

# Exhibit K

## PERFORMANCE ASSURANCE PLAN

### 1.0 Introduction

1.1 As set forth in this Agreement, Qwest and CLEC voluntarily agree to the terms of the following Performance Assurance Plan ("PAP"), prepared in conjunction with Qwest's application for approval under Section 271 of the Telecommunications Act of 1996 (the "Act") to offer in-region long distance service.

### 2.0 Plan Structure

2.1 The PAP is a two-tiered, self-executing remedy plan. CLEC shall be provided with Tier 1 payments if, as applicable, Qwest does not provide parity between the service it provides to CLEC and that which it provides to its own retail customers, or Qwest fails to meet applicable benchmarks.

2.1.1 As specified in section 7.0, if Qwest fails to meet parity and benchmark standards on an aggregate CLEC basis, Qwest shall make Tier 2 payments to a Fund established by the state regulatory commission or, if required by existing law, to the state general fund.

2.2 As specified in sections 6.0 and 7.0 and Attachments 1 and 2, payment is generally on a per occurrence basis, (i.e., a set dollar payment times the number of non-conforming service events). For the performance measurements which do not lend themselves to per occurrence payment, payment is on a per measurement basis, (i.e., a set dollar payment). The level of payment also depends upon the number of consecutive months of non-conforming performance, (i.e., an escalating payment the longer the duration of non-conforming performance).

2.3 Qwest shall be in conformance with the parity standard when service Qwest provides to CLEC is equivalent to that which it provides to its retail customers. The PAP relies upon statistical scoring to determine whether any difference between CLEC and Qwest performance results is significant, that is, not attributable to simple random variation. Statistical parity shall exist when performance results for CLEC and for Qwest retail analogue result in a z-value that is no greater than the critical z-values listed in the Critical Z-Statistical Table in section 5.0

2.4 For performance measurements that have no Qwest retail analogue, agreed upon benchmarks shall be used. Benchmarks shall be evaluated using a "stare and compare" method. For example, if the benchmark is for a particular performance measurement is 95% or better, Qwest performance results must be at least 95% to meet the benchmark. Percentage benchmarks will be adjusted to round the allowable number of misses up or down to the closest integer, except when a benchmark standard and low CLEC volume are such that a 100% performance result would be required to meet the standard and has not been attained. In such a

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situation, the determination of whether Qwest meets or fails the benchmark standard will be made using performance results for the month in question, plus a sufficient number of consecutive months so that a 100% performance result would not be required to meet the standard. For purposes of section 6.2, a meet or fail determined by this procedure shall count as a single month.

### 3.0 Performance Measurements

3.1 The performance measurements included in the PAP are set forth in Attachment 1. Each performance measurement identified is defined in the Performance Indicator Definitions ("PIDs") developed in the ROC Operational Support System ("OSS") collaborative, and which are included in the SGAT at Exhibit B. The measurements have been designated as Tier 1, Tier 2, or both Tier 1 and Tier 2 and given a High, Medium, or Low designation.

### 4.0 Statistical Measurement

4.1 Qwest uses a statistical test, namely the modified "z-test," for evaluating the difference between two means (i.e., Qwest and CLEC service or repair intervals) or two percentages (e.g., Qwest and CLEC proportions), to determine whether a parity condition exists between the results for Qwest and the CLEC(s). The modified z-tests shall be applicable if the number of data points are greater than 30 for a given measurement. For testing measurements for which the number of data points are 30 or less, Qwest will use a permutation test to determine the statistical significance of the difference between Qwest and CLEC.

4.2 Qwest shall be in conformance when the monthly performance results for parity measurements (whether in the form of means, percents, or proportions and at the equivalent level of disaggregation) are such that the calculated z-test statistics are not greater than the critical z-values as listed in Table 1, section 5.0.

4.3 Qwest shall be in conformance with benchmark measurements when the monthly performance result equals or exceeds the benchmark, if a higher value means better performance, and when the monthly performance result equals or is less than the benchmark if a lower value means better performance.

The formula for determining parity using the modified z-test is:

$$z = \text{DIFF} / \sigma_{\text{DIFF}}$$

Where:

$$\text{DIFF} = M_{\text{Qwest}} - M_{\text{CLEC}}$$

$$M_{\text{QWEST}} = \text{Qwest average or proportion}$$

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$M_{CLEC}$  = CLEC average or proportion

$\sigma_{DIFF}$  = square root  $\{\sigma^2_{Qwest} (1/n_{CLEC} + 1/n_{Qwest})\}$

$\sigma^2_{Qwest}$  = calculated variance for Qwest

$n_{Qwest}$  = number of observations or samples used in Qwest measurement

$n_{CLEC}$  = number of observations or samples used in CLEC measurement

The modified z-tests will be applied to reported parity measurements that contain more than 30 data points.

In calculating the difference between Qwest and CLEC performance, the above formula applies when a larger Qwest value indicates a better level of performance. In cases where a smaller Qwest value indicates a higher level of performance, the order is reversed, i.e.,  $M_{CLEC} - M_{QWEST}$ .

4.3.1 For parity measurements where the number of data points is 30 or less, Qwest will apply a permutation test to test for statistical significance. Permutation analysis will be applied to calculate the z-statistic using the following logic:

Calculate the modified z-statistic for the actual arrangement of the data

Pool and mix the CLEC and Qwest data sets

Perform the following 1000 times:

Randomly subdivide the pooled data sets into two pools, one the same size as the original CLEC data set ( $n_{CLEC}$ ) and one reflecting the remaining data points, and one reflecting the remaining data points, (which is equal to the size of the original Qwest data set or  $n_{QWEST}$ ).

Compute and store the modified z-test score ( $Z_S$ ) for this sample.

Count the number of times the z-statistic for a permutation of the data is greater than the actual modified z-statistic

Compute the fraction of permutations for which the statistic for the rearranged data is greater than the statistic for the actual samples

If the fraction is greater than  $\alpha$ , the significance level of the test, the hypothesis of no difference is not rejected, and the test is passed. The  $\alpha$  shall be .05 when the critical z value is 1.645 and .15 when the critical z value is 1.04.

### 5.0 Critical Z-Value

5.1 The following table shall be used to determine the critical z-value that is referred to in section 6.0. It is based on the monthly business volume of the CLEC

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for the particular performance measurements for which statistic testing is being performed.

**TABLE 1: CRITICAL Z-VALUE**

CLEC volume (Sample size)	LIS Trunks, Resale, UBL-DS1 and DS-3	UDITs, and DS-3	All Other
1-10	1.04*		1.645
11-150	1.645		1.645
151-300	2.0		2.0
301-600	2.7		2.7
601-3000	3.7		3.7
3001 and above	4.3		4.3

\* The 1.04 applies for individual month testing for performance measurements involving LIS trunks and DS-1 and DS-3 that are UDITs, Resale, or Unbundled Loops. The performance measurements are OP-3d/e, OP-4d/e, OP-5a, OP-6-4/5, MR-5a/b, MR-7d/e, and MR-8.

For purposes of determining consecutive month misses, 1.645 shall be used. Where performance measurements disaggregate to zone 1 and zone 2, the zones shall be combined for purposes of statistical testing.

### 6.0 Tier 1 Payments to CLEC

6.1 Tier 1 payments to CLEC shall be made solely for the performance measurements designated as Tier 1 on Attachment 1. The payment amount for non-conforming service varies depending upon the designation of performance measurements as High, Medium, and Low and the duration of the non-conforming service condition as described below. Non-conforming service is defined in section 4.0.

6.1.1 Determination of Non-Conforming Measurements: The number of performance measurements that are determined to be non-conforming and, therefore, eligible for Tier 1 payments, are limited according to the critical z-value shown in Table 1, section 5.0. The critical z-values are the statistical standard that determines for each CLEC performance measurement whether Qwest has met parity. The critical z-value is selected from Table 1 according to the monthly CLEC volume for the performance measurement. For instance, if the CLEC sample size for that month is 100, the critical z-value is 1.645 for the statistical testing of that parity performance measurement.

6.2 Determination of the Amount of Payment: Tier 1 payments to CLEC, except as provided for in sections 6.3 and 10.0, are calculated and paid monthly based on the number of performance measurements exceeding the critical z-value. Payments

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will be made on either a per occurrence or per measurement basis, depending upon the performance measurement, using the dollar amounts specified in Table 2 below. The dollar amounts vary depending upon whether the performance measurement is designated High, Medium, or Low and escalate depending upon the number of consecutive months for which Qwest has not met the standard for the particular measurement.

6.2.1 The escalation of payments for consecutive months of non-conforming service will be matched month for month with de-escalation of payments for every month of conforming service. For example, if Qwest has four consecutive monthly "misses" it will make payments that escalate from month 1 to month 4 as shown in Table 2. If, in the next month, service meets the standard, Qwest makes no payment. A payment "indicator" de-escalates down from month 4 to month 3. If Qwest misses the following month, it will make payment at the month 3 level of Table 2 because that is where the payment "indicator" presently sits. If Qwest misses again the following month, it will make payments that escalate back to the month 4 level. The payment level will de-escalate back to the original month 1 level only upon conforming service sufficient to move the payment "indicator" back to the month 1 level.

6.2.2 For those performance measurements listed on Attachment 2 as "Performance Measurements Subject to Per Measurement Caps," payment to a CLEC in a single month shall not exceed the amount listed in Table 2 below for the "Per Measurement" category. For those performance measurements listed on Attachment 2 as "Performance Measurements Subject to Per Measurement Payments," payment to a CLEC will be the amount set forth in Table 2 below under the section labeled "per measurement."

**TABLE 2: TIER-1 PAYMENTS TO CLEC**

<b>Per Occurrence</b>						
Measurement Group	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6 and each following month
High	\$150	\$250	\$500	\$600	\$700	\$800
Medium	\$ 75	\$150	\$300	\$400	\$500	\$600
Low	\$ 25	\$ 50	\$100	\$200	\$300	\$400
<b>Per Measurement Cap</b>						
Measurement Group	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6 and each following month
High	\$25,000	\$50,000	\$75,000	\$100,000	\$125,000	\$150,000
Medium	\$10,000	\$20,000	\$30,000	\$ 40,000	\$ 50,000	\$ 60,000
Low	\$ 5,000	\$10,000	\$15,000	\$20,000	\$ 25,000	\$ 30,000

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6.3 For collocation, CP-2 and CP-4 performance measurements shall be relied upon for delineation of collocation business rules. For purposes of calculating Tier 1 payments, collocation jobs and collocation feasibility studies that are later than the due date will have a per day payment applied according to Table 3. The per day payment will be applied to any collocation job in which the feasibility study is provided or the collocation installation is completed later than the scheduled date. The calculation of the payment amount will be performed by applying the per day payment amounts as specified in Table 3. Thus, for days 1 through 10, the payment is \$150 per day. For days 11 through 20, the payment is \$300 per day and so on.

**TABLE 3: TIER-1 COLLOCATION PAYMENTS TO CLECS**

Days Late	Completion Date	Feasibility Study
1 to 10 days	\$150/day	\$45/day
11 to 20 days	\$300/day	\$90/day
21 to 30 days	\$450/day	\$135/day
31 to 40 days	\$600/day	\$180/day
More than 40 days	\$1,000/day	\$300/day

6.4 A minimum payment calculation shall be performed at the end of each year for each CLEC with annual order volumes of no more than 1,200. The payment shall be calculated by multiplying \$2,000 by the number of months in which at least one payment was due to the CLEC. To the extent that the actual CLEC payment for the year is less than the product of the preceding calculation, Qwest shall make an additional payment equal to the difference.

### 7.0 Tier 2 Payments to the State

7.1 Payments to the State shall be limited to the performance measurements designated in section 7.4 for Tier 2 per measurement payments and in Attachment 1 for per occurrence payments and which have at least 10 data points each month for the period payments are being calculated. Similar to the Tier 1 structure, Tier 2 measurements are categorized as High, Medium, and Low and the amount of payments for non-conformance varies according to this categorization.

7.2 Determination of Non-Conforming Measurements: The determination of non-conformance will be based upon the aggregate of all CLEC data for each Tier 2 performance measurement. Non-conforming service is defined in section 4.2 (for parity measurements) and 4.3 (for benchmark measurements), except that a 1.645 critical z-value shall be used for Tier 2 parity measurements that have Tier 1 counterparts. The critical z-value is the statistical standard that determines for each performance measurement whether Qwest has met parity.

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7.3 Determination of the Amount of Payment: Except as provided in section 7.4, Tier 2 payments are calculated and paid monthly based on the number of performance measurements failing performance standards for a third consecutive month, or if two out of three consecutive months in the 12 month period have been missed, the second consecutive month for Tier 2 measurements with Tier 1 counterparts. For Tier 2 measurements that do not have Tier 1 counterparts, payments are calculated and paid monthly based on the number of performance measurements exceeding the critical z-values, identified in section 5.1, in any single month. Payment will be made on either a per occurrence or per measurement basis, whichever is applicable to the performance measurement, using the dollar amounts specified in Table 4 or Table 5 below. Except as provided in section 7.4, the dollar amounts vary depending upon whether the performance measurement is designated High, Medium, or Low.

7.3.1 For those Tier 2 measurements listed on Attachment 2 as "Performance Measurements Subject to Per Measurement Caps," payment to the State in a single month shall not exceed the amount listed in Table 4 for the "Per Measurement" category.

**TABLE 4: TIER-2 PAYMENTS TO STATE FUNDS**

Per Occurrence

Measurement Group	
High	\$500
Medium	\$300
Low	\$200

Per Measurement/Cap

Measurement Group	
High	\$75,000
Medium	\$30,000
Low	\$20,000

7.4 Performance Measurements Subject to Per Measurement Payment: The following Tier 2 performance measurements shall have their performance results measured on a region-wide (14 state) basis. Failure to meet the performance standard, therefore, will result in a per measurement payment in each of the Qwest in-region 14 states adopting this PAP. The performance measurements are:

- GA-1: Gateway Availability - IMA-GUI
- GA-2: Gateway Availability - IMA-EDI
- GA-3: Gateway Availability - EB-TA
- GA-4: System Availability - EXACT
- GA-6: Gateway Availability - GUI-Repair
- PO-1: Pre-Order/Order Response Times
- OP-2: Call Answered within Twenty Seconds - Interconnect Provisioning

Center

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### MR-2: Calls Answered within Twenty Seconds – Interconnect Repair Center

GA-1 has two sub-measurements: GA-1A, and GA-1D. PO-1 shall have two sub-measurements: PO-1A and PO-1B. PO-1A and PO-1B shall have their transaction types aggregated together.

For these measurements, Qwest will make a Tier 2 payment based upon monthly performance results according to Table 5: Tier 2 Per Measurement Payments to State Funds.

**TABLE 5: TIER-2 PER MEASUREMENT PAYMENTS TO STATE FUNDS**

Measurement	Performance	State Payment	14 State Payment
GA-1,2,3,4,6	1% or lower	\$1,000	\$14,000
	>1% to 3%	\$10,000	\$140,000
	>3% to 5%	\$20,000	\$280,000
	>5%	\$30,000	\$420,000
PO-1	2 sec. Or less	\$1,000	\$14,000
	>2 sec. to 5 sec.	\$5,000	\$70,000
	>5 sec. to 10 sec.	\$10,000	\$140,000
	>10 sec.	\$15,000	\$210,000
OP-2/MR-2	1% or lower	\$1,000	\$14,000
	>1% to 3%	\$5,000	\$70,000
	>3% to 5%	\$10,000	\$140,000
	>5%	\$15,000	\$210,000

### 8.0 Step by Step Calculation of Monthly Tier 1 Payments to CLEC

8.1 Application of the Critical Z-Values: Qwest shall identify the Tier 1 parity performance measurements that measure the service provided to CLEC by Qwest for the month in question and the critical z-value from Table 1 in section 5.0 that shall be used for purposes of statistical testing for each particular performance measurement. The statistical testing procedures described in section 4.0 shall be applied. For the purpose of determining the critical z-values, each disaggregated category of a performance measurement is treated as a separate sub-measurement. The critical z-value to be applied is determined by the CLEC volume at each level of disaggregation or sub-measurement.

8.2 Performance Measurements for which Tier 1 Payment is Per Occurrence:

8.2.1 Performance Measurements that are Averages or Means:

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8.2.1.1 Step 1: For each performance measurement, the average or the mean that would yield the critical z-value shall be calculated. The same denominator as the one used in calculating the z-statistic for the measurement shall be used. (For benchmark measurements, the benchmark value shall be used.)

8.2.1.2 Step 2: The percentage differences between the actual averages and the calculated averages shall be calculated. The calculation is  $\% \text{ diff} = (\text{CLEC result} - \text{Calculated Value}) / \text{Calculated Value}$ . The percent difference shall be capped at a maximum of 100%. In all calculations of percent differences in sections 8.0 and 9.0, the calculated percent differences is capped at 100%.

8.2.1.2 Step 3: For each performance measurement, the total number of data points shall be multiplied by the percentage calculated in the previous step and the per occurrence dollar amounts from the Tier 1 Payment Table shall determine the payment to the CLEC for each non-conforming performance measurement.

### 8.2.2 Performance Measurements that are Percentages:

8.2.2.1 Step 1: For each performance measurement, the percentage that would yield the critical z-value shall be calculated. The same denominator as the one used in calculating the z- statistic for the measurement shall be used. (For benchmark measurements, the benchmark value shall be used.)

8.2.2.2 Step 2: The difference between the actual percentages for the CLEC and the calculated percentages shall be determined.

8.2.2.3 Step 3: For each performance measurement, the total number of data points shall be multiplied by the difference in percentage calculated in the previous step, and the per occurrence dollar amount taken from the Tier 1 Payment Table, to determine the payment to the CLEC for each non-conforming performance measurement.

### 8.2.3 Performance Measurements that are Ratios or Proportions:

8.2.3.1 Step 1: For each performance measurement the ratio that would yield the critical z-value shall be calculated. The same denominator as the one used in calculating the z-statistic for the measurement shall be used. (For benchmark measurements, the benchmark value shall be used.)

8.2.3.2 Step 2: The absolute difference between the actual rate for the CLEC and the calculated rate shall be determined.

8.2.3.3 Step 3: For each performance measurement, the total number of data points shall be multiplied by the difference calculated in the previous step, and the per occurrence dollar amount taken from the Tier 1 Payment Table, to determine the payment to the CLEC for each non-conforming performance measurement.

