negative like-to-like cells (wire center/service)
- Tier 2 (Fines Paid to State)
  - Quarterly Assessment at State Level for CLEC Aggregate
- Tier 3 (suspension of LD authority)
  - Selected sub-measures (12) at the state level.
  - Triggered by repeated failures of the same 5 or more sub-measures for a quarter.

Enforcement Mechanism
(Measurements / Tiers / Retail Analogue or Benchmark)

		VSEEM II						
Process	Measures	Resale POTS	Resale Design	UNE Loop & Port Combo	UNE Loops	IC Trunks	LNP	Other
	Percent Response Received within "X" sec							Tier-2 (B)
	OSS Interface Availability							Tier-2 (RA)
	Order Process Percent Flow-Through							Tier-2 (B)
	FOC Timeliness (Mechanized only)							Tier-1 (B)
	Average Reject Interval (Mechanized only)							Tier-1 (B)
	Order Completion Interval (Dispatch Only)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)		Tier-1 and Tier-2 (RA)		
	Percent Installations Completed within "X" Days				Tier-1 and Tier-2 (B)			
	Percent Missed Installation Appointments	Tier-1, -2 and -3 (RA)	Tier-1, -2 and -3 (RA)	Tier-1, -2 and -3 (RA)	Tier-1, -2 and -3 (B)			
	Percent Provisioning Troubles within 4 Days of Installation	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (B)			
	Customer Trouble Report Rate	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (B)			
	Percent Missed Repair Appointments	Tier-1, -2 and -3 (RA)	Tier-1, -2 and -3 (RA)	Tier-1, -2 and -3 (RA)	Tier-1, -2 and -3 (B)			
	Maintenance Average Duration	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (B)	Tier-1 and Tier-2 (RA)		
	Percent Repeat Troubles within 30 days	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (RA)	Tier-1 and Tier-2 (B)			
	Billing Accuracy							Tier-2 and Tier-3 (RA)
	Billing Timeliness							Tier-2 and Tier-3 (RA)
	Usage Data Delivery Timeliness							Tier-2 (RA)
	Usage Data Delivery Accuracy							Tier-2 (RA)
	Percent Trunk Blockage					Tier-1, -2 and -3 (RA)		
	Disconnect Timeliness						Tier-1 and Tier-2 (B)	
	Percent Missed Installation Appointment						Tier-1 and Tier-2 (B)	
	Coordinated Customer Conversions				Tier-1 and Tier-2 (B)		Tier-1 and Tier-2 (B)	
	Percent Missed Collocation Due Dates							Tier-1, -2 and -3 (B)

LEGEND: RA = Retail Analogue, B = Benchmark

Voluntary Self Enforcement Remedies

TIER-3

EXCESSIVE PROCESS PERFORMANCE FAILURES

- Selected sub-measures (12) at the State Level
- Failures of the same 5 or more sub-measures for a quarter

EXAMPLE:

		TIER-3 FAILURE X = Miss			NOT A TIER-3 FAILURE X = Miss		
Process	Measures	Month 1	Month 2	Month 3	Month 1	Month 2	Month 3
	Resale POTS	X	X	X	X		
	Resale Design	X			X	X	X
	UNE Loop & Port Combo		X				
	UNE Loops	X	X	X			
	Resale POTS	X	X	X	X		X
	Resale Design		X	X		X	
	UNE Loop & Port Combo					X	X
	UNE Loops				X		
	Billing Accuracy	X	X	X			
	Billing Timeliness				X	X	X
	Percent Trunk Blockage	X	X	X			
	Percent Missed Collocation Due Dates						

Voluntary Self Enforcement Remedy Plan

- PERFORMANCE STANDARDS
  - Parity for analogous products, processes, service
  - Benchmark where no analogues exist
- DETECT POTENTIAL DISCRIMINATION
  - Overall Test Statistic (Truncated Z) Computed to ensure Type I and Type II Errors are balanced
  - Minimizes concern around random variation while,not masking discrimination
- PAYMENTS
  - Made at the cell level (Cells test similar products at the wire center level to get Like - to - Like samples - concept approved by FCC statisticians)
- ESCALATING REMEDIES
  - Magnitude of Failure - Addressed utilizing the z-value and balancing critical value. The further z deviates from the balancing critical value, the higher the penalty that is paid.
  - Repeat Failures
    - VSEEM fee schedule increases month-over-month if failures repeat

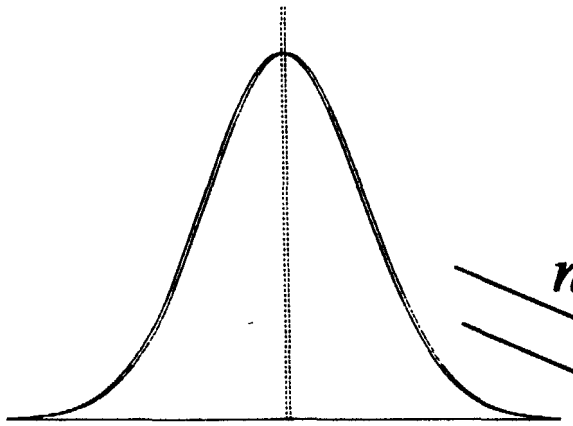
Statistical Determination of Parity

- PARITY
  - Statistical Testing required to determine parity
    - Overall Test Statistic using the Truncated-Z Test for Rates and Proportions
    - Overall statistic using the Aggregated Adjusted-Z for Means and Averages
  - Balancing Critical Value
    - Computed to ensure Type I and Type II Errors are balanced
    - Used (with z-value) to assess the Magnitude of a Failure
- OVERALL TEST STATISTICS
  - Minimizes concern around random variation while not masking discrimination

What About "Significance" ?

2 Normal Distributions

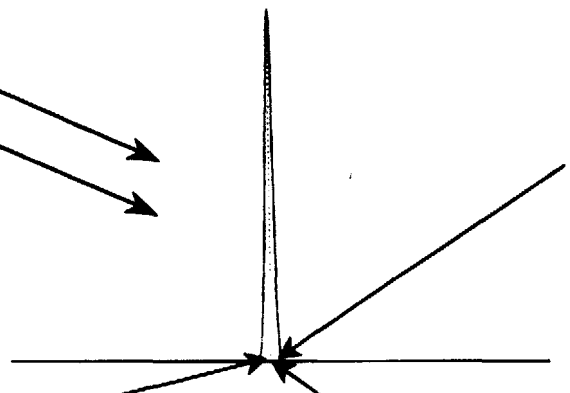
With large enough sample sizes, even tiny differences can be statistically significant.



$\mu_1 = 1$ $\mu_2 = 1.05$

n_1, n_2 large

Distribution of $\bar{x}_1 - \bar{x}_2$



0

Example: Percent Missed Repair Appointments
BST = 5% and CLEC 5.05%

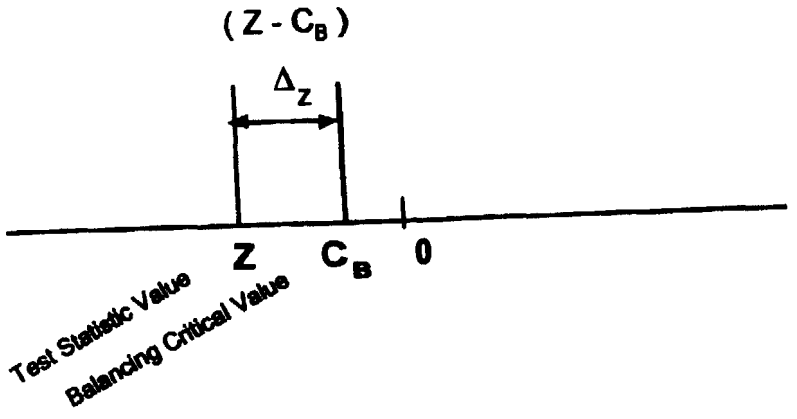
$\mu_{\bar{x}_1 - \bar{x}_2} = -0.05$

significant gap $> 2\sigma_{\bar{x}_1 - \bar{x}_2}$

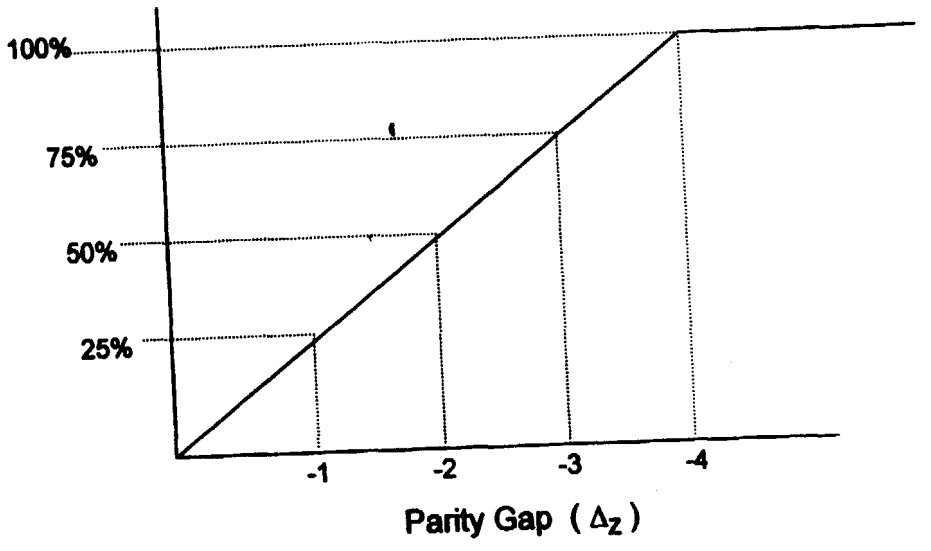
Enforcement Mechanism

Volume Payment Variables

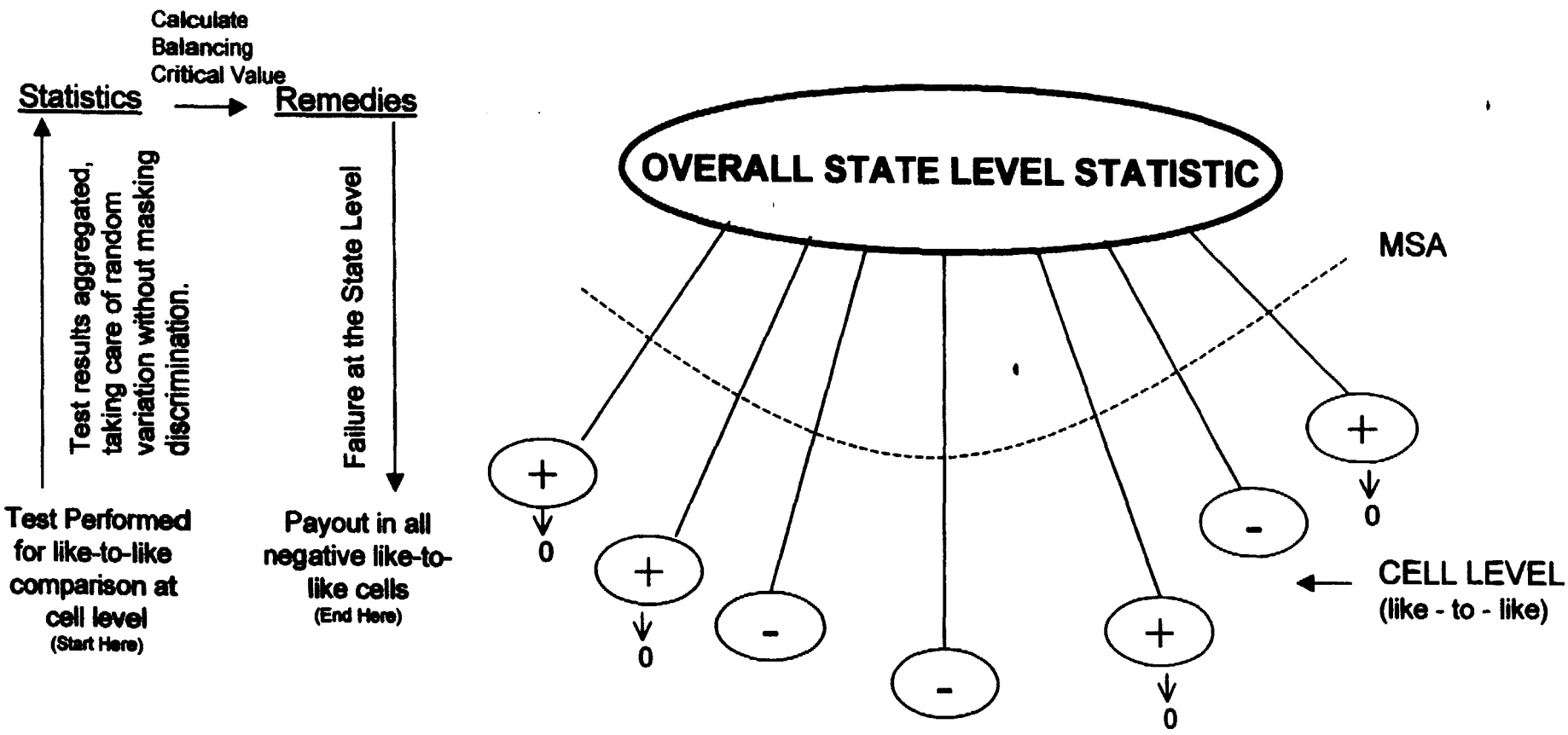
Parity Gap



Volume Proportion



Remedy Payout Diagram



Legend: + = Performance favored CLEC
- = Performance favored BST

Enforcement Mechanisms Proposal Fee Schedule

Tier-1

PER ITEM PER CLEC

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Ordering	$40	$50	$60	$70	$80	$90
Provisioning POTS	$100	$125	$175	$250	$325	$500
Provisioning UNE (incl Coordinated Customer Conversions)	$400	$450	$500	$550	$650	$800
Maintenance	$100	$125	$175	$250	$325	$500
Maintenance UNE	$400	$450	$500	$550	$650	$800
Trunk Blockage/100 calls	$150	$250	$500	$600	$700	$800
LNP	$150	$250	$500	$600	$700	$800
Collocation	$5,000	$5,000	$5,000	$5,000	$5,000	$5,000

Tier-2

PER ITEM

Pre-Ordering	$20
Ordering	$60
Provisioning POTS	$300
Provisioning UNE	$875
Maintenance POTS	$300
Maintenance UNE	$875
Billing	$1
Trunk Blockage/100 calls	$500
LNP	$500
Collocation	$15,000

Remedy State Caps (annual)

- (Tier-1 plus Tier-2 by state)

– AL	$17M	MS	$11M
– FL	$56M	NC	$23M
– GA	$36M	SC	$11M
– KY	$10M	TN	$23M
– LA	$21M		

- Regional Total $208M

Voluntary Self Enforcing Remedies Individual CLECs and CLEC industry

- Tier 1 (Liquidated Damages)
  - Monthly Assessment at State Level for Individual CLEC
    - State level evaluation is consistent with test statistic
    - State level evaluation takes 'random variation' into consideration
    - State level evaluation will not mask discrimination
  - Parity gap will result in payment to the CLEC operating in negative like-to-like cells (wire center/service)
- Tier 2 (Fines Paid to State)
  - Quarterly Assessment at State Level for CLEC Aggregate
- Tier 3 (suspension of LD authority)
  - Selected sub-measures (12) at the state level.
  - Triggered by repeated failures of the same 5 or more sub-measures for a quarter.

VSEEM III	*MEASURES AND SUB-METRICS*	Retail Analogue	Benchr
Pre-Ordering	Percent Response Received within "X" seconds		x
	OSS Interface Availability	x	
Ordering	Percent Flow-Through Service Request		x
	Firm Order Confirmation Timeliness (Mechanized only)		x
	Reject Interval (Mechanized only)		x
Provisioning	Order Completion Interval (Dispatch only) – Resale POTS	x	
	Order Completion Interval (Dispatch only) – Resale Design	x	
	Order Completion Interval (Dispatch only) – UNE Loop and Port Combinations	x	
	Order Completion Interval (Dispatch only) – IC Trunks	x	
	Percent Installations Complete within "X" Days – UNE Loops		x
	Percent Missed Installation Appointments – Resale POTS	x	
	Percent Missed Installation Appointments – Resale Design	x	
	Percent Missed Installation Appointments – UNE Loop and Port Combinations	x	
	Percent Missed Installation Appointments – UNE Loops		x
	Percent Provisioning Troubles within 4 Days - Resale POTS	x	
	Percent Provisioning Troubles within 4 Days - Resale Design	x	
	Percent Provisioning Troubles within 4 Days - UNE Loop and Port Combinations	x	
	Percent Provisioning Troubles within 4 Days - UNE Loops		x
[illegible]	Customer Trouble Report Rate – Resale POTS	x	
	Customer Trouble Report Rate – Resale Design	x	
	Customer Trouble Report Rate - UNE Loop and Port Combinations	x	
	Customer Trouble Report Rate - UNE Loops		x
	Percent Missed Repair Appointments – Resale POTS	x	
	Percent Missed Repair Appointments - Resale Design	x	
	Percent Missed Repair Appointments - UNE Loop and Port Combinations	x	
	Percent Missed Repair Appointments - UNE Loops		x
	Maintenance Average Duration – Resale POTS	x	
	Maintenance Average Duration – Resale Design	x	
	Maintenance Average Duration - UNE Loop and Port Combinations	x	
	Maintenance Average Duration - UNE Loops		x
	Maintenance Average Duration – IC Trunks	x	
	Percent Repeat Troubles within 30 Days – Resale POTS	x	
	Percent Repeat Troubles within 30 Days – Resale Design	x	
	Percent Repeat Troubles within 30 Days - UNE Loop and Port Combinations	x	
	Percent Repeat Troubles within 30 Days - UNE Loops		x
[illegible]	Invoice Accuracy	x	
	Mean Time To Deliver Invoices	x	
	Usage Data Delivery Accuracy	x	
	Usage Data Delivery Timeliness	x	
Trunk [illegible]	Trunk Group Service Report (Percent Trunk Blockage)	x	
[illegible]	Average Disconnect Timeliness Interval		x
	Percent Missed Installation Appointments		x
[illegible]	Coordinated Customer Conversions – UNE Loop		x
	Coordinated Customer Conversions – LNP		x
[illegible]	% of Due Dates Missed		x

NOTE: Benchmarks will be available by 12/17/99

BST VSEEM REMEDY PROCEDURE

TIER-1 CALCULATION:

1. Calculate the test statistic for each CLEC at the State Level; z_{CLEC_1} (See Exhibit C)
2. Calculate the balancing critical value($^{C}B_{CLEC_1}$) that is associated with the alternative hypothesis (that the CLEC mean does not exceed the ILEC mean by no more than $100\delta_B$% of an ILEC standard deviation; where, δ_B is fixed). (See Exhibit C)
3. If the State test statistic is equal to or falls above the State balancing critical value, stop here. Otherwise, go to step 4.
4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1.; $z_{CLEC1} - {}^{C}B_{CLEC_1}$
5. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by taking the absolute value of the Parity Gap from step 4. divided by 4; ABS(($z_{CLEC1} - {}^{C}B_{CLEC_1}$) / 4). All parity gaps equal or greater to 4 will result in a volume proportion of 100%.
6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total $CLEC_1$ Volume in the negatively affected cell; where the cell value is negative. (See Exhibit C)
7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-1 payment = Affected $Volume_{CLEC1}$ * $$ from Fee Schedule

Example: CLEC-1 Missed Installation Appointments (MIA) for UNE Loops

	n_I	n_C	MIA_I	MIA_C	Z	C_B	Parity Gap	Volume Proportion	Affected Volume
State	50000	600	9%	16%	-1.92	-0.21	1.71	0.4275	
Cell									
1		150	0.091	0.112	-1.994				64
2		75	0.176	0.098	0.734				
3		10	0.128	0.333	-2.619				4
4		50	0.158	0.242	-2.878				21
5		15	0.245	0.075	1.345				
6		200	0.156	0.130	0.021				
7		30	0.166	0.233	-0.800				13
8		20	0.106	0.127	-0.065				9
9		40	0.193	0.218	-0.918				17
10		10	0.160	0.235	-0.660				4
									133

where n_I = ILEC observations and n_C = CLEC-1 observations

Payout for CLEC-1 is (133 units) * ($400/unit) = <u>$53,010</u>

Exhibit D

TIER-2 CALCULATION:

1. Calculate the test statistic for the CLEC Aggregate at the State Level using all transactions from the calendar quarter; z_{CLECA}

2. Calculate the balancing critical value($^{C}B_{CLECA}$) that is associated with the alternative hypothesis (that the CLEC mean does not exceed the ILEC mean by no more than $100\delta_B$% of an ILEC standard deviation; where, δ_B is fixed).

3. If the State test statistic is equal to or falls above the State balancing critical value for three consecutive months, stop here. Otherwise, go to step 4.

4. Calculate the Parity Gap by subtracting the value of step 2. from that of step 1.; $z_{CLECA} - {}^{C}B_{CLECA}$

5. Calculate the Volume Proportion using a linear distribution with slope of ¼. This can be accomplished by dividing the Parity Gap from step 4. by 4; $((z_{CLECA} - {}^{C}B_{CLECA}) / 4)$. All parity gaps equal or greater to 4 will result in a volume proportion of 100%.

6. Calculate the Affected Volume by multiplying the Volume Proportion from step 5. by the Total $CLEC_A$ Volume (CLEC Aggregate) in the negatively affected cell; where the cell value is negative (See Exhibit C).

7. Calculate the payment to CLEC-1 by multiplying the result of step 6. by the appropriate dollar amount from the fee schedule.

So, CLEC-A payment = Affected $Volume_{CLECA}$ * $$ from Fee Schedule

Example: CLEC-A Missed Installation Appointments (MIA) for UNE Loops

State	n_I	n_C	MIA_I	MIA_C	Z	C_B	Parity Gap	Volume Proportion	Affected Volume
Quarter1	180000	2100	9%	16%	-1.92	-0.21	1.71		
Cell									
1		500	0.091	0.112	-1.994				214
2		300	0.178	0.098	0.734				
3		80	0.128	0.333	-2.619				34
4		205	0.158	0.242	-2.878				88
5		45	0.245	0.075	1.345				
6		605	0.156	0.130	0.021				
7		80	0.186	0.233	-0.600				34
8		40	0.106	0.127	-0.065				17
9		165	0.193	0.218	-0.918				71
10		80	0.160	0.235	-0.660				34
									492

where n_I = ILEC observations and n_C = CLEC-A observations

Payout for CLEC-A is (344 units) * ($875/unit) = <u>$430,172</u>

Exhibit D

Appendix B. Trunk Blocking

This Appendix describes how the trunk blocking data can be processed to apply the Truncated Z Statistic. Trunk blocking is defined as the proportion of blocked calls a trunk group experiences in a time interval. It is a ratio of two numbers—blocked and attempted calls, both of which can vary over time and across trunk groups. Since the measure is a proportion where the numerator is a subset of the denominator, the truncated Z statistic, modified for proportions, can be applied here (see Appendix A).

As with other performance measures, data are first assigned to like-to-like cells, and the Z statistic is then computed within each cell. For trunk blocking, cells are defined by three variables: hour, day, and trunk group size or capacity. The next sections will describe the data and the data processing steps in greater detail.

Data Sources

Two data files are processed for the trunk blocking measure. One is the Trunk Group Data File that contains the Trunk Group Serial Number (TGSN), Common Language Location Identifier (CLLI), and other characteristics needed to categorize trunk groups and to identify them as BellSouth or CLEC.

The other file is the Blocking Data File (BDF), which contains the actual 24 hour blocking ratios for each weekday. There are 4 or 5 weeks in a monthly report cycle. The current system, however, allows the storage of daily blocking data by hour for a week only. Therefore, the data elements necessary to compute the Truncated Z must be extracted each week.

Two important data fields of interest on the Blocking Data File are the Blocking Ratio and Offered Load. The basic definition of Blocking Ratio is the proportion of all attempted calls that were blocked. For the simplest case of one way trunk groups, this is computed by dividing the number of blocked calls by the total call attempts, given that the data are valid. If they are not valid (e.g., actual usage exceeds capacity), blocking is estimated via the Neal Wilkinson algorithm.

Although the raw data--blocked calls (overflow) and peg counts (total call attempts)--are available, the calculation of the Blocking Ratio may be complicated for two-way trunk groups and trunk groups with invalid data. For this reason, we use the blocking ratios from the BDF instead of computing the ratios from the raw data. In order to reflect different call volumes processed through each trunk group, however, the blocking ratios need to be either weighted by call volume or converted to blocked and attempted calls before they are aggregated.

The measure of call traffic volume recommended for weighting is Offered Load. Offered Load is different from call counts in that it incorporates call duration as well. Since it is

not just the number of calls but the total usage—number of calls multiplied by average call duration--that determines the occurrence of any blocking, this pseudo measure, Offered Load, appears to be the best indicator of call volume.

Cells or comparison classes are determined by three factors—hour, day, and trunk group capacity (number of trunks in service). The first two factors represent natural classes because trunk blocking changes over time. The third factor is based on our finding that high blocking tends to occur in small trunk groups. A pattern was found not only in the magnitude of blocking but also in its variability. Both the magnitude and variability of blocking decrease as trunk group capacity increases. Additional work is needed to establish the appropriate number of capacity levels and the proper location of boundaries.

Data Processing

The data are processed using the five steps below:

1. Merge the two files by TGSN and select only trunk groups listed in both files.
2. Reset the blocking of all high use trunk groups to zero[1].
3. Assign trunk group categories to CLEC and BellSouth: Categories 1, 3, 4, 5, 10, and 16 for CLEC and 9 for BellSouth[2]. The categories used here for comparison are:

Category	Administrator	Point A	Point B
1	BellSouth	BellSouth End Office	BellSouth Access Tandem
3	BellSouth	BellSouth End Office	CLEC Switch
4	BellSouth	BellSouth Local Tandem	CLEC Switch
5	BellSouth	BellSouth Access Tandem	CLEC Switch
9	BellSouth	BellSouth End Office	BellSouth End Office
10	BellSouth	BellSouth End Office	BellSouth Local Tandem
16	BellSouth	BellSouth Tandem	BellSouth Tandem

4. Recode the missing data. The Blocking Data File assigns all missing data (no valid measurement data) zero blocking. To differentiate true zero blocking from zeroes due to missing data, invalid records were identified and the ratios reset to missing. The blocking value was invalid if both the number of Loaded Days and the Offered Load were 0 for a given hourly period.
5. Form comparison classes based either on the data (i.e., quartiles) or on a predetermined set of values.

[1] The high use trunk groups cannot have any blocking. These are set up such that all overflow calls are automatically routed to other trunk groups instead of being physically blocked.
[2] More detailed information on all categories is described in a report 'Trunk Performance Report Generation' by Ernst & Young (March 1999).

Calculation of the Proportion of Blocked Calls

Each cell is determined by day of the month, hour of the day, and trunk group capacity. To use the Truncated Z method, we generate summary information, to include the total number of blocked calls and the total number of attempted calls, for each cell.

For the details of each calculation step, the following notation is used. For a given hour of a day, let $\overline{X}_{1ij}$ be the proportion of BellSouth blocked calls for trunk group i in cell j and $\overline{X}_{2ij}$ be the corresponding proportion for CLEC. Then $\overline{X}_{1ij} = X_{1ij} / n_{1ij}$ where X_{1ij} denotes the number of BellSouth blocked calls and n_{1ij} denotes the number of BellSouth total call attempts (indicated by Offered Load) for trunk group i in cell j. Likewise, $\overline{X}_{2ij} = X_{2ij} / n_{2ij}$. For the steps outlined below, only the CLEC notation is provided.

1. Compute the number of blocked calls for trunk group i: $X_{2ij} = \overline{X}_{2ij} * n_{2ij}$
2. Compute total call attempts for all trunk groups in the cell: $n_{2j} = \sum_i n_{2ij}$
3. Compute mean blocking proportion for cell j: $\overline{X}_{2j} = \sum_i X_{2ij} \Big/ \sum_i n_{2ij}$
4. Compute the total number of BellSouth and CLEC blocked calls in cell j: $t_j = \sum_i X_{1ij} + \sum_i X_{2ij}$
5. Apply the Truncated Z Statistic for Proportion measures presented in Appendix A.