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**PROPOSED**  
**VERIZON PERFORMANCE PLAN**  
**FOR THE STATE OF FLORIDA**

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# VERIZON PERFORMANCE PLAN

## I. SUMMARY

Verizon Florida Inc. ("Verizon FL") offers this proposal for a Performance Plan for Florida ("Florida Plan"). The proposed Florida Plan is a self-executing financial incentive plan that will ensure that Verizon FL provides quality wholesale services to competitive local exchange carriers ("CLECs"). The Plan places at risk an annual total of \$10 Million in the first year, \$15 Million in the second year and \$20 Million in the third year. With the opening of Docket No. 00121-TP on February 1, 2000, the Florida Public Service Commission commenced its investigation into establishing Operations Support Systems ("OSS") permanent performance measures for Incumbent Local Exchange Companies ("ILECs"). In the March 30, 2000 workshop, Verizon FL presented an appropriate set of performance measures that should be used to gauge Verizon FL's compliance with its obligation to provide nondiscriminatory service to new entrants. In the subsequent August 8, 2000 workshop held in this docket, Verizon FL put forth key characteristics of an effective remedy proposal. The Florida Plan, as presented here, is consistent with Verizon FL's preference for implementing a comprehensive performance measures plan including a self-executing remedy mechanism.

The Florida Plan uses one of two methods for calculating incentive amounts when Verizon FL's performance does not meet the applicable metrics/standards. For most measures, incentive amounts are computed on a "per unit" basis, which provides for incentive amounts to each CLEC that received sub-standard service, in an amount based on the volume of sub-standard service transactions for each affected CLEC. For a few measures, where assessing incentive amounts on a "per unit" basis is not feasible, if Verizon FL's performance does not

meet the applicable metric/standard, a pre-established total dollar amount is allocated among affected CLECs.

Both the “per unit” and the “per measure” incentive amounts increase as the degree by which a standard is missed increases. The severity of a performance standard miss is categorized as “Minor,” “Moderate”, or “Major” based on the magnitude of a miss.

In addition, both the “per measure” and the “per unit” incentive amounts increase with the duration of a miss. The incentive amounts for a measure for which the standard is missed for three or more consecutive months will be two times the amount that would be due if the standard had been missed for one or two months.

## **II. MEASURES/METRICS INCLUDED IN THE PLAN**

The proposed incented performance measures for Florida are based on the California performance measures and are displayed in the FCC format. The Florida Plan covers a broad range of measures from the Pre-Ordering, Ordering, Provisioning, Maintenance, Network Performance, Billing, Operator Services & Databases, and General categories. Measures in the Florida Plan are compared against one of two types of standards. For measures of wholesale services for which there is a comparable Verizon FL service, the standard will be parity. For wholesale services with no comparable Verizon FL service, performance will be compared with a benchmark standard.

Appendix A provides a list of the 124 incented measures included in the Florida Plan. Measures that are not incented are considered to be duplicative or have a close correlation that would result in multiple incentive amounts being paid for the same process failure.

### **III. INCENTIVE AMOUNT DETERMINATION**

For each measure/metric included in the Florida Plan, Appendix A lists and indicates whether incentive amounts are computed on a “per unit” or a “per measure” basis. The methods of calculating corresponding incentive amounts are illustrated by way of examples in Appendix B.

#### **A. Per Measure and Per Unit Incentive Amounts**

For each “per unit” measure, incentive amounts are calculated as follows:

- The number of affected units is determined by multiplying the number of measured units for the CLEC in that month by the difference between Verizon’s actual performance for the CLEC and the applicable standard.
- Incentive amounts are then calculated by multiplying the number of affected units by a fixed dollar amount per unit that corresponds to the magnitude of the difference between the standard and actual performance.

For the few measures for which the per unit calculation is not feasible (because, for example, all CLECs are affected), an incentive amount is assigned to each measure. If the standard is missed, this amount will be allocated among all affected CLECs.<sup>1</sup>

For parity measures based on interval data (averages), if the Z score is less than -1.645, the extent of noncompliance is determined by comparing the number of CLEC customers exceeding the Verizon FL 70<sup>th</sup> percentile with the number expected (30%) under parity. The affected units are multiplied by a fixed dollar amount. More details can be found in Appendix B.

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<sup>1</sup> For example, if Verizon FL missed the standard for an electronic pre-order query response time measure, only those CLECs submitting this type of pre-order query through the electronic interface would be allocated incentive amounts. The incentive amount would be allocated to affected CLECs based upon lines in service.

## **B. Severity of the Miss**

Each month, Verizon FL's performance for each measure will be compared to the applicable standard. The severity of each miss will be categorized as "Minor," "Moderate" or "Major." The amount of the incentive amount increases with the magnitude of the miss.

### **Performance Differences for Absolute Standards**

For measures with absolute (benchmark) standards, where performance does not meet the applicable standard, the severity of the miss is determined by the difference between the standard and Verizon FL performance.

### **Performance Differences for Parity Standards**

For measures with parity standards, the Z-score will be used to determine if the standard has not been met. A Z-score of less (farther from zero) than  $-1.645$  provides a 95% confidence level that the standard has been missed. Verizon FL will then compare actual performance provided to CLECs with actual Retail performance to calculate the magnitude of a miss.<sup>2</sup>

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<sup>2</sup> Verizon FL will not use Z-scores to determine the magnitude of a miss. Z-scores depend on factors unrelated to the degree of disparity between Verizon FL wholesale and Verizon FL Retail performance. For example, a larger Z-score may result from a larger sample size, and not from a larger disparity in performance.

### Incentive Amounts

The following table shows how misses are assigned to the “Minor,” “Moderate” or “Major” categories based on the severity of a miss:

	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>
Measures	0.1%to < 5% Difference	5% to 15% Difference	> 15% Difference
OSS Response Time Differences (vs. Standard)	< 3 seconds	3 to 8 seconds	> 8 seconds
OSS Availability	< 99.5% to 98%	< 98% to 96.5%	< 96.5%
Report Rate	0.10 to .25	> 0.25 to 2.0	> 2.0
Trunk Blockage	1 trunk group	2 trunk groups	> 2 trunk groups

The following table shows the fixed dollar amounts assigned to “Minor”, “Moderate” and “Major” misses:

	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>
<b>\$/UNIT</b>	\$7	\$14	\$28
<b>\$/Measure</b>	\$2,875	\$5,750	\$11,500

### C. Frequency of the Miss

If Verizon FL misses the standard for a measure for three or more consecutive months, the amount of the incentive amount will be 2.0 times the amount of the incentive amount for the first or second month the standard is missed. These increases are shown in the following table:

<b>Frequency Factor</b>	<b>1 or 2 months</b>	<b>3 or More Consecutive Months</b>
Multiple of incentive amount	1.0	2.0

#### IV. ANNUAL DOLLARS AT RISK

The maximum annual amount of incentive amounts that will be paid by Verizon FL will be \$10 Million in the first year, \$15 Million in the second year and \$20 Million in the third year. However, if incentive amounts due in a single month exceed the amounts shown in the table below for a single CLEC, or for all CLECs in the aggregate in the corresponding year, Verizon FL may commence a proceeding with the Florida PUC to show why it should not have to provide incentive amounts in excess of these amounts.

	<b>Annual Risk</b>	<b>Incentive amounts for a Single CLEC</b>	<b>Incentive amounts for all CLECs in aggregate</b>
Year 1	\$10,000,000	\$367,000	\$1,250,000
Year 2	\$15,000,000	\$550,500	\$1,875,000
Year 3	\$20,000,000	\$734,000	\$2,500,000

Pending resolution of the proceeding, Verizon FL may hold in escrow the portion of any incentive amount that exceeds the amounts stated above.

#### V. STATISTICAL METHODOLOGIES

In general, in computing incentive amounts, the Florida Plan will use the statistical methodology described in Appendix C.

##### **Measures with a Parity Standard**

Measures with a standard of parity with Verizon FL Retail will use the “modified t and Z statistic” proposed by a number of CLECs.

- A confidence level of 95% will be used as a threshold to determine when parity has not been achieved. Measures with a Z-statistic of less (farther from zero) than -1.645



will be deemed not to have achieved the parity standard, while those with a Z-statistic greater (closer to zero) or equal to -1.645 will be deemed to have achieved parity.

- If the Verizon FL Retail or CLEC sample size for a measure is less than 10 for a given month, performance will not be evaluated for that month.
- For percentage metrics, if the Verizon FL Retail or CLEC sample size for a measure is greater than or equal to 10 and less than 30, the standard hyper-geometric formula will be used to determine the Z-statistic for count data. It can be calculated using the Hyper-geometric Distribution function (“HYPGEOMDIST”) in Microsoft Excel or SAS software.<sup>3</sup> An example of use of this function is set out in Appendix C. For interval data (averages), Verizon will employ permutation testing.

#### **Measures with a Benchmark Standard**

Measures with benchmark standards will use the standards specified in the performance measures documentation. If the CLEC sample size for a measure is fewer than 10 for a given month, performance will not be evaluated for that month. If the CLEC sample size for a measure is 10 or more, but less than 20, fewer than 2 misses will not generate any incentive amounts, 2 misses will be considered a miss at a “Moderate” level, and 3 or more misses will be considered a miss at the “Major” level.

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<sup>3</sup> In collaborative meetings in New York with statistical representatives from different CLECs, it was agreed that for measures of percentages, the hyper-geometric distribution provides the same results as permutation. Because this can be completed within Excel, exceptions for small sample size do not have to be run separately from the reports.

### **Type I Error - K Factor Offset**

Because the Florida Plan uses a 95% confidence level, there is a 5% probability of a Type I error, i.e. an erroneous determination that Verizon FL has failed to meet the parity standard when, in fact, the parity standard has been met. Using the K-factor as described in Appendix D provides a means of offsetting the Type I error. Based on the number of submeasures with a parity standard reported for a CLEC in a given month, the methodology specifies “K” the number of submeasures that can miss performance standards before any incentive amounts are due.

### **VI. ADDITIONAL PROVISIONS**

To the extent that a CLEC is entitled to performance assurance payments or incentive amounts under an interconnection agreement between the CLEC and Verizon, the measurements, standards and incentives adopted in this proceeding will supersede provisions in interconnection agreements.

VII. APPENDICES

Appendix A  
Verizon Florida Inc.

Metric # California/FCC	Metric	Service	Product	Parity (P) or Benchmark (B)	Per Unit (U) or Per Metric (M)
<b>Pre-Ordering</b>					
<b>Ordering OSS Response Time</b>					
M1 / PO-1-02	Average Response Time – Service Appointment Scheduling	OSS	Electronic Interface	B	M
M1 / PO-1-03	Average Response Time – Address Verification	OSS	Electronic Interface	B	M
M1 / PO-1-04	Average Response Time –Service Availability	OSS	Electronic Interface	B	M
M1 / PO-1-05	Average Response Time – Request for Telephone Number	OSS	Electronic Interface	B	M
M1 / PO-1-07	% CSR Queries On Time – Manual	OSS	Manual	B	M
M1 / PO-1-08	% CSR Queries On Time – WISE	OSS	WISE	B	M
<b>Interfaces</b>					
<b>OSS Availability</b>					
M42 / PO-2-01	OSS Interface Availability – Scheduled Hours	OSS	Email	B	M
	OSS Interface Availability – Scheduled Hours	OSS	FTP	B	M
	OSS Interface Availability – Scheduled Hours	OSS	NDM	B	M
	OSS Interface Availability – Scheduled Hours	OSS	WISE CSR Requests	B	M
	OSS Interface Availability – Scheduled Hours	OSS	WISE Pre-Order	B	M
	OSS Interface Availability – Scheduled Hours	OSS	WISE Order	B	M
	OSS Interface Availability – Scheduled Hours	OSS	WISE Repair	B	M
<b>Contact Center Availability</b>					
M44 / PO-3-01	Center Responsiveness (Ordering)		Ordering Center	B	M
M44 / PO-3-03	Center Responsiveness (Repair)		Repair Center	B	M
<b>Ordering</b>					
<b>Order Confirmation Timeliness</b>					
M2 / OR-1-02	% On time LSC – Flow Through	Resale	POTS	B	U
	% On time LSC – Flow Through	UNE	Loop – Non Designed	B	U
	% On time LSC – Flow Through	UNE	Port	B	U
	% On time LSC – Flow Through	UNE	Platform	B	U

**Appendix A**  
Verizon Florida Inc.

<b>Metric # California/FCC</b>	<b>Metric</b>	<b>Service</b>	<b>Product</b>	<b>Parity (P) or Benchmark (B)</b>	<b>Per Unit (U) or Per Metric (M)</b>
M2 / OR-1-04	% On Time LSC < 10 Lines (No Flow Thru)	Resale	POTS	B	U
	% On Time LSC < 10 Lines (No Flow Thru)	UNE	Loop – Non Designed	B	U
	% On Time LSC < 10 Lines (No Flow Thru)	UNE	Port	B	U
	% On Time LSC < 10 Lines (No Flow Thru)	UNE	Platform	B	U
	% On Time LSC < 10 Lines (No Flow Thru)	UNE	xDSL Loop	B	U
M2 /OR-1-05	% On Time LSC < 10 Lines (Specials)	Resale	Specials	B	U
	% On Time LSC < 10 Lines (Specials)	UNE	Loop–Designed	B	U
	% On Time LSC < 10 Lines (Specials)	UNE	Transport	B	U
M2 / OR-1-06	% On Time LSC >= 10 Lines (No Flow - Thru)	Resale	POTS	B	U
	% On Time LSC >= 10 Lines (No Flow - Thru)	UNE	Loop Non- Designed	B	U
	% On Time LSC >= 10 Lines (No Flow - Thru)	UNE	Port	B	U
	% On Time LSC >= 10 Lines (No Flow - Thru)	UNE	Platform	B	U
	% On Time LSC >= 10 Lines (No Flow - Thru)	UNE	xDSL Loop	B	U
M2 / OR-1-12	% On Time FOC	Interconn.	Trunks	B	U
	% On Time FOC	UNE	Transport	B	U
M2 / OR-1-13					
	% On Time LSC >= 10 Lines (No Flow - Thru)	Resale	Specials	B	U
	% On Time LSC >= 10 Lines (No Flow - Thru)	UNE	Loop – Designed	B	U
	% On Time LSC >= 10 Lines (No Flow - Thru)	UNE	Transport	B	U
<b>Reject Timeliness</b>					
M3 / OR-2-02	% On Time LSR Reject – Flow Through	Resale	POTS	B	U
	% On Time LSR Reject – Flow Through	UNE	Loop – Non Designed	B	U
	% On Time LSR Reject – Flow Through	UNE	Port	B	U
	% On Time LSR Reject – Flow Through	UNE	Platform	B	U

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<b>Metric # California/FCC</b>	<b>Metric</b>	<b>Service</b>	<b>Product</b>	<b>Parity (P) or Benchmark (B)</b>	<b>Per Unit (U) or Per Metric (M)</b>
M3 / OR-2-04	% On Time LSR Reject < 10 Lines (No Flow Through)	Resale	POTS	B	U
	% On Time LSR Reject < 10 Lines (No Flow Through)	UNE	Loop - Non Designed	B	U
	% On Time LSR Reject < 10 Lines (No Flow Through)	UNE	Port	B	U
	% On Time LSR Reject < 10 Lines (No Flow Through)	UNE	Platform	B	U
	% On Time LSR Reject < 10 Lines (No Flow Through)	UNE	xDSL Loop	B	U
M3 / OR-2-05	% On Time LSR Reject < 10 Lines (Specials)	Resale	Specials	B	U
	% On Time LSR Reject < 10 Lines (Specials)	UNE	Loop - Designed	B	U
M3 / OR-2-06	% On Time LSR Reject >= 10 Lines	Resale	POTS	B	U
	% On Time LSR Reject >= 10 Lines	UNE	Loop Non-Designed	B	U
	% On Time LSR Reject >= 10 Lines	UNE	Port	B	U
	% On Time LSR Reject >= 10 Lines	UNE	Platform	B	U
	% On Time LSR Reject >= 10 Lines	UNE	xDSL Loop	B	U
M3 / OR-2-12	% on Time Interconnection Trunk and UNE Transport ASR Reject	Interconn.	Trunks	B	U
	% on Time Interconnection Trunk and UNE Transport ASR Reject	UNE	Transport	B	U
M3 / OR-2-13	% on Time LSR Reject >= 10 Lines - Specials	Resale	Specials	B	U
	% on Time LSR Reject >= 10 Lines - Specials	UNE	Loop - Designed	B	U
<b>Provisioning</b>					
<b>% Missed Due Dates</b>					
M11 / PR-4-01	% Missed Due Dates - Designed Services	Resale	Specials	P	U
	% Missed Due Dates - Designed Services	UNE	Loop - Designed	P	U
	% Missed Due Dates - Designed Services	UNE	Transport	P	U
	% Missed Due Dates - Designed Services	Intercon.	Trunks	P	U
	% Missed Due Dates - Designed Services	UNE	Line Sharing - Conditioned	P	U
M11 / PR-4-04	% Missed Due Dates - Dispatch (Non-designed)	Resale	POTS	P	U
	% Missed Due Dates - Dispatch (Non-designed)	UNE	Loop - Non-Designed	P	U
	% Missed Due Dates - Dispatch (Non-designed)	UNE	xDSL Loop	P	U
	% Missed Due Dates - Dispatch (Non-designed)	UNE	Port	P	U
	% Missed Due Dates - Dispatch (Non-designed)	UNE	Platform	P	U

**Appendix A**  
Verizon Florida Inc.

Metric #	Metric	Service	Product	Parity (P) or Benchmark (B)	Per Unit (U) or Per Metric (M)
M11 / PR-4-05	% Missed Due Dates – No Dispatch (Non-designed)	Resale	POTS	P	U
	% Missed Due Dates – No Dispatch (Non-designed)	UNE	Loop – Non-Designed	P	U
	% Missed Due Dates – No Dispatch (Non-designed)	UNE	Port	P	U
	% Missed Due Dates – No Dispatch (Non-designed)	UNE	Platform	P	U
	% Missed Due Dates – No Dispatch (Non-designed)	UNE	Line Sharing – Non - Conditioned	P	U
	% Missed Due Dates – No Dispatch (Non-designed)	UNE	xDSL loop	P	U
<b>Installation Quality</b>					
M 16 / PR-6-01	% Installation Troubles reported w/in 30 Days	Resale	Specials	P	U
	% Installation Troubles reported w/in 30 Days	UNE	Loop – Designed	P	U
	% Installation Troubles reported w/in 30 Days	UNE	Platform	P	U
	% Installation Troubles reported w/in 30 Days	UNE	Transport	P	U
	% Installation Troubles reported w/in 30 Days	UNE	xDSL Loop	P	U
	% Installation Troubles reported w/in 30 Days	UNE	Line Sharing	P	U
	% Installation Troubles reported within 30 Days	UNE	xDSL Loop	P	U
	% Installation Troubles reported w/in 30 Days	Interconn.	Trunks	P	U
M 17 / PR-6-02	% Installation Troubles reported within 7 Days	Resale	POTS	P	U
	% Installation Troubles reported within 7 Days	UNE	Loop – Non-Designed	P	U
	% Installation Troubles reported w/in 7 Days	UNE	Port	P	U
	% Installation Troubles reported within 7 Days	UNE	Platform	P	U
<b>Coordinated Conversions/Hot Cuts</b>					
M 9 / PR-9-01	% On Time Performance	UNE	Coordinated Conversions	B	U
M9 / PR9-02	% On Time Performance		Coordinated Hot Cuts	B	U

**Appendix A**  
Verizon Florida Inc.

<b>Metric #</b>	<b>Metric</b>	<b>Service</b>	<b>Product</b>	<b>Parity (P) or Benchmark (B)</b>	<b>Per Unit (U) or Per Metric (M)</b>
<b>Maintenance</b>					
<b>Network Trouble Report Rate</b>					
M19 / MR-2-01	Network Trouble Report Rate	Resale	POTS	P	U
	Network Trouble Report Rate	Resale	Specials	P	U
	Network Trouble Report Rate	UNE	Loop – Non-Designed	P	U
	Network Trouble Report Rate	UNE	Loop – Designed	P	U
	Network Trouble Report Rate	UNE	Port	P	U
	Network Trouble Report Rate	UNE	Transport	P	U
	Network Trouble Report Rate	UE	Platform	P	U
	Network Trouble Report Rate	UNE	xDSL Loop	P	U
	Network Trouble Report Rate	UNE	Line Sharing	P	U
	Network Trouble Report Rate	Interconn.	Trunks	P	U
<b>% Missed Repair Appointments</b>					
M20 / MR-3-01	% Missed Repair Commitment	Resale	POTS	P	U
	% Missed Repair Commitment	UNE	Loop – Non-Designed	P	U
	% Missed Repair Commitment	UNE	Port	P	U
	% Missed Repair Commitment	UNE	Platform	P	U
	% Missed Repair Commitment	UNE	xDSL Loop	P	U
	% Missed Repair Commitment	UNE	Line Sharing	P	U
<b>Maintenance Quality</b>					
M23 / MR-5-01	% Repeat Reports within 30 Days	Resale	POTS	P	U
	% Repeat Reports within 30 Days	Resale	Specials	P	U
	% Repeat Reports within 30 Days	UNE	Loop – Non-Designed	P	U
	% Repeat Reports within 30 Days	UNE	Loop – Designed	P	U
	% Repeat Reports within 30 Days	UNE	Port	P	U
	% Repeat Reports within 30 Days	UNE	Transport	P	U
	% Repeat Reports within 30 Days	UNE	Platform	P	U
	% Repeat Reports within 30 Days	UNE	xDSL Loop	P	U
	% Repeat Reports within 30 Days	UNE	Line Sharing	P	U
	% Repeat Reports within 30 Days	Interconn.	Trunks	P	U
<b>Network Performance</b>					
<b>Final Trunk Blockage</b>					
M 25__ / NP-1-04	Number Final Trunk Groups Exceeding 2% Blocking Standard – 3 Months	Interconn.	Trunks	B	M

**Appendix A**  
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<b>Metric #</b>	<b>Metric</b>	<b>Service</b>	<b>Product</b>	<b>Parity (P) or Benchmark (B)</b>	<b>Per Unit (U) or Per Metric (M)</b>
<b>Collocation</b>					
M40 / NP-2-01	% On Time Response to Request for Physical Collocation	Collocation	Physical	B	U
M41 / NP-2-05	% On Time --Physical Collocation	Collocation	Physical	B	M
<b>NXX Updates</b>					
M26 / NP-6-01	NXX Loaded by LERG Effective Date	Interconn.	NXX	P	U
<b>Billing</b>					
<b>Bill Timeliness</b>					
M30 / BI-2-01	Timeliness of Carrier Bill	Bill		B	M
<b>Bill Accuracy</b>					
M34 / BI-3-02	Bill Accuracy	Resale/UNE	Usage	B	M
	Bill Accuracy	Resale/UNE	Recurring	B	M
	Bill Accuracy	Resale/UNE	Non-Recurring	B	M
	Bill Accuracy	Interconn.	Usage	B	M
	Bill Accuracy	Interconn.	Recurring	B	M
	Bill Accuracy	Interconn.	Non-Recurring	B	M



## Appendix B

### Incentive Amount Calculation

Performance incentives in the amount specified in the table below apply to all measures with sub-standard performance in excess of the applicable “K” number of exempt measures. Incentive amounts apply on either a “per measure” or a “per unit” basis. The total amount of the incentive amount is a function of the severity of the miss (“Major,” “Moderate” or “Minor”), the number of consecutive months for which Verizon FL has failed to meet the standard, the relative volume of CLEC activity (in the case of “per measure” measures), and the volume of “affected units” (in the case of “per unit” measures).

### Performance Differences for Absolute Standards

For measures with absolute (benchmark) standards, where performance does not meet the applicable standard, the severity of the miss is determined by the difference between the standard and the actual Verizon FL performance.

- If a lower result indicates better performance, subtract the actual Verizon FL performance for the CLEC from the standard.
- If a higher result indicates better performance, subtract the standard from the actual Verizon FL performance for the CLEC.

**Example:** If Metric BI-3-02, % Accuracy Billing UNE Recurring, had an actual performance of 94.5% against a standard of 95%, the difference would be 95%-94.5% or 0.5%. Since this is a “Percent Measure,” the severity designation for the performance for Metric BI-3-02 is as follows:

	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>
All Percent Measures	0.1 to < 5% Difference	5 to 15% Difference	> 15% Difference

The severity of this miss is "Minor."

### **Performance Differences for Parity Standards**

For measures with parity standards where the standard has not been met (i.e., the Z-score is less than -1.645), the severity of the miss is determined by the difference between the CLEC performance and the Verizon FL Retail performance.

- If a lower result indicates better performance, subtract the CLEC performance from the actual Verizon FL Retail performance.
- If a higher result indicates better performance, subtract the actual Verizon FL Retail performance from the CLEC performance.

**Example:** If Metric PR-4-05, % Missed Due Dates, Resale Specials, had a Retail performance of 0.42% and a CLEC performance of 5.73%, the difference would be 5.73% - 0.42% or 5.31%. Since this is a "Percent Measure," the severity designation for the performance for Metric PR-4-05 would be as follows:

	<b>Minor</b>	<b>Moderate</b>	<b>Major</b>
All Percent Measures	0.1 to < 5% Difference	5 to 15% Difference	> 15% Difference

The severity of this miss is "Moderate."

### Amounts for Measures with “Per Measure” Incentives

For those measures listed in Appendix A as having “per measure” incentive amounts will apply on a per measure basis, at the amounts set forth in the following table:

	Minor	Moderate	Major
\$/Measure	\$2,875	\$5,750	\$11,500

**Example:** If Metric BI-3-01, % Billing Accuracy (Verizon FL) has a “Minor” miss, incentives in the amount of \$2,875 would be allocated among the CLECs based on their lines in service.

### Amounts for Measures with “Per Unit” Incentives

Most CLEC-specific measures are assigned a fixed amount of incentive amount per affected unit associated with the CLEC in a given month. For these measures, the following calculation is performed to determine incentive amounts due:

- Affected units are determined by multiplying the number of units of measured service activity (observations for the month) by the performance difference.
- Incentive amounts are calculated by multiplying the affected units by the fixed dollar amount per unit that corresponds to the severity level of the performance difference.

	Minor	Moderate	Major
\$/UNIT Measures	\$7	\$14	\$28

**Example:** Metric PR-4-05, % Missed Due Dates Resale Specials, has a moderate miss, with a 5.31% performance difference on a CLEC’s volume of 6,500 orders. First determine the “affected units” by multiplying 5.31% x 6,500 to obtain 345.15 affected units. Then, multiply the “Moderate” per unit incentive amount of \$14 by 345.15 to obtain a total \$4,832 incentive amount for the CLEC for that month.

### Incentive Amounts for Misses

For measures that miss the applicable standard, a factor is applied:

- A measure for which the standard is missed for one or two months will be subject to an incentive amount with a frequency factor of 1.0.
- A measure for which the standard is missed for three or more consecutive months will be subject to an incentive amount that is 2.0 times the incentive amount for the first or second month the standard is missed.

#### Frequency Factor

Frequency Factor	1 or 2 Months	3 or More Consecutive Months
Multiple of incentive amount	1.0	2.0

*Example:* Metric PR-4-05, % Missed Due Dates Resale Specials, has a “Moderate” miss with a 5.31% performance difference on a CLEC’s volume of 6,500 orders, resulting in a \$ 4,832 incentive amount. If this measure had missed the standard for three or more consecutive months, the incentive amount would be 2 x \$4,832 or \$9,664.

### Performance Differences for Average Data

The 70<sup>th</sup> percentile for Verizon FL establishes the baseline for comparison with CLEC performance. (Seventy percent of Verizon FL customers do worse than the 70<sup>th</sup> percentile and 30% do better). If more than 70% of the CLEC customers do better than Verizon FL 70<sup>th</sup> percentile then no “misses” have occurred.

If Verizon FL and CLEC levels of performance are the same, we would expect that 30% of the CLEC customers would exceed the 70<sup>th</sup> percentile of Verizon FL customers. To

determine the number of “misses,” sum the number of CLEC customers whose performance exceeds Verizon FL’s 70<sup>th</sup> percentile and subtract 30% of the total number of CLEC customers.

Example: There are 1600 total CLEC customers. The 70<sup>th</sup> percentile for Verizon FL’s performance is 4 hrs. If CLEC performance were equivalent to Verizon FL’s performance, we would expect 480 (out of 1600) CLEC customers to experience service times in excess of 4 hrs. If we observe 560 CLEC customers with service times greater than 4 hours, the percent of misses is calculated as  $(560/1600)-(480/1600)$  or  $35\%-30\% = 5\%$ . This would be a moderate miss per the table. The number of affected units would be  $560-480 = 80$  and the incentive amount would be  $80 \times \$14 = \$1,120$ .

#### **Type I Error Offset Exclusions**

The methodology for determining the Type I Error offset is addressed in Appendix D.

## Appendix C

### Statistical Methodologies

The statistical methodology for determining whether a parity standard has been met is set out in this appendix.

#### Statistical Methodologies:

Verizon FL will use statistical methodologies as a means to determine if “Parity with Verizon FL Retail” or “Parity with Verizon FL Affiliate Aggregate”<sup>4</sup> exists (that is, to determine if the performance for a CLEC, or CLECs in the aggregate, is equivalent to the performance for Verizon FL retail customers or for Verizon FL Affiliates). For performance measures where “Parity with Verizon FL Retail” or “Parity with Verizon FL Affiliate Aggregate” is the standard and a statistically significant sample size exists, Verizon FL will use the “modified t and Z statistics” proposed by a number of CLECs in LCUG (Local Competition Users Group). For metrics where the performance is measured against an objective (absolute) standard, the “modified t and Z statistics” are not applicable. The specific formulas are detailed below:

Mean Variables:	Percent Variables:
$t = \frac{\bar{X}_{CLEC} - \bar{X}_{BA}}{\sqrt{S_{BA}^2 \left( \frac{1}{n_{CLEC}} + \frac{1}{n_{BA}} \right)}}$	$Z = \frac{P_{CLEC} - P_{BA}}{\sqrt{P_{BA}(1 - P_{BA}) \left( \frac{1}{n_{CLEC}} + \frac{1}{n_{BA}} \right)}}$

#### Definitions:

Mean Variables are metrics of means or averages, such as mean time to repair, or average delay days.

<sup>4</sup> For 2 Wire xDSL Loop and 2 Wire xDSL Line Sharing measures.

Percent Variables are metrics of proportions, such as percent metrics.

X is defined as the average performance or mean of the sample

$S^2$  is defined as the standard deviation

n is defined as the sample size

P is defined as the proportion (for percentages, 90% translates to a 0.90 proportion)

A Z or t score of below  $-1.645$  provides a 95% confidence level that the samples are different, or that they come from different distributions.

If the Z or t score is  $\geq -1.645$ , the performance standard of "Parity with Verizon FL Retail" or "Parity with Verizon FL Affiliate Aggregate" will be deemed to have been met. If the Z or t score is  $< -1.645$  (farther from zero than  $-1.645$ ), except as otherwise provided for in this Appendix or determined by the Commission, the standard of "Parity with Verizon FL Retail" or "Parity with Verizon FL Affiliate Aggregate" will be deemed not to have been met.

#### **Sample Size Requirements:**

**Minimum Sample Size:** The minimum sample size is 10. When the measured sample size for either Verizon FL Retail (or Verizon FL Affiliate Aggregate) or CLEC is less than 10 (Verizon FL Retail  $< 10$  { Verizon FL Affiliate Aggregate  $< 10$ } or CLEC  $< 10$ ), no determination will be made as to whether the standard has been met.

**Use of Z or t Statistic and Permutation Methods:** The minimum sample size for use of the Z or t statistic is 30. When the measured sample size for each of Verizon FL Retail (or Verizon FL Affiliate Aggregate) and CLEC is 30 or more (Verizon FL Retail  $\geq 30$  { Verizon FL Affiliate Aggregate  $\geq 30$ } and CLEC  $\geq 30$ ), the Z or t statistic will be used for metrics where "Parity with Verizon FL Retail" (or "Parity with Verizon FL Affiliate Aggregate") is the standard. When the measured sample size for either Verizon FL Retail (or Verizon FL Affiliate Aggregate) or CLEC is from 10 to 29 (Verizon FL Retail 10 to 29 { Verizon FL Affiliate Aggregate 10 to 29} or CLEC 10 to 29), Verizon FL will do the following:

- a.) If the absolute performance for the CLEC is better than the Verizon FL retail (or Verizon FL Affiliate Aggregate) performance, no statistical analysis is required; the standard will be deemed to have been met.
- b.) If the absolute performance for the CLEC is worse than the Verizon FL retail (or Verizon FL Affiliate Aggregate) performance, Verizon FL will perform a permutation test to determine whether or not Verizon FL's performance for the CLEC was at "Parity with Verizon FL Retail" (or "Parity with Verizon FL Affiliate Aggregate").

## **Verizon FL Exceptions:**

### **(1) Clustering:**

A key assumption about the data, necessary to use statistics, is that the data is independent. Events included in the performance measures of provisioning and maintenance of telecommunications services may not be independent. The lack of independence is referred to as “clustering” of data. Clustering occurs when individual items (orders, troubles etc.) are clustered together as one single event.

- a.) **Event Driven Clustering** (for example, Cable Failure): If a significant proportion (more than 30%) of a CLEC’s troubles are in a single cable failure, Verizon FL will provide the data demonstrating that all troubles within that failure, including Verizon FL troubles, were resolved in an equivalent manner. Then, Verizon FL will provide the repair performance data with that cable failure performance excluded from the overall performance for both the CLEC and Verizon FL and the remaining troubles compared according to normal statistical methodologies.
- b.) **Location Driven Clustering** (for example, Facility Problems): If a significant proportion (more than 30%) of a CLEC’s missed installation orders and resulting delay days were due to an individual location with a significant facility problem, Verizon FL will provide the data demonstrating that the orders were “clustered” in a single facility problem, will show that the problem was resolved in a manner equivalent to the manner in which such a problem primarily impacting Verizon FL retail operations would have been resolved, and will provide the provisioning performance with that data excluded. Additional location driven clustering may be demonstrated by disaggregating performance into smaller geographic areas.
- c.) **Time Driven Clustering** (for example, Single Day Events): If a significant proportion (more than 30%) of CLEC activity, provisioning or maintenance, occurs on a single day within a month, and that day represents an unusual amount of activity in a single day, Verizon FL will provide the data demonstrating the unusual amount of activity on that day. Verizon FL will compare that single day’s performance for the CLEC to Verizon FL’s own performance, including Verizon FL’s processing of similar peak loads in Verizon FL’s retail operations. Then, Verizon FL will provide data with that day excluded from overall performance to demonstrate “parity”.

### **(2) CLEC Actions:**

If Verizon FL’s performance for any measure is impacted by unusual or inappropriate CLEC behavior, Verizon FL will bring such behavior to the attention of the CLEC to attempt resolution. Examples of CLEC behavior impacting performance results include order quality deficiencies, causing excessive missed appointments, incorrect dispatch identification, resulting in excessive multiple dispatch and repeat reports, failing to apply X coding on orders, where extended due dates are desired, and delays in rescheduling appointments, when Verizon FL has missed an appointment. If such action negatively



impacts performance, Verizon FL will provide appropriate detail documentation of the events to the CLEC and the Commission.

Where Verizon FL proposes an exception, Verizon FL will provide applicable information, ensuring protection of customer proprietary information, to the CLEC and the Commission. Such information might include individual trouble reports and orders, with analysis of Verizon FL and CLEC performance. For cable failures, Verizon FL will provide appropriate documentation detailing other troubles associated with that cable failure.

### (3) **Data Anomalies:**

In the course of performing root cause analysis, Verizon FL discovers that the data reported is incorrect, such as an incorrect code, Verizon FL will provide supporting detail documenting such a data error. For example, if it is determined that a Verizon FL representative consistently mis-coded performance in either retail or CLEC services, Verizon FL would provide the supporting detail identifying the underlying causes contributing to the error for review and restatement of results as appropriate.

### **Metrics with Absolute (Benchmarks) Standards:**

**Minimum Sample Size:** The minimum sample size is 10. When the measured sample size is less than 10, no determination will be made as to whether the standard has been met.

### **Standard Hyper-geometric Formula (use for small sample size counted variables)**

This substitute for the permutation tests was proposed by AT&T in a statistical subgroup in New York as an alternative method of obtaining accurate results that requires far fewer computational resources than permutation testing. A Hyper-geometric formula function is built into MS Excel or can be found in SAS software and has been found to provide accurate results. Probability of a given number of failures ( $x$ ), for a given sample size ( $n$ ), population failures ( $M$ ), and population size ( $N$ ),

$$P(x) = \frac{\binom{M}{x} \binom{N-M}{n-x}}{\binom{N}{n}}$$

$N$  = total sample size (ILEC + CLEC)  
 $M$  = total number of failures (ILEC + CLEC)  
 $n$  = CLEC sample size  
 $x$  = number of CLEC failures

Where the function  $({}_M C_x)$  is the binomial coefficient function:  $M!/((M-x)!x!)$

**Example:**

ILEC had 100 failures in 3350 while the CLEC had 3 misses in 35

$$N = 3350 + 35 = 3385$$

$$M = 100 + 3 = 103$$

$$n = 35$$

To compute the probability of the CLEC having three or more failures ( $x \geq 3$ ) in a sample of 35, the probabilities of  $x = 0, 1$  and  $2$  need to be summed and subtracted from 1.

$$\text{For } x = 0, \quad P(0) = \{ 103!/((103-0)!0!) \} * \{ 3282!/((3282-35)!35!) \} / \{ 3385!/((3385-35)!35!) \}$$

$$P(0) = 0.3371974$$

$$\text{Similarly } P(1) = 0.374260045 \text{ and } P(2) = 0.199743588$$

$$P(x < 3) = P(0) + P(1) + P(2) = 0.911201$$

$$P(x \geq 3) = 1 - 0.911201 = 0.088799$$

This probability corresponds to a Z-score of:

$$Z = -1.35$$

## **Appendix D**

### **Type I Error - K Factor Offset**

Parity testing requires Verizon FL to perform a large number of statistical tests. Each individual test is performed at a 5% Type I error level. This means that there is a 5% chance that an individual test will indicate a failure to meet parity when parity service is actually being provided. As the number of tests performed increases, the expected number of false violations in any month also increases. Statisticians refer to this dilemma as the “multiple-testing” problem. To deal with this problem, Verizon FL will employ a table that indicates the number of allowable misses per CLEC per month. This table is based on calculations of the number of false violations that can reasonably be expected when Verizon FL is providing parity service to the CLEC. The following procedure provides an offset for this problem by specifying a number of measures that may miss their parity standard before any incentive amounts are required.

#### **Application of K Value Exclusions**

For each month for each CLEC, determine the measures for which Verizon FL has failed to meet the standard (“non-compliant” measures). Sort all measures that are non-compliant in ascending order of deviation from parity (in percentage terms) and exclude the first “K” measures (those with the smallest deviations). If a measure has been missed for three or more consecutive months, that measure will be subject to incentives and will be excluded from the total number of tests used to determine the appropriate entry in the table. For the remaining non-compliant measures that are above the K number of measures, incentive amounts per apply.

**TABLE 1**  
**Table of Allowable Misses for a Single CLEC**  
**Individual Tests at a 5% Type I Error Level**

NUMBER OF MEASURES FOR WHICH THERE WAS MEASURED PERFORMANCE FOR THE CLEC		NUMBER OF MEASURES FOR WHICH THE STANDARD CAN BE MISSED WITH NO INCENTIVE APPLYING
Lower Bound	Upper Bound	
15	20	3
21	30	4
31	41	5
42	52	6
53	64	7
65	77	8
78	90	9
91	103	10
104	116	11
117	130	12
131	144	13
145	158	14
159	173	15
174	187	16
188	202	17
203	217	18
218	232	19
233	247	20
248	262	21
263	277	22
278	292	23
293	308	24
309	324	25
325	339	26
340	355	27
356	371	28
372	387	29
388	402	30
403	418	31
419	435	32
436	451	33