



0000019916

ORIGINAL

RECEIVED

BEFORE THE ARIZONA CORPORATION COMMISSION

2002 MAY 10 P 4:33

WILLIAM A. MUNDELL

Chairman

JIM IRVIN

Commissioner

MARC SPITZER

Commissioner

AZ CORP COMMISSION
DOCUMENT CONTROL

IN THE MATTER OF
U S WEST COMMUNICATIONS, INC.'S
COMPLIANCE WITH SECTION 271 OF THE
TELECOMMUNICATIONS ACT OF 1996

Docket No. T-00000A-97-238

**QWEST CORPORATION'S BRIEF ON
PERFORMANCE ASSURANCE PLAN ISSUES
IN THE STATE OF ARIZONA**

Arizona Corporation Commission

DOCKETED

MAY 10 2001

DOCKETED BY 

Andrew D. Crain
Charles W. Steese
Lynn A. Stang
Qwest Corporation
1801 California Street, Suite 4900
Denver, CO 80202
(303) 672-2926

John M. Devaney
Kelly A. Cameron
PERKINS COIE LLP
607 Fourteenth Street, N.W., Suite 800
Washington, D.C. 20005-2011
(202) 628-6600
(202) 434-1690 (fax)

Timothy Berg
FENNEMORE CRAIG, P.C.
3003 North Central, Suite 2600
Phoenix, Arizona 85012-2913
(602) 916-5421
(602) 916-5999 (fax)

Attorneys for Qwest Corporation

CONTENTS

I.	INTRODUCTION	1
A.	The Qwest Performance Assurance Plan is the Result of Review from CLECs and Commission Staff.....	1
B.	The Plan – an Overview.....	2
I.	DISCUSSION OF OPEN OR UNRESOLVED ISSUES.....	4
A.	Performance Measurements – PAP-1	4
B.	Measurement of Change Management – PAP-2.....	7
C.	Root Cause Analysis After Measurement Failure over Two Consecutive Months – PAP-3.....	8
D.	Appropriateness of Qwest's K-Table – PAP-4.....	10
1.	Background Relating to Statistical Testing and Random Error.....	10
2.	ROC Workshop Agreement Extended to Arizona.....	11
3.	Description of the K-Table	12
4.	Statistical Theory Behind the K-Table	13
5.	Application of the K-Table	14
6.	Responses to CLEC Comments Relating to the K-Table	14
E.	Cap for Penalties – PAP-5	15
F.	Miscellaneous Penalty Issues – PAP-6.....	17
1.	Qwest Agrees to Roll Forward Unused Portions of Monthly Caps.....	17
2.	The PAP Should Not Include a Minimum Per-Occurrence Penalty....	18
3.	Escalated Penalties for Repeat Occurrences Will Lead to Unreasonable and Unfair Results.....	20

4.	Qwest Should Be Permitted to Pay Penalties through Bill Credits and Should Not Be Required to Make Direct Payments to the CLECs.....	22
G.	Classification of Measurements – PAP-9	23
H.	Severity Factor – PAP-10	25
I.	Reviews and Audits – PAP-11.....	27
J.	Tier 2 Payments – PAP-12.....	28
K.	Fall-Back and Escalation of Penalties – PAP-13	30
L.	Plan Limitations – PAP-14	32
1.	Qwest's Proposal Properly Sets the Effective Date of the Plan and Limits the Plan's Application to CLECs with Agreements.....	32
2.	Qwest's Plan Appropriately Precludes Duplicative Payments.....	34
3.	The Proposed Plan Properly Precludes Use of the Plan in Other Proceedings.....	36
M.	Penalty for not Providing Data on a Timely Basis - PAP-15	39
N.	Effect of Arizona Statute That Limits Fines - PAP-16.....	39
III.	CONCLUSION.....	40

Qwest Corporation, formerly known as U S WEST Communications, Inc., ("Qwest") submits its Brief on Performance Assurance Plan Issues in the State of Arizona.

I. INTRODUCTION

A. The Qwest Performance Assurance Plan Has Evolved as a Result of the Collaborative Process.

On June 30, 2000, Qwest submitted its Arizona Performance Assurance Plan ("Plan" or "PAP") to the Arizona Corporation Commission ("ACC" or "Commission") section 271 collaborative. Soon after that, Qwest took the extraordinary step of proposing a plan that is, in key structural respects, identical to the SBC Texas Plan that the Federal Communications Commission ("FCC") has approved. In the course of the collaborative process, Qwest made a number of changes to the PAP, resulting in a plan that is both strong and responsive to the issues and concerns that the collaborative participants have raised.¹

In its most recent version of the Plan, Exhibit 16 submitted April 13, 2001, and revised on May 4, 2001, Qwest incorporated a number of significant changes that resulted from this collaborative effort, including: (1) adding a provision providing for a minimum payments for nascent services; (2) adjusting the critical values identified in the K-Table, thereby narrowing the number of exclusions that can apply to a given sample size, and also providing the Commission with an alternative to the K-Table based upon the agreement relating to statistical methods reached with a number of competitive local exchange carriers ("CLECs") participating in the workshops before the Regional Oversight Committee ("ROC"); (4) adding opportunities for CLEC and staff audits and provisions that require Qwest to perform root cause analysis when it fails to meet performance standards; and (5) incorporating agreed upon due dates for the

¹ The parties to this proceeding have discussed and debated PAP issues extensively. Over the past year, the Commission has held numerous workshops, each of which involved the submission of extensive pre- and post-workshop comments from multiple parties. These comments have addressed the merits of the Qwest plan as well as alternative plan proposals.

distribution of performance results. Qwest has also demonstrated that its proposed PAP is specifically appropriate for use in Arizona. Through evidence presented in the workshop, Qwest has demonstrated that its Plan will produce proper and reasonable incentives for Qwest to meet its obligations under the Act.

B. The Plan – an Overview

Qwest has submitted its Arizona Plan to demonstrate that it will continue to fulfill its obligations under section 271 of the Telecommunications Act of 1996 ("the Act") after the FCC approves Qwest's application to offer in-region long distance services. In discussing similar plans submitted by other Bell Operating Companies ("BOCs"), the FCC has emphasized that the benefits of the reporting and enforcement mechanisms contained in PAPs must be viewed in the context of the other regulatory and legal processes that provide positive incentives for BOCs to continue to meet the requirements of section 271 after their applications to provide long distance service have been approved by the FCC.²

The Plan is consistent with the performance plans already approved by state commissions in Kansas, Massachusetts, New York, Oklahoma, and Texas and endorsed by the FCC in connection with its approval of the section 271 applications of Bell Atlantic-New York, Inc. ("Bell Atlantic"), Verizon New England, Inc. ("Verizon"), and SBC Communications, Inc./Southwestern Bell Telephone Company (collectively, "SBC"). In each of its orders approving the applications of these carriers, the FCC acknowledged that a PAP is not a required component of a BOC's section 271 application. However, the FCC has also stated that a BOC can submit a PAP as part of its showing that approval of its application is in the public interest and as evidence that the BOC will continue to provide "market-opening performance after

² See, e.g., *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*, Memorandum Opinion and Order, CC Dkt. No. 99-295, ¶¶ 429-33 (rel. Dec. 22, 1999) ("*Bell Atlantic-New York Order*").

receiving section 271 authorization."³ The FCC has indicated that a PAP is appropriate if the components of it fall within a "zone of reasonableness, and are likely to provide incentives that are sufficient to foster post-entry checklist compliance."⁴

Qwest's proposed Arizona Plan contains reasonable and effective elements. The Plan is transparent and easy to understand. It incorporates key measurements with clearly identified standards, applies straightforward criteria to determine when performance is out of compliance, and uses logical calculations to determine whether Qwest must make payments and the amount of any payments. The measures and standards were developed in the collaborative process and, therefore, are known to the CLECs and the Arizona Staff. Moreover, the performance measurements will have been the subject of an independent audit to ensure accurate data collection and reporting.

The Plan is also comprehensive and self-executing. It addresses all modes of competitive entry into the Arizona local telecommunications market. Under the Plan, all parties involved in Plan administration – CLECs, Staff, and Qwest management – will have knowledge of the expected performance, the actual performance, and the resulting consequences. Payment under the Plan will be certain and efficient. In instances where Qwest is found to be out of compliance

³ *Id.* at 433; see also *In the Matter of Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc., d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Service in Texas*, Memorandum Opinion and Order, CC Dkt. No. 00-65, ¶¶ 420, 423 (rel. June 30, 2000) ("*SBC Texas Order*"); *In the Matter of Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc., d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Service in Kansas and Oklahoma* Memorandum Opinion and Order, CC Dkt. No. 00-217, ¶¶ 269, 270, 273 (rel. Jan. 22, 2001) ("*SBC Kansas/Oklahoma Order*"); *In the Matter of Application by Verizon New England, Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) and Verizon Global Networks, Inc., for Authorization to Provide In-Region, InterLATA Service in Massachusetts*, Memorandum Opinion and Order, CC Dkt. No. 01-9, ¶¶ 236, 238, 240 (rel. April 16, 2001) ("*Verizon Massachusetts Order*").

⁴ *Bell Atlantic-New York Order* at 433.

with the measures set forth in the Plan, the PAP calls for the automatic imposition of a range of penalties set at reasonable levels. Consistent with the approach endorsed by the FCC on several occasions, Qwest's proposed Arizona PAP puts at risk 36% of Qwest's net revenues from local exchange services.

Through the workshops Qwest has demonstrated that the features of the Plan create powerful incentives for Qwest to take appropriate action in cases of non-compliance with the Plan's performance standards. Qwest has proposed the Plan in order to support an FCC finding that Qwest's Arizona Section 271 application is in the public interest. In light of Qwest's demonstration and the fact that the Plan meets the expectations of the FCC, Qwest requests that the ACC should recommend the Plan as acceptable.

I. DISCUSSION OF OPEN OR UNRESOLVED ISSUES

A. Performance Measurements – PAP-1

Performance measurements form the foundation of any PAP. Qwest's Plan includes comprehensive and carefully tailored performance measurements that provide a detailed view of Qwest's wholesale performance. The performance measures in the Qwest Plan ensure that the service Qwest provides to competitors will be measured and monitored to detect and appropriately sanction any degradation of agreed upon service levels.

The measurements in the Plan are the result of significant scrutiny and, ultimately, consensus among Qwest and CLECs. This consensus exists not only in Arizona, but also across Qwest's fourteen-state region, as the performance measures developed through the Arizona Technical Advisory Group (TAG) are almost identical to those developed through the Regional Oversight Committee (ROC) collaborative. The Tier-1 and Tier-2 performance measurements upon which the parties have agreed are set forth in Qwest Exhibit 13, which Qwest submitted at the workshop on April 3, 2001. The participants in the Regional Oversight Committee ("ROC")

Post Entry Performance Plan workshops agreed to include the same performance measures that are listed in Exhibit 13.⁵

Initially, the CLECs and Qwest were in substantial disagreement concerning the number of performance measurements that should be included in the Plan. Through dialogue and innovative ideas, such as the "family" concept in which two performance sub-measurements share a single payment opportunity,⁶ the parties were able to narrow their differences significantly. The only remaining issues following the conclusion of the workshop are whether to include PO-6 (Work Completion Notification Timeliness), PO-8 (Jeopardy Notice Interval), and PO-9 (Timely Jeopardy Notices) performance measurements in the Plan. In the spirit of compromise, Qwest offered the CLECs the opportunity to choose either PO-6 or PO-7 for inclusion in the Plan, but does not agree to include both measurements.⁷ Qwest also proposed that sub-measurements PO-8 and PO-9 be formed into three "families," with each family sharing one payment opportunity.⁸ The CLECs have rejected both of these proposals.

Throughout this collaborative, Qwest has voiced its concern over linkage between the performance measurements and the payment structure of the Plan.⁹ The issues surrounding PO-6, PO-7, PO-8, and PO-9 exemplify that concern. Simply put, the structure in the existing Qwest Plan already affords CLECs substantial payment opportunities, including the potential for receiving more from Qwest through payments than a CLEC stands to gain in profits from a customer. The payments also give rise to the realistic possibility that Qwest's payments under

⁵ April 4, 2001 Transcript, pp. 7-8.

⁶ See Qwest Exhibit 13 at footnotes c, d, and e.

⁷ *Id.* at footnote a.

⁸ *Id.* at footnote b.

⁹ See, e.g., Qwest Exhibit 8 (Qwest Comments at p. 4); December 18, 2001 Transcript at pp 29-43, Qwest Exhibit 11, (Qwest's Comments Regarding Outstanding Issues at pp 1-2.

the Plan could substantially exceed the profits that Qwest loses from customers who switch to other carriers.¹⁰

The CLECs recognized Qwest's concern that it could face multiple payment obligations arising from the same performance, particularly where the same Qwest function is being measured by two different performance measurements, when they accepted the family compromise involving measurements OP-4 and OP-6. In that instance, the same function – installation of lines – was measured twice. In the case of the disputed issue, PO-8 and PO-9, the same is true, except that the function is the issuance of jeopardy notices. Qwest's proposal that the sub-measurements of PO-8 and PO-9 share a single payment opportunity is reasonable and should be acceptable to the Commission. Qwest should be liable only for a single payment for late jeopardy notices. Qwest should not be liable for two payments, as would be the case with the CLEC's proposal to include both PO-8 and PO-9 in the Plan.

The inclusion in the Plan of either PO-6 or PO-7, but not both, is justified based upon the overall analysis that CLECs are afforded ample payment opportunities exceeding the annual profit of the business customer that they compete for and that Qwest's liability to make payments sufficiently exceeds the same profit such that it has substantial incentive to meet performance standards. Excessive payment opportunities for the CLECs will create distorted economic incentives, as the CLECs will stand to gain more financially if Qwest misses performance standards. This situation would result in uneconomic windfalls to CLECs and create perverse economic incentives. It also would competitively disadvantage Qwest.

¹⁰ See Qwest Exhibit 9, Slide 5 (demonstrating that under the Qwest proposal, the CLECs payment opportunity already exceeds the business customer profit they seek to take away from Qwest by 6 to 44 times, and that conversely, with liability for payments greater than the profit Qwest stands to lose to the CLEC, Qwest will have substantial incentive to meet performance standards for each of the measurements).

B. Measurement of Change Management – PAP-2

This issue concerns the measurement relating to Qwest's change management processes. At the request of WorldCom, Qwest agreed to consider including measurements to address software change management, even though neither WorldCom nor any other CLEC proposed change management performance measurements in the Arizona OSS process. Qwest has proposed two measurements that are similar to the two change management measurements that are now included within the Texas Plan. These are attached as Attachments A and B to this Brief.

The performance measurements are currently being considered in the Arizona OSS collaborative, however, will not be a part of that test. After investigating the appropriate characteristics of these measurements, Qwest has determined that the standards must necessarily be diagnostic so that it is premature, at this point, to include them in the Plan. Qwest does agree that the results should be reported and monitored and is willing to consider whether inclusion is appropriate at the first six month review. As the number of the new PID implies, GA-7 is placed in the Gateway Availability category because the outages it measures are also captured by the GA-1, GA-2, and GA-6 measurements for the IMA, EDI, and CEMR interfaces, respectively. Accordingly, in light of the other GA measures, the appropriate standard for GA-7 should be diagnostic. Moreover, as with any new measurements, it would be appropriate to treat both GA-7 and PO-16 as diagnostic until the first six-month review. At that time, the matter of a benchmark could be reconsidered in the context of both the actual results for these measurements and the results of the other Gateway Availability measurements.

No other change management measurements are necessary. Although WorldCom has indicated a desire for a software "test bed", it acknowledges that the issue is being addressed through the Qwest CICMP process. Qwest does not concede that a measurement on the success of a "test bed" platform is appropriate; however, the opportunity to consider such a measure will be presented in the Plan six-month review process.

C. Root Cause Analysis After Measurement Failure over Two Consecutive Months – PAP-3

Qwest has agreed to investigate any second consecutive Tier-2 miss to determine the cause of the miss and to identify the action needed to meet the standard. The specific provision is incorporated into Qwest's Exhibit 16 (revised 5/4/01), at Section 15.

Qwest notes that no other BOC's performance assurance plan contained a requirement for "root cause" analysis when presented to the FCC. Indeed, without this provision, a BOC still has substantial incentive to identify the causes of misses and to take corrective action. This incentive comes from the significant payments that the PAP requires of Qwest when misses occur. As a practical matter, the prospect of these payments will cause Qwest to act aggressively to identify causes and to implement corrective steps.

Unlike the SBC Texas Plan, Qwest's proposal does not require root cause analyses for Tier-1 misses. The exclusion of Tier-1 misses from this requirement is driven by data and circumstances specific to Arizona. Specifically, in more than 50% of the situations involving Tier-1 in Arizona, there are less than 10 CLEC orders per month. When volumes of orders are that low, only a small number of missed orders could lead to a miss under the Plan. For example, if Qwest received nine orders per month in two consecutive months and missed two orders each month, that result would lead to a time-consuming and costly root cause analysis under the SBC Texas Plan. However, the reality is that missing a total of four orders over two months does not indicate the potential presence of the type of systemic problem that would justify a root cause analysis. More data and more misses are required to demonstrate a realistic possibility of a systemic problem and, in turn, the need for a root cause analysis. It would be highly wasteful to require Qwest to invest the substantial time and resources needed for this type of analysis based on results from small sample sizes and the existence of a handful of missed orders.

The inappropriateness of root cause analysis in this situation is heightened in this case by the CLECs' proposals that the statistical confidence levels for meets/fails decisions for parity be lowered from the traditionally accepted confidence level of 95%. Under the CLECs' proposal, to balance Type I and Type II error, the statistical confidence level would be between 55 and 65% when the volume of orders is less than nine and 65 to 75% when the volume of orders is between 10 and 30. This reduction in the confidence levels increases the likelihood that Qwest will miss sub-measurements in two consecutive months. Particularly given the significant undertaking that is required for a full-blown root cause analysis, it would be unreasonable to impose this requirement based on performance results that are judged to be non-compliant with only a 55 to 65% level of confidence.

Z-Tel's proposal that root cause analysis be triggered when performance results exceed "a mean difference of 25%" or more provides an example of how the CLEC proposals would lead to unfair and unreasonable results. Under this proposal, a 25% mean difference would require that when the relevant retail measurement point is 90%, the CLEC result could be no less than 87.5%.¹¹ With the small CLEC order volumes that exist in Tier 1 situations, a margin of 87.5 to 90% is meaningless. For example, with a total of five orders, a single miss will cause the CLEC result to fall 20 percentage points, from 100% to 80%. And even with a total of 20 CLEC orders, a single miss would cause the CLEC result to fall five percentage points, from 100% to 95%.

D. Appropriateness of Qwest's K-Table – PAP-4

1. Background Relating to Statistical Testing and Random Error

Statistical tests are used to distinguish between true differences and those that are simply the result of random variation. Where statistical tests can never distinguish with absolute certainty between true and random differences, it is possible to specify the degree of uncertainty

¹¹ See Qwest Exhibit 12, p. 2, n. 2.

in the conclusions. A “z-test” is used to determine if differences are statistically significant. By selecting a critical value for the z-test, statisticians specify the degree of uncertainty, or error, they are willing to accept. A standard selection in parity testing is to provide 95% confidence that the observed results truly differ. Stated another way, this is a test at the 5% level of significance. For a single parity test, the critical value corresponding to a 5% level of significance is 1.645. If the z statistic is equal to or greater than 1.645, Qwest would be deemed to have missed the parity standard.

Inherent in the application of the 95 percent confidence level is a corresponding five percent chance that the observed miss could have been attributable solely to chance. In other words, approximately 5% of a large number of observations will appear to be significantly different from a statistical perspective even though, in reality, they are not different at all. This result is referred to as Type I error.

The greater the number of parity tests that are conducted, the greater becomes the probability of at least one erroneous finding of a statistically significant difference in results when there is no true difference between CLEC and Qwest performance. With multiple parity tests, there is a likelihood well beyond a five percent chance of falsely finding a difference in any one test. In practical terms, this means that, over time, disparities in service will be incorrectly found greater than five percent of the time. The K-Table reduces the probability of false findings and, hence, is an important component of the Plans that have been adopted in Texas, Oklahoma, and Kansas. The application details of the K-Table are discussed later in Section 5, below.

The CLECs acknowledge the propriety of using a z-test and the existence of Type I error. However, they claim that a PAP must account for both Type I and Type II errors. Qwest opposes including a Type II adjustment factor because, outside a controlled test such as the OSS test, Type II error cannot properly be controlled without significantly affecting Type I error. Type I error occurs when a significant difference is found that is not a true difference. It is a false failure. Type I error is determined by the selection of the critical value, z^* . Type II error occurs

when no significant difference is found when there is a true difference. By definition, Type II error is unknown and requires an assumption about the "true" differences in the population. If the true difference were known, there would be no need for statistical testing – the purpose of statistical testing is to estimate the difference that truly exists. Therefore, an assumption of the true difference is illusory – it can not be known, but can only be assumed to exist without benefit of evidence.

2. Description of the K-Table¹²

The K-Table serves an important function. If the ROC agreement is not adopted in Arizona, then the K-Table should be included in the PAP. Specifically, the K-Table reduces the statistical chance that Qwest will be required to make payments to CLECs when there is no

¹² In the April 24-26, 2001, Regional Oversight Committee ("ROC") workshop, Qwest and certain CLECs reached an agreement to satisfy the parties' concerns about statistical differences over the range from small to large sample sizes and Type I and Type II errors. (AT&T, McLeod, and New Edge participated in the agreement. WorldCom and Z-Tel have indicated that they do not intend to participate in the agreement.) While Qwest believes the K-Table serves an important function and should be included in the Plan, the company also offers the ROC statistical agreement to the CLECs participating in the Arizona collaborative.

The ROC agreement eliminates the K-Table and specified the following critical values to be used for statistical testing in the PAP:

Sample Size	CRITICAL VALUE	
	LIS Trunks, UDITs -- DS1 and DS3	All Other Parity Measurements
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

* Applies for individual month testing. For purposes of determining consecutive month misses, 1.645 shall be used. Zone 1 and Zone 2 shall be combined.

The parties to the ROC agreement have agreed that this table of sample sizes and critical values appropriately mitigates the potential for Type-I and Type-II errors.

difference in service results. Without the K-Table, the chances will increase that Qwest will be required to make self-executing payments to CLECs – who have no requirement to demonstrate any harm – for observed differences in quality that are nothing more than the result of statistical error. Basic fairness dictates that the PAP should minimize the likelihood of Qwest making payments to the CLECs that are based on statistical errors. Accordingly, each of the PAPs that the FCC has approved in Texas, Kansas, and Oklahoma includes a K-Table. The K-Table that Qwest is proposing is based on the tables in those PAPs and on the development of a K-Table by AT&T and WorldCom.

3. Statistical Theory Behind the K-Table

The K-Table was developed in papers presented by Dr. Collin Mallows of AT&T,¹³ and by MCI/WorldCom (for the LCUG) ("the Mallows and WorldCom Papers").¹⁴ The table is developed through a series of repeating steps that create pairings of K adjustments and critical z values. These pairings are designed to maintain a Type I error of five percent regardless of the number of statistical tests.

Although it is possible to hold the probability of making a Type I error to 5% when conducting one z-test, conducting multiple z-tests unavoidably increases the Type I error beyond 5%. For example, with 10 tests and a nominal 5% chance of Type I error for each test, there is a combined probability of 40% that at least one test will be failed purely by random chance alone. Because of the large number of sub-measurements in the Qwest PAP, it is likely that a large number of z-tests will be performed for each CLEC. The K-Table serves the critical function of keeping the combined Type I error rate at 5% regardless of the number of z-tests that are

¹³ Qwest Exhibit 17, (Testimony of Dr. Collin Mallows, AT&T, "In the Matter of Performance Measurements and Reporting Requirements for Operations Support Services, Interconnection, and Operator Services and Directory Assistance," FCC Dkt. No. 98-56 (May 29, 1998).)

¹⁴ Qwest Exhibit 18, (MCI and Worldcom, "Local Service Non-Discrimination Compliance and Compliance Enforcement," Version 1.0, August 4, 1998).

performed. By limiting the combined probability of false failure to 5%, the K-Table reduces, but does not eliminate, the occurrence of false failures for which Qwest will be required to make payments to CLECs.¹⁵

Qwest has made one change to the K-Table as presented in the Mallows and WorldCom Papers in response to comments from CLECs involved in the Arizona PAP workshops. Mallows and WorldCom treat a failure to meet a measurement in three consecutive months as an automatic miss that is not subject to a K-Table exclusion. Qwest's PAP does not include this provision, and, therefore, the probability, even though very small, is removed from the K-Table calculations. The end result is that the Qwest K-Table will result in fewer exclusions than the K-Tables approved by the FCC in Texas, Kansas, and Oklahoma.¹⁶

4. Application of the K-Table

Application of the K-Table is simple and only involves the following steps: (1) Count all parity measurements for each CLEC with a sample size of at least 10; (2) Look up the critical value and number of measurements to exclude in the K-Table; (3) Rank the CLEC measurements by ascending importance and sample size, removing low importance, low sample size and low payments first; and (4) Remove the appropriate number of measurements.

The effect of the K-Table on the amount of Tier-1 payments will vary from one CLEC to another and will depend on the volumes of orders that a CLEC has submitted. In general, the mitigating effect of the K-Table is minimized because the payment structure in Qwest's Plan requires application of the K-Table exclusions in a systematic manner, beginning with missed performance measurements that are designated "low" and that have the smallest CLEC order volumes.

¹⁵ See Qwest Exhibit 14.

¹⁶ See Qwest Exhibit 11, p. 20.

5. Responses to CLEC Comments Relating to the K-Table

CLECs have contended that the number of exclusions in Qwest's K-Table is too large. However, Qwest has based its table on the Mallows and WorldCom Papers and on the K-Tables adopted in Texas, Kansas, and Oklahoma. The consistency between the level of exclusions between Qwest's K-Table, the tables adopted in these other states, and the K-Tables described in the Mallows and WorldCom Papers demonstrates that this contention is meritless.

In an attempt to challenge the foundation for Qwest's K-Table, WorldCom's statistician, Dr. John Jackson, argues that the Texas K-table, as well as the WorldCom paper is based on an incorrect interpretation of the Mallows Paper.¹⁷ This argument does not withstand scrutiny. It is clear that both papers are concerned with the overall probability of making a Type I error, and that is exactly what the K-Table is designed to do. In order to substantiate his claim, Dr. Jackson would have to show that WorldCom misunderstood Mallows, that SBC misunderstood Mallows, and that the commissions in Texas, Kansas, and Oklahoma misunderstood Mallows and misapplied his paper.

Dr. Jackson claims further that for 100 CLEC sub-measurements, the correct number of exclusions is five, not eight. Z-Tel offers the same assertion. The flaw in this contention is that it is indisputable that more than five significant sub-measurements will be found by chance alone about 40% of the time. In other words, as Dr. Jackson and Z-Tel would have it with their request for only five exclusions; there would be a substantial likelihood that Qwest would be required to make payments to CLECs when there have been no misses or performance deficiencies.

E. Cap for Penalties – PAP-5

Qwest's Plan puts 36% of its Arizona "net return," as defined by the FCC in its previous orders, at significant and meaningful risk. This is precisely the same percentage as in the

¹⁷ See MCI Exhibit 12.

performance plans initially approved by state commissions in New York, Texas, Oklahoma, and Kansas and endorsed by the FCC in connection with its approval of the 271 applications in those states.¹⁸ The Massachusetts commission originally approved a cap of \$142 million, which represented 36% of Verizon's net return,¹⁹ but it later increased the amount at risk to \$155 million, which represented 39%, to include additional bill credits available for payment to account for additional DSL and line-sharing metrics.²⁰ The Massachusetts commission did so in anticipation of comparable changes to Verizon's New York PAP by the New York commission during its annual review.

Qwest performed simulations of the PAP using actual CLEC volumes to demonstrate that 36% of net revenues are at substantial risk.²¹ The results of the simulation demonstrate that the PAP does indeed put 36% of Arizona's net return at significant and meaningful risk. If Qwest were to make payments on just 1% of CLEC volumes²², its annual Tier-1 payment to CLECs would be \$4 million for the first month miss. If Qwest were to miss a second consecutive month, its payments to CLECs would total \$7 million. In the third consecutive month, Tier-2 payments would be triggered, and the combined Tier-1 and Tier-2 payments would be \$18 million.²³ The

¹⁸ *Bell Atlantic-New York Order* at ¶ 436 n.1332; *SBC Texas Order* at ¶ 424 n.1235; *SBC Kansas/Oklahoma Order* at ¶ 274 n.837.

¹⁹ *Order Adopting Performance Assurance Plan* at 24 (Mass. D.T.E. Sep. 5, 2000).

²⁰ *Order on Motions for Clarification and Reconsideration; Performance Assurance Plan* at 6 (Mass. D.T.E. Nov. 21, 2000); *Verizon (Massachusetts) Plan* at 4 (Jan. 30, 2001); *see also Verizon Massachusetts Order* at ¶¶ 239, 241 n.769.

²¹ Qwest Exhibit 12, Attachment D. The simulation was based upon projected May 2002 volumes which were drawn from the volumes to which Qwest and the CLECs have agreed for purposes of the Arizona OSS test.

²² *Id.* (A 1% miss is the equivalence for a 90% benchmark standard of Qwest providing 89.1% service to the CLECs.)

²³ *Id.*

simulation also demonstrated that the 36% of net revenue cap would be reached when approximately 7% of CLEC volumes were missed, a margin for error that is illustrative of the power of the Qwest Plan.

The CLECs propose that a "procedural" cap replace the 36% cap on payments, thus requiring Qwest to continue to make payments to CLECs beyond the 36% level. The CLECs claim that stopping payments at 36% reduces the effectiveness of the PAP. This position is based upon the misguided premise that the incentive to meet performance standards would cease to exist if payment stopped at 36%. The CLECs ignore the fact that after reaching the level of 36% of net revenues, Qwest will have paid out approximately \$72 million for the year. Because the cap is a recurring annual cap, unless Qwest quickly fixes its performance results, it stands to pay another \$72 million the next year, and the year after that.²⁴ Furthermore, Qwest risks losing its ability to market interLATA services to new customers.²⁵

The CLECs also propose that the 36% be raised to 44%. They offer no rationale to support 44%, other than to state that the New York Commission ordered 44% in response to post-section 271 service problems of Verizon-New York. No such circumstances exist in Arizona. Thirty-six percent of net revenues is a substantial sum of money to put at risk. The requirement is that a substantial financial incentive be created to ensure Qwest compliance with service standards. Thirty-six percent meets the requirement. CLECs can offer no rationale, nor evidence, to the contrary.

F. Miscellaneous Penalty Issues – PAP-6

There are several miscellaneous issues relating to penalties that the parties were unable to resolve in the workshops: (1) whether unused portions of monthly caps should be rolled forward

²⁴ Qwest Exhibit 9, Slide 11; February 5, 2001 Transcript pp [REDACTED].

²⁵ See Qwest Exhibit 12, p. 4.

into other months; (2) whether the PAP should impose a minimum payment whenever Qwest fails to meet a standard for a sub-measurement; (3) whether the PAP should impose escalated payments for repeat monthly occurrences; and (4) whether Qwest should be permitted to pay penalties through bill credits instead of through direct payments to the CLECs. Qwest addresses each of these issues in the discussion that follows.

1. Qwest Agrees to Roll Forward Unused Portions of Monthly Caps.

As Qwest stated in the Comments it filed on April 2, 2001, Qwest has agreed that the unused portions of caps from prior months will roll forward continuously until the end of the calendar year. Accordingly, Qwest has removed language in section 12.0 of the revised Plan that would have precluded rolling unused caps forward.

2. The PAP Should Not Include a Minimum Per-Occurrence Penalty.

While the PAP should ensure that Qwest has proper incentive to provide appropriate wholesale service to the CLECs, it also should not go so far as to impose unreasonable and inequitable penalties on Qwest. This issue of minimum per occurrence penalties directly implicates the fundamental principle that Qwest should not be required to pay unreasonable penalties. The imposition of minimum payments for each time that Qwest fails to meet a standard for sub-measurement will result in unreasonable payments that will substantially exceed any harm the CLECs may suffer when Qwest does not meet a sub-measurement standard. This result is fundamentally unfair and should be avoided.

The unfairness and arbitrariness of minimum penalties is demonstrated by WorldCom's proposal for a \$5,000 minimum payment that would apply to each sub-measurement, in each month, and for each CLEC. Data from Arizona demonstrate that, on average, 61 percent of the results at the sub-measurement level have fewer than 10 data points.²⁶ Given this level of

²⁶ Qwest Exhibit 12, Attachment B.

disaggregation, a large CLEC like WorldCom could have hundreds of orders in a given month, but those orders could be spread across a number of services and geographic zones, thereby giving the false appearance that the CLEC is small. This result could lead to multiple minimum payments, which is fundamentally unfair. Further, a \$5,000 minimum payment for one miss out of nine service opportunities at the sub-measurement level is simply unreasonable.

Similarly, Z-Tel proposes a minimum per-occurrence penalty, arguing in support that when CLEC volumes are small, the per occurrence payment structure will produce payment levels that are less than the "actual consequences of discrimination."²⁷ Despite Qwest's requests for evidence of the "actual" financial consequences to CLECs that would justify a minimum per occurrence penalty, the CLECs have not made any factual showing. The need for factual support for this demand by the CLECs is demonstrated by the ever-changing nature of Z-Tel's proposal. Z-Tel initially proposed a minimum per occurrence penalty of \$15,000 and later reduced that amount to \$5,000.²⁸ In its latest proposal, Z-Tel seeks a minimum penalty of \$2,500.²⁹ Z-Tel's quickness to change the amount of the minimum penalty – an amount that is supposed to represent "actual consequences" – is a clear demonstration of the arbitrariness of the proposed minimum penalty and the lack of any relationship between the minimum penalty and any harm that the CLECs may suffer if Qwest does not meet a standard for sub-measurement.

The reality is that the extent to which a CLEC may be harmed when Qwest does not meet a standard sub-measurement is a fact-specific inquiry that will vary from one situation to another. Any minimum penalty that the CLECs propose will necessarily be arbitrary and will not be related to actual harm. As a result, if minimum penalties are adopted, there will be situations

²⁷ Z-Tel Comments, January 29, 2001, at p. 4.

²⁸ Z-Tel Exhibit 2, p. 6.

²⁹ Z-Tel Exhibit 4 ("Response to PAP-6")

where CLECs receive payments from Qwest when they have not suffered any harm and where Qwest's payments exceed the harm that the CLECs have suffered. This result would violate the basic principle that payments to CLECs under the Plan should be based upon the financial harm that the CLECs have suffered and should not lead to financial windfalls.

Qwest has voluntarily incorporated a provision that applies a minimum payment for nascent services. This provision adequately addresses any perceived need to bolster incentives for provisioning where volumes are low. In its November filing, Qwest added to its PAP a new Section 10.0, "Low Volume, Developing Markets." When the aggregate monthly volume for a qualifying performance measurement for CLECs participating in the PAP is between 10 and 100 and Qwest misses the standard for the qualifying sub-measurement, Qwest will make a Tier-1 payment to the participating CLECs. The Qwest payment will be calculated on CLEC aggregate volume for the measurement and apportioned to the affected CLECs based upon their relative share of the service misses. The payment calculation will be subject to a \$5,000 minimum. The performance sub-measurements will not be subject to the K-value exclusions, but will be included in the count to determine K-values in Section 4.0.³⁰

This new element in the Qwest PAP addresses concerns raised by the CLEC over the effect of a per-occurrence payment structure on developing markets for new services and assures a substantial payment by Qwest in the event performance results do not meet the applicable standard.³¹ Although this provision is patterned after the Texas Plan, it is more beneficial to the CLECs than the Texas Plan because it requires Qwest to provide compensation to CLECs instead of to the state.

³⁰ Qwest Exhibit 8, pp. 7-8.

³¹ *Id.*

3. Escalated Penalties for Repeat Occurrences Will Lead to Unreasonable and Unfair Results.

This issue concerns whether Qwest should be required to make ever-increasing per occurrence payments to CLECs for consecutive month misses beyond the sixth month.³² The per occurrence payment amounts should not escalate any further because the six-month levels already greatly exceed any potential financial harm to the CLECs. At the December workshop, Qwest demonstrated through Exhibit 5 that CLECs have the opportunity to receive PAP payments that substantially exceed the potential lost profit if Qwest service performance caused the CLEC to lose the customer. At the six consecutive month level, CLEC payment exceeds estimated lost profit by 44 times.³³ With the likely inclusion of additional Tier-2 per occurrence payments of \$200, \$300, and \$500, Qwest will already have substantial incentive to fix any non-compliance service.

The CLECs have presented no evidence of the level of financial harm they might incur from missed performance standards. Nor have the CLECs presented any evidence that a miss of a performance standard for any specific sub-measurements would directly cause financial harm.³⁴ Without any supporting evidence, there is no justification for the CLEC proposals that payment amounts continually escalate.

³² The current Qwest Plan includes a payment table that provides that per occurrence payments be either \$400, \$600, or \$800 per occurrence for the sixth consecutive month miss and that those per occurrence amounts also apply beyond the sixth consecutive month.

³³ See Qwest Exhibit 11, Attachment 3.

³⁴ CLECs present no evidence that a miss at the sub-measurement level, which corresponds to the level at which payments would be calculated, would have such visibility that it could influence customers choice of telecommunications carrier. The fact of the matter is that customers will not have direct knowledge of different service levels (CLEC and Qwest retail) or missed benchmark standards.

Qwest presented the following table to illustrate that any further escalation of the six-month payment amount would only add further to the uneconomic windfall that CLECs will receive under the PAP at the six-month level.³⁵

	6 Mon Payment	With the Effect of Disaggregation	Annual Profit ³⁶	Uneconomic Windfall ³⁷
Low	\$400	\$6,400	\$146	\$254 - \$6,254
Medium	\$600	\$6,400	\$146	\$454 - \$6,254
High	\$800	\$6,400	\$146	\$654 - \$6,254

This table demonstrates that the \$400, \$600, and \$800 per occurrence payments, coupled with the effect of multiple payment opportunities created by the numerous times in the ordering and provision process that Qwest is measured, substantially exceed the annual profit of the customer being switched from Qwest to a CLEC. Thus, CLECs stand to receive an uneconomic windfall ranging from several hundred dollars to \$6,254 per customer.

4. Qwest Should Be Permitted to Pay Penalties through Bill Credits and Should Not Be Required to Make Direct Payments to the CLECs.

The CLECs' request that Qwest be required to make direct payments to the CLECs instead of issuing bill credits is inconsistent with the PAPs that were adopted as part of the

³⁵ Qwest Exhibit 11, pp. 12-13.

³⁶ Evidence from Z-Tel's financial reports proves that the incremental pre-tax profit Z-Tel achieves from a customer is \$60. Thus, Z-Tel cannot reasonably argue before this Commission that its financial harm exceeds this amount, nor that payments greater than \$60 would not be an economic windfall which could be used to fund further market penetration into Qwest's customer base. See Qwest Exhibit 5 at p. 15 (presented at the December 18, 2000, workshop).

³⁷ The uneconomic windfall is estimated by subtracting the annual profit from a single 6-month payment and the \$6,400 payment that takes into account each of the 34 steps that the Qwest process of responding to a CLEC LSR has been disaggregated into by the PIDs. Arguably, a miss of a single sub-measurement is not likely to cause a CLEC to lose a customer, nor does Qwest believe it likely that it would miss standard for all 34 sub-measurement. The uneconomic windfall lies somewhere within this range.

section 271 approval processes in Kansas, Massachusetts, New York, Oklahoma, and Texas.³⁸ None of the PAPs in those states requires direct payments instead of bill credits.

While the CLECs claim that checks are easier to administer than bill credits, they have neither explained nor demonstrated why that is allegedly the case. The financial management at a modern corporation is performed through its accounting system, not through its cash box. Whether paid by check or by bill credit, CLECs must still enter the payment into its accounting system, which disregards whether the payment originated as a bill credit or a check.

CLECs claim that checks would have a greater impact on Qwest than bill credits. This assertion is simply wrong and is based upon the mistaken view that the modern corporation still relies upon senior management hand-signing all checks. Whether by bill credits or check, the visibility to Qwest senior management of payments to CLECs under this PAP will be through the monthly profit and loss statement that summarizes Qwest results.³⁹

G. Classification of Measurements – PAP-9

As a result of the collaborative process, the PAP now includes all Arizona performance indicator definitions ("PIDs") as Tier-1 performance measurements, with the following exceptions: PIDs that are not suitable for Tier-1 payments; PIDs that are either parity by design or diagnostic; PIDs that overlap with other measurements; and PIDs that the CLECs agreed should not be included in the PAP. In addition, the measurements included in the Plan are at the lowest level of product and geographic disaggregation (*i.e.*, at the sub-measurement level). This approach is consistent with the most current version of the Arizona PID. The sub-measurement level is the level at which Tier-1 statistical testing and stare and compare are used to determine

³⁸ See, e. g., *Verizon Massachusetts Order* ¶ 238; *Bell Atlantic-New York Order* ¶ 432.

³⁹ See e.g., Exhibit 9, Slide 17.

whether Qwest meets standard each month. Furthermore, the determination of whether Qwest meets standard is made on an individual CLEC basis.

Measures GA-1, GA-2, PO-1, OP-2, and MR-2 were not included because they are not suitable for Tier-1 payments because individual CLEC results are not reported. Measures PO-2, PO-4, PO-6, PO-10, PO-15, OP-5b, OP-7, OP-13b, OP-15, MR-10 and selected OP/MR product sub-measurements were not included because they are diagnostic measurements,⁴⁰ and BI-2, DB-1, DB-2, DA-1, and OS-1 were not included because they are parity by design. Measurements GA-3, GA-4, OP-7, MR-4, and MR-10 were not included because the CLECs did not request them.

The Plan's Tier-2 performance measurements are appropriate. These measurements were selected based upon two considerations. First, measurements which are not suitable for Tier-1 payments because of reporting issues (*e.g.*, measurements GA-1, GA-2, PO-1, OP-2, and MR-2) were automatically included as Tier-2 performance measurements. The determination of whether Qwest meets standards on Tier-2 performance measure is made on CLEC aggregate performance results at the sub-measurement level. Second, Qwest included many Tier-1 measurements in Tier-2 based upon the apparent importance assigned to them by CLECs and by their potential for customer impact. Among the Pre-Order and Order measurements, measurement PO-5 was chosen for inclusion in Tier-2 because of its apparent high interest to CLECs. All Ordering and Provisioning and Maintenance and Repair measurements are designated Tier-2 because issues relating to restoration of service directly impact consumers. Similarly, Billing measurements BI-1 and BI-4 are designated Tier-2 because they relate to timeliness and accuracy, both of which directly affect customers.

⁴⁰ Qwest acknowledges that the performance results for the parity by design and diagnostic performance measurements would still be reported to the Arizona Commission and the CLECs until such time their reporting was determined to be unnecessary or until it was determined that they should have parity or benchmark standards.

The assignment of Low, Medium, and High weightings within Tier-1 and Tier-2 is based upon the relative importance of the performance measurements. For example, Ordering and Provisioning and Maintenance and Repair performance measurements are arguably more customer impacting than the Pre-Order and Order and Billing measurements, because provisioning and repair results represent a more direct and perceptible relationship between the LEC and the consumer. Thus, all Ordering and Provisioning and Maintenance and Repair measurements are distributed among the Medium and High levels within the two tiers. By contrast, the Pre-Order and Order and Billing measurements are designated Low, as they represent performance that is less direct and less perceptible to customers. Low, Medium, and High weightings for Tier-2 performance measurements generally parallel the Tier-1 weightings except for several measurements given higher weightings in Tier-2 (*e.g.*, PO-5 and BI-4). And, constant with Qwest' overall approach, the Tier-1 and Tier-2 weightings also track the weights given to similar performance measurements in SBC's Plan in Texas.

Notwithstanding ample opportunity, the CLECs have failed to provide any specific counterproposal. Z-Tel states only that there should be a vote on classifying measurements.⁴¹ WorldCom offers only that the "market" should determine the appropriate classification.⁴² Given the experience from Texas and the rationale described above, the Qwest proposed classifications are appropriate.

In sum, the Plan appropriately includes within the two tiers all of the measures required to adequately safeguard against post-entry backsliding and are, therefore, consistent with the FCC's orders. Moreover, the measures are categorized and distributed among the tiers in a

⁴¹ Z-Tel Exhibit 3, p. 6.

⁴² WorldCom Exhibit 13 ("PAP-9 Ranking of Measures").

rational way, and their weightings reasonably reflect their relative importance to CLECs and consumers in Arizona.

H. Severity Factor – PAP-10

The CLECs are advocating the inclusion of a severity factor in the PAP that would result in increases in per occurrence payments based upon the degree of a service miss by Qwest. In other words, the further the miss is from a standard, the greater would be the per occurrence payment amount. This escalation in per occurrence amounts is not needed.

The Commission's consideration of the CLECs' demand for a severity factor should take into account the entirety of the payment structure that the Plan establishes. The evidence in the record demonstrates clearly that the Plan's Tier-1 payment structure will provide a reasonable level of payments to the CLECs that will compensate them for any economic harm. A severity factor would, therefore, lead to an economic windfall for the CLECs. As Qwest demonstrated in previous comments and through evidence, when a CLEC's local service request ("LSR") is processed through Qwest's service delivery system, there are 11 performance measurements that Qwest must meet, and the CLEC, therefore, has 11 opportunities to receive payments from Qwest. At each of the 11 measurement points, if Qwest misses a standard, the CLEC will receive established payment amounts that will escalate based upon the number of consecutive months that Qwest has failed to meet the sub-measurement standard.

Under this structure, in the normal case, a CLEC will receive total payments that exceed the annual profit of serving a business customer. In fact, the PAP gives a CLEC the opportunity for payments in the first month of a miss that exceed profits for a business customer by a factor of six; by the sixth consecutive month, the factor increases to 44.⁴³ Further, the CLEC Q-Mod proposal would require Tier-1 payments that exceed Qwest's pre-tax net profit of serving a

⁴³ See Qwest's Exhibit 11, at p. 17.

business customer by factors ranging from 199 to 1,192 assuming a severity penalty of only 5%. With a severity penalty of 25%, the factors range from 349 to 2,093 times net profit.⁴⁴ These levels of payments would serve no legitimate purpose and would only lead to over-compensation of the CLECs and unfair, punitive punishment of Qwest.

Additionally, the CLECs recommend that z-scores be used for determining the level of economic penalties. This approach would lead to an improper use of statistics. Statistical decision rules (or hypothesis tests) are appropriate for determining whether observed differences between actual and expected behavior are *statistically significant*. They *cannot* reliably indicate whether those differences are economically or financially important. It is possible to have a statistically significant result but not be economically important and for the opposite also to be true. Why is that? Statistical decision rules should be used for one purpose, *i.e.*, to *detect* performance violations. They should not be used for determining the severity of violations, because z-scores and similar test statistics are designed only to indicate whether a particular statistical hypothesis is true or false, not how true or how false or what the economic significance of a given deviation from the null hypothesis might be. In other words, a statistical decision rule like z-scores can only provide an absolute diagnosis, not a relative one.

For example, assume z-scores are computed for the same measure in two successive months. In both months, the observed differences from parity are statistically significant. Next, assume the month two z-score is twice as distant from the critical value as for month one. Can it be inferred that the observed departure is twice as strong in the second month as in the first? No. The reason is that z-scores are developed incorporating several variables (e.g., the mean performance when Qwest serves itself, the mean performance when Qwest serves the CLEC, standard deviations in the data and number of observations). Changes in any of these components can influence z-score values. A z-score twice as distant from a critical value as

⁴⁴ See Qwest Exhibit 12, at p. 9.

another can be, *for reasons other than performance*, twice as large as the other. It is improper to use the same statistical decision rules to first determine whether outcomes are statistically significant to then also equate those outcomes with relative economic harm.

I. Reviews and Audits – PAP-11

In contrast with the reasonable review and audit provisions contained in Qwest's proposed Arizona Plan, the proposed PAP filed by WorldCom calls for an extensive and unwarranted audit regime comprised of comprehensive annual audits and CLEC-initiated "mini-audits." Qwest's proposal is reasonable and sufficient.

By the time that the Plan becomes effective in Arizona, the performance measurements that form the basis for the Plan will have undergone not one, but two comprehensive audits by two different independent auditors. In light of this scrutiny, there is no basis for conducting comprehensive annual audits going forward. Qwest has indicated that Liberty Consulting Group will propose a monitoring program. An acceptable monitoring program is sufficient to ensure that the audited measures remain reliable. In addition, Qwest has agreed to include in its Plan the opportunity for CLEC-initiated audits. The relevant provisions are contained in section 15 of the Plan and are similar to provisions contained within the SBC Plans.

Qwest has also provided for reasonable audits of the financial system used to calculate payments/credits owed to CLECs. Qwest has agreed to a full audit of that system one year after the Plan is in effect and again, eighteen months thereafter.⁴⁵ These provisions provide reasonable assurances that the data collection and reporting of performance measurements and Plan payments are accurate and reliable.

⁴⁵ See Qwest Exhibit 12, pp. 11-14; See also Qwest Exhibit 16, Section 15.

J. Tier 2 Payments – PAP-12

Only Qwest has offered a comprehensive Tier-2 payment structure.⁴⁶ Under Qwest's proposal, Tier-2 payments would give Qwest incentive, in addition to the incentive provided by Tier-1 payments to CLECs, to correct ongoing non-conformance. Tier-2 payments would be made to a state fund established by the state commissions. The funds would be used to reimburse customers' shares of fees to extend telephone service within Qwest's service territory, to extend Qwest telephone service into adjacent, unassigned service territory, and for any other purposes that relates to the Qwest service territory that a state commission may be determine within its discretion. The Qwest Tier-2 payment structure is similar to the Tier-1 payment structure, but it applies higher payment levels to performance measurements listed on Attachment 1 of the Qwest PAP.

The CLECs propose that the Tier-2 structure be identical to the structure for Tier-1 payments, but they have provided no rationale for that position. In the absence of any stated rationale, it appears that the CLECs' unspoken purpose is to maximize the amount of money that Qwest may be required to pay under the Plan.⁴⁷

The Qwest Tier-2 payment structure gives Qwest ample incentive to comply with performance standards, particularly when the Tier-2 payments are combined with the Tier-1 payments. At the workshops, Qwest presented simulation results for the Qwest PAP that showed the incremental level of Tier-2 payments that would result for performance misses ranging from 1% to 10% of CLEC business volumes.⁴⁸ The simulation results demonstrate that Qwest's

⁴⁶ See Qwest Exhibit 16, Section 7.0.

⁴⁷ Commission Staff repeatedly asked the CLECs to bring to the workshops concrete proposals for compromise. The CLECs consistently declined to do so.

⁴⁸ The percent misses is the proportion of CLEC business volumes (e.g., LSRs, orders, trouble tickets, out of service conditions) that failed to meet performance standards. For example of 1% miss of OP-3 (Installation Commitments Met) means Qwest missed the commitments met standard by 1% of the

proposed Tier-2 structure incrementally increases payments from 59% at 1% misses, up to 82% at 10% misses.⁴⁹ The level of this increase is a clear demonstration of the power of the performance incentives that Qwest's Tier-2 structure will create.

Qwest priced out the effect of the CLECs' proposal that Tier-2 should exactly mirror Tier-1, and that analysis proves the unreasonableness of the proposal. Using actual October 2000 CLEC performance results, Qwest demonstrated that the CLEC's proposal would produce extraordinarily high monthly and annual Tier-2 payments. The amounts of these payments, which are confidential, are set forth in Qwest Exhibit 10. To put these dollar levels in perspective, the percent misses that would produce these Tier-2 payments is 4.2% of CLEC volumes for selected performance measurements and 1.1% of CLEC volumes for all performance measurements.⁵⁰ Payments at these levels, given the relative low level of percent misses, are patently unreasonable. The CLECs could offer no response to this analysis.

K. Fall-Back and Escalation of Penalties – PAP-13

This issue involves two sub-issues: (1) whether penalties that have increased because of repeat misses should fall back to the original amounts after two months of compliance by Qwest; and (2) whether repeat occurrences should cause any fall-back of penalties to return to amounts that are higher than the original penalty amounts.

Z-Tel proposes the use of a "sticky duration" provision in the PAP under which repeat misses in service would be deemed *prima facie* evidence that payment levels are not high enough and should be permanently escalated. While this concept may have some theoretical appeal, the reality is that sticky duration is inappropriate for use in the telecommunications industry, and, not

CLECs orders completed in that month. Thus, if the standard was 90% commitments met, the CLEC result was 89%.

⁴⁹ Qwest Exhibit 12 (Qwest Comments (4/2/01),) Ex. D.

⁵⁰ *Id.*; Ex. E (revised).

surprisingly, there is no body of practical experience in the industry involving use of the concept. For several reasons, Qwest strongly opposes this proposal.

First, none of the PAPs that have been adopted as part of the FCC's section 271 approval processes have included this type of provision. Second, as discussed previously in connection with PAP-6, it is unrealistic to assume that Qwest alone will always be the cause of repeat occurrences. Not all factors that affect service performance are under Qwest's control. There are multiple circumstances in which factors outside Qwest's control could lead to repeat occurrences, including, for example, misses that result from inaccurate CLEC forecasts of demand. The reality is that CLEC demand and demand from Qwest retail customers cannot be perfectly forecasted. In addition, bad weather, systems outages, power blackouts, and other events beyond Qwest's control can cause performance misses. Performance misses caused by these events obviously are not the result of payment levels being too low, and they demonstrate why the application of "sticky duration" would be inappropriate and inequitable in the context of providing telecommunications services.

Third, implicit in the proposal for permanent escalation of penalty amounts is the assumption that failures of performance are the result of overt discrimination by Qwest. For example, the Z-Tel proposals in discussing remedies, provide that slamming was "a situation all but identical to one dealt with in the performance plans."⁵¹ Furthermore, Z-Tel characterized its original Plan as utilizing "the standard economic framework of crime and punishment."⁵² As such, Z-Tel stated that PAP remedies should incorporate such factors as "the financial gain of non-compliance" and "the probability of being detected and punished."⁵³ This assumption is

⁵¹ Z-Tel Exhibit 2, at pp. 27-28.

⁵² *Id.* at p. 17.

⁵³ *Id.*

plainly unrealistic. In virtually all cases, performance misses will be the result of unintended failures in systems or processes, not the result of any deliberate discrimination. The punitive step of permanently increasing penalty amounts is inappropriate and unnecessary for addressing conduct that is not deliberate.

Fourth, another underlying premise for permanent escalation resulting from non-compliant service performance is that Qwest should be held to a standard of 100% perfection in providing service to CLECs. This standard is unreasonable for the telecommunications industry and also is not economically feasible. To avoid permanent escalation of payment levels under the sticky duration proposal, Qwest effectively would have to devote enough resources to its systems and staffing to be able to handle every unanticipated jump in CLEC volume.

Fifth, permanent penalty increases dictated by duration formulas would discourage adoption of new systems and procedures and significant upgrades to existing processes. If Qwest is required to operate under the threat of permanent penalty escalation, in addition to having to operate at inefficient levels of capital and human resources, it will naturally be loath to implement new processes and systems. It is not unusual for newly deployed technology systems to have some performance difficulties during the transitional period following deployment, particularly if the systems rely on complex software programs. If the PAP provides for the permanent escalation of penalties, Qwest's decision to deploy new systems will give rise to the real possibility of permanent increases in penalties. This type of risk creates disincentive for Qwest to deploy new systems and procedures. There simply could be too much risk associated with adopting new procedures or implementing new systems.

L. Plan Limitations – PAP-14

1. Qwest's Proposal Properly Sets the Effective Date of the Plan and Limits the Plan's Application to CLECs with Agreements.

Following the pattern of Plans approved by state commissions and endorsed by the FCC in approving the 271 application of Verizon in New York and Massachusetts, section 13.1 of

Qwest's Arizona Plan provides that the provisions of the Plan become effective upon the FCC's approval of Qwest's 271 application in Arizona.⁵⁴ By contrast, WorldCom and Z-Tel propose that Qwest's Arizona performance assurance plan became effective before Qwest obtains section 271 approval.⁵⁵

As Qwest explained in its comments filed with the Commission on this issue, the FCC has clearly stated that the purpose of a performance assurance plan is to prevent backsliding once the RBOC obtains approval to offer interLATA long distance.⁵⁶ The rationale behind such a Plan is that a BOC's incentive to engage in market opening behavior exist before, but not after approval.

The FCC has emphasized that the purpose of an assurance plan is to provide "probative evidence that the BOC will continue to meet its *271 obligations* and that its entry would be consistent with the public interest."⁵⁷ In other words, to bolster its assertion that granting section 271 approval is in the public interest, BOCs such as Qwest may agree to do *more* than otherwise required to meet their section 251 obligations, such as offer liquidated damages and penalties that are self-executing. Qwest's proposed PAP meets this standard, as the level and type of payments made under the Qwest proposed Plan exceed that which the Commission may unilaterally implement and represent a significant waiver of Qwest's constitutional due process rights.

That Qwest is proposing remedies beyond what this Commission can unilaterally order under Arizona law is confirmed by the fact that the Commission is not a judicial body with power to award monetary damages. The power to award monetary damages is plainly a judicial

⁵⁴ See Exhibit 16 (revised 5/4/01), § 13.1.

⁵⁵ See, e.g., Z-Tel Exhibit 2, at p. 12.

⁵⁶ See, e.g., *Verizon Massachusetts Order* ¶¶ 236-37, 240 (noting that purpose of Massachusetts Plan is to ensure "post-entry checklist compliance").

⁵⁷ *Bell Atlantic-New York Order* ¶ 429 (emphasis added).

power vested in Arizona's courts.⁵⁸ And, because the Arizona Constitution does not expressly authorize the Commission to award monetary damages, the Commission is without authority to do so.⁵⁹

In addition, Qwest has a constitutional right to demonstrate that any statistical disparity is not the result of discrimination.⁶⁰ An order requiring Qwest to make automatic payments based solely on statistical results would violate this right. Further, although Qwest can agree to be bound by provisions of the Plan calling for penalties going directly to CLECs, absent Qwest's agreement, the Commission has no power to mandate penalties paid directly to CLECs. Arizona law plainly requires that any penalties assessed by the Commission be made to the State.⁶¹

Z-Tel's proposal that the PAP be available to any CLEC without the requirement that the CLEC have an interconnection agreement with Qwest also is not supported by the FCC's section 271 orders. The FCC's SBC orders make clear that the SBC Plans for Kansas, Oklahoma, and Texas are a part of the standard interconnection agreements in those states.⁶² Accordingly, as Qwest proposes, the appropriate vehicle for the performance assurance plan is the SGAT, or interconnection agreements that contain provisions of the PAP by virtue of the CLEC having opted into it. This structure makes the PAP available to any CLEC operating in the state and enables the Commission to approve and enforce the provisions agreed to by Qwest.

⁵⁸ See *Eastin v. Broomfield*, 116 Ariz. 576 582, 570 P.2d 744 (1977); see also Arizona Const. art. VI, §§ 1 and 14.

⁵⁹ See *Trico Elec. Coop. v. Ralston*, 67 Ariz. 358, 363, 196 P.2d 470 (concluding that "[n]o judicial power is vested in or can be exercised by the corporation commission unless that power is expressly granted by the constitution").

⁶⁰ See *Hazelwood Sch. Dist. v. United States*, 433 U.S. 299 (1977).

⁶¹ See Arizona Const. art. XV, § 16.

⁶² See, e.g., *SBC Kansas/Oklahoma Order* ¶ 270.

2. Qwest's Plan Appropriately Precludes Duplicative Payments.

Section 13.3 of the Arizona Qwest Plan sets forth the limited exceptions to payments that would otherwise be due under the PAP and, by reference to other provisions of the PAP, excludes any requirement that Qwest would be subject to duplicative payments for the same harm. Qwest's proposed limitations are appropriate and supported by the FCC's order on Verizon's 271 application in Massachusetts.⁶³ The FCC acknowledged the Massachusetts Commission's finding⁶⁴ that under a regime that requires the BOC to "pay cumulative damages would result in double counting."⁶⁵

Section 13.5 simply states that the payments under the Plan are "liquidated damages." This statement is entirely appropriate, as the payment amounts are unquestionably estimates, and the intent of the Plan is to have Qwest make the payments without actual proof of harm incurred. As Qwest explained in its comments filed with the Commission on April 4, 2001, liquidated damages are a means by which the parties, in advance of a breach, fix the amount of damages that will result therefrom and agree upon its payment.⁶⁶ Any objection to this language necessarily derives from a desire to take advantage of the self-executing liquidated damages provisions of the Plan (without proof of harm), while reserving the ability to seek, through litigation, actual damages for any breach. In essence, under such an approach, a CLEC will be

⁶³ See *Verizon Massachusetts Order* ¶ 242.

⁶⁴ While acknowledging that the Bell Atlantic-New York Plan exists concurrently with other interconnection agreements containing liquidated damages, the Massachusetts Commission, in approving Verizon's Massachusetts Plan, questioned whether the remedies outside the New York Plan were, in fact, duplicative, but in any event refused to make the remedies under the Plan cumulative with the existing interconnection remedies in Massachusetts. The Commission held that to impose both penalties would "result in significant double counting and would be unfair." See *Order Adopting Performance Assurance Plan* at 30 (Mass. D.T.E. Sep. 5, 2000).

⁶⁵ *Id.*

⁶⁶ See Qwest Exhibit 12, at p. 16 (citing *Moore v. Kline*, 143 P. 262 (1914)).

allowed to keep the specified liquidated damages when the amount of actual damages is less the liquidated sum, but seek actual damages when the amount exceeds it. This approach is not only contrary to sound legal and public policy principles, but it also is legally untenable.

As Qwest has previously noted, the reservation of a right to sue for actual damages renders the liquidated damages unenforceable.⁶⁷ Indeed, courts and commentators agree that such attempts to allow one party to "have his cake and eat it too" are unenforceable.⁶⁸ The rationale for the rule is straightforward: the optional nature of a provision allowing a non-breaching party to seek actual damages or to collect the liquidated sum renders the liquidated damage provision unenforceable because it will only be invoked to penalize the breaching party when the liquidated sum is greater than actual damages.⁶⁹ As such, the liquidated damages provision would be unenforceable under Arizona law.⁷⁰ Accordingly, if the CLECs desire the right to prove actual damages, then Qwest should not be required to make self-executing payments of specified amounts under the Plan.

Qwest's section 13.6 properly precludes CLECs from obtaining remedies under both the PAP and alternative service obligation whether they be contained in contractual provisions, wholesale rules or orders. The nature of liquidated damages is to settle all claims for the alleged

⁶⁷ *Id.*

⁶⁸ See J. Calamari & J. Perillo, *The Law of Contracts* § 14-32, at 594 (4th ed. 1998) (collecting cases and noting that clauses which "attempt to fix damages in the event of a breach with an option on the part of the aggrieved party to sue for actual damages," referred to as a "Have Cake and Eat It Clause," have been "struck down as they do not involve a reasonable attempt definitively to estimate the loss").

⁶⁹ See *Grossinger Motorcorp, Inc. v. American Nat'l Bank and Trust Co.*, 607 N.E.2d 1337, 1347 (Ill. Ct. App. 1992) (quoting *Dalston Constr. Co. v. Wallace*, 214 N.Y.S. 2d 191, 193 (N.Y. Sup. Ct. 1960), remaining citations omitted) cited in *Catholic Charities of the Archdiocese of Chicago v. Thorpe*, 741 N.E.2d 651, 657 (Ill. Ct. App. 2000).

⁷⁰ See, e.g., *Gary Outdoor Advertising C. v. Sun Lodge, Inc.*, 133 Ariz 240, 243, 650 P.2d 1222, 1225 (1982) (invalidating liquidated damages clause on grounds that it operated as a penalty).

harm. Accordingly, there should not be multiple measures of damages for the same harm within the same agreement. CLECs should be required to choose if there is a remedy scheme other than the PAP available to them. Qwest understands that SBC does not have existing interconnection agreements with remedy plans or significant liquidated damages that exist in addition to its PAP (which is incorporated in to SBC's agreements as Attachment 17), so that a section similar to section 13.6 is not applicable here. However, faced with possible duplicative vehicles for sanctions, SBC expressly limits the recovery of Tier-2 payments.⁷¹ Section 13.7 is inserted to protect Qwest from duplicative recovery in the event compensatory awards arise out from some other causes of action. In that event, Qwest would be entitled to offset compensatory damages awarded with those paid under the Plan.⁷²

3. The Proposed Plan Properly Precludes Use of the Plan in Other Proceedings.

Section 13.4 of Qwest's proposed Arizona Plan prohibits the use of the performance results or payments under the Plan as an admission of discrimination or of Qwest's liability for claims or causes of actions brought outside of the Plan. This provision is appropriate, as the structure of the Plan deprives Qwest of its constitutional due process rights. Qwest's waiver of these rights is solely in the context of a contract in which the liability is identified and settled. It would be unreasonable and unfair to ask Qwest to completely relinquish all constitutional protections and concede liability for future unknown claims and causes of actions. Nothing in PAP section 13.4 limits the introduction of the performance results into evidence in another proceeding, if appropriate. As with many of the other Plan provisions at issue here, this

⁷¹ See SBC (Texas) Plan, § 6.3 ("SWBT shall not be liable for both Tier-2 'assessments' and any other assessments or sanctions under PURA or the Commission's service quality rules relating to the same performance").

⁷² The SBC Texas Plan reserves the right to seek offsets in the content of future proceedings in §6.2. The language in Qwest's §13.7 is more definitive.

provision is based on the language of the SBC Texas Plan approved by the commissions in Kansas, Oklahoma, and Texas and endorsed by the FCC.⁷³

M. Penalty for not Providing Data on a Timely Basis – PAP-15

Qwest does not believe that late reporting causes harm to CLECs. However, Qwest is willing to agree to pay a total of \$500, payable to the state, for each business day for which performance reports are past the grace period.

N. Effect of Arizona Statute That Limits Fines – PAP-16

Qwest respectfully refers the Commission to its discussion in Section L, PAP 14. As Qwest explains, the statute does not provide the Commission with authority to unilaterally impose the payments specified in the proposed Qwest PAP. However, Qwest does not perceive that the statute precludes the Commission from enforcing the specific payment provisions to which Qwest had agreed.

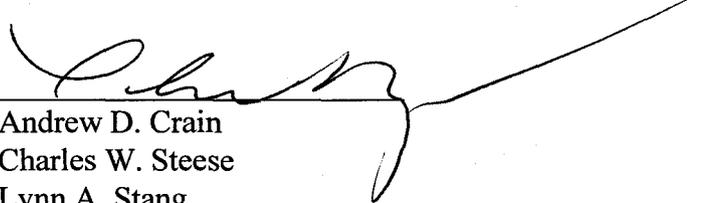
⁷³ See, e.g., SBC (Texas) Plan, § 6.2.

III. CONCLUSION

For the foregoing reasons, the Commission should conclude that the Plan, as proposed by Qwest, is reasonable and effective and is sufficient to support a recommendation that Qwest's Arizona 271 application is in the public interest.

RESPECTFULLY SUBMITTED this 10th day of May 2001.

Qwest Corporation

By: 

Andrew D. Crain
Charles W. Steese
Lynn A. Stang
Qwest Corporation
1801 California Street, Suite 4900
Denver, CO 80202
(303) 672-2926

John M. Devaney
Kelly A. Cameron
PERKINS COIE LLP
607 Fourteenth Street, N.W., Suite 800
Washington, D.C. 20005-2011
(202) 628-6600
(202) 434-1690 (fax)

Timothy Berg
FENNEMORE CRAIG, P.C.
3003 North Central, Suite 2600
Phoenix, Arizona 85012-2913
(602) 916-5421
(602) 916-5999 (fax)

Attorneys for Qwest Corporation

ATTACHMENT A

GA-7 Timely Outage Resolution following Software Releases – DRAFT – 19 Apr 01

<p>Purpose: Measures the timely resolution of outages attributable to software releases for specified OSS interfaces that have a significant impact^{Note 1} on CLEC business activity, focusing on CLEC-affecting software releases involving the specified interfaces.</p>	
<p>Description:</p> <ul style="list-style-type: none"> • Measures the percentage of Severity Level 1 and Severity Level 2 outages^{Note 1} attributable to software releases, reported by a CLEC within two weeks after the date of software releases, that are resolved within 48 hours of reporting by the CLEC. • Includes software releases associated with the following OSS interfaces in Qwest: IMA-GUI, IMA-EDI, and CEMR. • Severity Level 1 outage is defined as a catastrophic defect that causes total failure of the software or a component essential to the gateway, or unrecoverable data loss. No workaround or bypass is available. • Severity Level 2 outage is defined as a condition in which a critical piece of software is severely impaired causing a serious loss of functionality affecting multiple clients. No workaround is available, but a bypass may be possible. Includes situations in which major access is down, but partial backup exists. • The outage resolution time interval considered in this measurement starts with the time the CLEC reports the outage to the Qwest help desk and ends with the time the software fix is implemented or a workaround^{Note 2} becomes available. • The CLEC is responsible for reporting the problem to the OSS Help Desk in order for this measure to apply to the individual CLEC. • Software Patches installed or utilized to repair the outage are not considered a software release. 	
<p>Reporting Period: Reported in the month in which the software release date-plus-16 calendar days occurs.</p>	<p>Unit of Measure: Percent</p>
<p>Reporting Comparisons: Individual CLEC</p>	<p>Disaggregation Reporting: Region-wide level.</p>
<p>Formula: $\left(\frac{\text{Total Severity Level 1 and 2 outages reported by CLEC within two weeks of a Software Release that are resolved within 48 hours of the time the CLEC reported the outage}}{\text{Total number of Severity Level 1 and 2 outages that are reported by CLEC within two weeks of Software Releases included in the Reporting Period}} \right) * 100$</p>	
<p>Exclusions:</p> <ul style="list-style-type: none"> • Errors where a workaround^{Note 2} is available. • Duplicate reports by the same CLEC attributable to the same software defect. 	
<p>Product Reporting: None</p>	<p>Standard: Diagnostic in light of GA-1, GA-2 and GA-6</p>
<p>Availability: TBD upon approval of TAG</p>	<p>Notes:</p> <ol style="list-style-type: none"> 1. "Significant Impact" is defined by the Severity Level 1 and 2 outage designations. 2. Manual faxing will not constitute a "workaround" for purposes of this measurement.

ATTACHMENT B

PO-16 Timely Release Notifications – DRAFT – 16 Apr 01

<p>Purpose: Measures the percent of release notifications for changes to specified OSS interfaces sent by Qwest to CLECs within the intervals required by the change management plan.</p>	
<p>Description:</p> <ul style="list-style-type: none"> • Measures the percent of timely release notices: Draft Developer Worksheets (Initial Requirements), Disclosure Documents (Final Requirements) and/or Release Notes, sent to the CLEC, within the intervals/timeframes prescribed by the release notification procedure documentation for the following OSS interfaces in Qwest: IMA-GUI, IMA-EDI, and CEMR. • Includes release notifications by Qwest to CLECs for four types of changes, including (1) CLEC-initiated changes, (2) Qwest-initiated changes, (3) changes in industry standards, and (4) changes required by regulatory agencies. • Includes all release notifications pertaining to OSS interfaces, subject to the exclusions specified below. • Notifications sent on or before the date required by the change management plan are considered timely. • Notifications sent after the date required by the change management plan are considered untimely. Notifications required but not sent are considered untimely. 	
<p>Reporting Period: One month</p>	<p>Unit of Measure: Percent</p>
<p>Reporting Comparisons: CLEC Aggregate</p>	<p>Disaggregation Reporting: Region-wide level.</p>
<p>Formula: (Number of required release notifications for specified OSS interface changes made within the reporting period that are sent on or before the date required by the change management plan/Total number of required release notifications for specified OSS interface changes within reporting period) * 100</p>	
<p>Exclusions:</p> <ul style="list-style-type: none"> • Changes related to emergency fixes. • CLEC initiated changes to Final Requirements (excluding changes requested due to a mistake by Qwest identified by the CLEC) • Changes that fall outside the change management plan. • Changes where Qwest and CLECs agree, through the CICMP process, that notification is unnecessary • Changes involving EXACT or EB-TA. 	
<p>Product Reporting: None</p>	<p>Standard: Diagnostic for 6 months; address benchmark at the end of completing 6 months of data</p>
<p>Availability: TBD upon approval of TAG</p>	<p>Notes:</p>

ORIGINAL and 10 copies filed
this 10th day of May, 2001, with

Docket Control
ARIZONA CORPORATION COMMISSION
1200 W. Washington St.
Phoenix, AZ 85007

Chris Kempley, Chief Legal Counsel
Maureen A. Scott
Legal Division
ARIZONA CORPORATION COMMISSION
1200 W. Washington St.
Phoenix, AZ 85007

Deborah Scott, Director
Utilities Division
ARIZONA CORPORATION COMMISSION
1200 W. Washington St.
Phoenix, AZ 85007

Lyn Farmer, Chief Hearing Officer
Hearing Division
ARIZONA CORPORATION COMMISSION
1200 W. Washington St.
Phoenix, AZ 85007

COPIES mailed by regular mail
this ~~2nd~~ day of May, 2001 to:

Steven H. Kukta
Darren S. Weingard
Sprint Communications Company, LP
1850 Gateway Drive, 7th Floor
San Mateo, CA 94404-2567

Thomas Campbell
Lewis & Roca
40 N. Central Avenue
Phoenix, AZ 85004

Joan S. Burke
Osborn Maledon, P.A.
2929 N. Central Avenue, 21st Floor
P.O. Box 36379
Phoenix, AZ 85067-6379

Thomas F. Dixon
Karen L. Clausen
MCI Telecommunications Corp.
707 17th Street #3900
Denver, CO 80202

Scott S. Wakefield
Residential Utility Consumer Office
2828 North Central Avenue, Suite 1200
Phoenix, AZ 85004

Michael M. Grant
Gallagher & Kennedy
2575 E. Camelback Road
Phoenix, AZ 85016-9225

Michael Patten
Brown & Bain
2901 N. Central Avenue
Phoenix, AZ 85012

Bradley Carroll, Esq.
Cox Arizona Telcom, LLC
1550 West Deer Valley Road
Phoenix, AZ 85027

Daniel Waggoner
Davis, Wright & Tremaine
2600 Century Square
1501 Fourth Avenue
Seattle, WA 98101-1688

Richard S. Wolters
Maria Arias-Chapleau
AT&T Law Department
1875 Lawrence Street #1575
Denver, CO 80202

David Kaufman
e.spire Communications, Inc.
343 W. Manhattan Street
Santa Fe, NM 87501

Alaine Miller
NEXTLINK Communications, Inc.
500 108th Avenue, NE, Suite 2200
Bellevue, WA 98004

Diane Bacon, Legislative Director
Communications Workers of America
5818 N. 7th Street, Suite 206
Phoenix, AZ 85014-5811

Nigel Bates
Electric Lightwave, Inc.
4400 NE 77th Avenue
Vancouver, WA 98662

Philip A. Doherty
545 South Prospect Street, Suite 22
Burlington, VT 05401

Hagood Bellinger
5312 Trowbridge Drive
Dunwoody, GA 30338

Joyce Hundley
U.S. Department of Justice
Antitrust Division
1401 H Street, NW, #8000
Washington, DC 20530

Andrew O. Isar
Telecommunications Resellers Association
4312 92nd Avenue, NW
Gig Harbor, WA 98335

Raymond S. Heyman
Randall H. Warner
Two Arizona Center
400 North 5th Street, Suite 1000
Phoenix, AZ 85004-3906

Douglas Hsiao
Rhythms Links, Inc.
6933 Revere Parkway
Englewood, CO 80112

Mark Dioguardi
Tiffany and Bosco, PA
500 Dial Tower
1850 N. Central Avenue
Phoenix, AZ 85004

Thomas L. Mumaw
Snell & Wilmer
One Arizona Center
Phoenix, AZ 85004-0001

Richard Rindler
Morton J. Posner
Swider & Berlin
3000 K Street, NW, Suite 300
Washington, DC 20007

Charles Kallenbach
American Communications Services, Inc.
131 National Business Parkway
Annapolis Junction, MD

Mark J. Trierweiler
Vice President—Government Affairs
AT&T
111 West Monroe
Suite 1201
Phoenix, AZ 85003

Gena Doyscher
Global Crossing Services, Inc.
1221 Nicollet Mall
Minneapolis, MN 55403-2420

Karen L. Clauson
Eschelon Telecom, Inc.
730 Second Avenue South, Suite 1200
Minneapolis, MN 55402

Mark N. Rogers
Excell Agent Services, LLC
2175 W. 14th Street
Tempe, AZ 85281

Janet Livengood
Regional Vice President
Z-Tel Communications, Inc.
601 S. Harbor Island Blvd.
Tampa, FL 33602

Johnathan E. Curtis
Michael B. Hazzard
Kelly Drye & Warren, LLP
1200 19th Street, NW, Fifth Floor
Washington, DC 20036

Andrea P. Harris, Senior Manager, Regulatory
Allegiance Telecom, Inc.
P.O. Box 2610
Dublin, CA 94568

Gary L. Lane, Esq.
6902 East 1st Street, Suite 201
Scottsdale, AZ 85251

J. David Tate
Senior Counsel
SBC Telecom, Inc.
5800 Northeast Parkway, Suite 125
San Antonio, TX 78249

APoole