

**BEFORE THE
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the
Investigation into U S WEST
Communications, Inc.'s Compliance with
§ 271 of those Telecommunications Act of
1996

Docket No. UT-003022

In the Matter of U S WEST
Communications, Inc.'s Statement of
Generally Available Terms Pursuant to
Section 252(f) of the Telecommunications
Act of 1996

Docket No. UT-003040

**QWEST'S CORPORATION'S BRIEF
DEMONSTRATING SATISFACTION OF THE
FCC'S SECTION 271 CHANGE ANAGEMENT
CRITERIA**

TABLE OF CONTENTS

	<u>Page</u>
I. INFORMATION REGARDING QWEST'S CMP IS CLEARLY ORGANIZED AND READILY ACCESSIBLE TO CLECS.	2
II. CLECS HAVE SUBSTANTIAL INPUT IN THE DESIGN AND CONTINUED OPERATION OF QWEST'S CMP.	5
III. QWEST'S CMP DEFINES A PROCEDURE FOR THE TIMELY RESOLUTION OF CHANGE MANAGEMENT DISPUTES.	6
IV. THE EVIDENCE DEMONSTRATES THAT QWEST HAS ESTABLISHED A PATTERN OF COMPLIANCE WITH ITS CMP.	6
A. The Core Provisions of Qwest's CMP have been Implemented for More than Five Months.	6
B. Qwest has met More than 98% of its Commitments under the Redesigned CMP.	7
C. Qwest has Adequately Addressed All Significant Third Party Test Issues.	15
1. Exception 3094	15
2. Exception 3110	17
3. Exception 3111	17
D. Qwest is Adhering to the Procedural Safeguards Contained in the Redesigned CMP.	19
1. Qwest Adheres to its Notification Provisions.	20
2. The Facts Show that Qwest has Provisioned ISDN Loops for CLECs where Integrated Pair Gain is Present.	21
3. Qwest is Working with CLECs through the CMP to Address the Issues Relating to its Preferred Local Carrier Freeze.	22
4. Qwest has Observed the CMP Production Support Process.	23
V. QWEST ADEQUATELY ASSISTS COMPETITORS IN IMPLEMENTING AND USING QWEST'S OSS.	23
VI. QWEST'S EDI DOCUMENTATION ENABLES COMPETITORS TO SUCCESSFULLY BUILD AN ELECTRONIC GATEWAY.	31
VII. QWEST MAKES AVAILABLE A STABLE TESTING ENVIRONMENT THAT MIRRORS PRODUCTION.	35
2. The Interoperability Environment	37
3. The Stand-Alone Test Environment (SATE)	40
4. Comparison of the Interoperability Environment with SATE.	43
B. Stable Test Environment that Mirrors Production.	45
C. Commercial Data	48
D. Third Party Test Results	50
1. KPMG/HP Draft Report for ROC States Third Party Test.	50
2. HP's Evaluation for Arizona Third Party Test.	53

3.	KPMG's Closed Unresolved Exceptions Related to Interface Testing Do Not Present Section 271 Issues.	54
a.	Exception 3077.....	55
b.	Exception 3095.....	60
c.	Exception 3109.....	62
E.	Conclusion.....	66
	CONCLUSION.....	67

Qwest Corporation ("Qwest") submits this Brief Demonstrating Satisfaction of the FCC's Section 271 Change Management Evaluation Criteria.

INTRODUCTION

In evaluating RBOC change management plans under Checklist Item 2 of Section 271, the Federal Communications Commission ("FCC") has relied on the following factors:

(1) that information relating to the change management process is clearly organized and readily accessible to competing carriers; (2) that competing carriers had substantial input in the design and continued operation of the change management process; (3) that the change management plan defines a procedure for the timely resolution of change management disputes; (4) the availability of a stable testing environment that mirrors production; and (5) the efficacy of the documentation the RBOC makes available for the purpose of building an electronic gateway.¹

The FCC has also examined two additional factors: whether an RBOC has demonstrated a "pattern of compliance" with its own change management plan and whether it has provided adequate technical assistance to CLECs in using the RBOC's OSS.²

Qwest's Wholesale Change Management Process ("CMP")³ clearly meets the standards set by the FCC for change management. As Qwest demonstrated during the hearing on this matter, the core provisions of Qwest's CMP have been implemented for more than five

¹ Joint 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 Services in Arkansas and Missouri, CC Docket No. 01-194, Memorandum Opinion and Order, FCC 01-338 (rel. Nov. 16, 2001) ("Arkansas/Missouri 271 Order"), Appendix D, at ¶ 42, citing Bell Atlantic New York Order, 15 FCC Rcd at 4002-004 (footnotes omitted).

² *Arkansas/Missouri 271 Order*, 16 FCC Rcd at 20865 (App. D, at ¶ 40); see *Massachusetts 271 Order*, at ¶ 103, citing *Texas 271 Order*, 15 FCC Rcd at 18404, ¶ 108.

³ Qwest's Wholesale Change Management Process Document ("Wholesale CMP") is attached as Exhibit A, and can also be found at the following URL: <http://www.qwest.com/wholesale/cmp/whatiscmp.html>.

months, during which Qwest has compiled an impressive overall compliance rate of 99% for systems change requests and 97% for product and process change requests.⁴

I INFORMATION REGARDING QWEST'S CMP IS CLEARLY ORGANIZED AND READILY ACCESSIBLE TO CLECS.

Qwest provides easily accessible and well-organized information regarding its change management process on its wholesale web site.⁵ Qwest's web site sets forth the current change management process,⁶ including the method for proposing and processing CLEC-originated and Qwest-originated OSS interface change requests ("CRs") and product and process changes. The web site includes a single document – the Wholesale CMP document – that sets forth the governing process for change management. This document contains the agreements reached through extensive collaborative negotiations between the CLEC community and Qwest. Through the redesign process, CLECs have had substantial input into the organization and clarification of change management related materials on the web site.

The joint CLECs express only one concern with the first FCC criterion – that the redesign process has not addressed all significant issue. During the hearing, AT&T indicated that the process will be complete enough for 271 purposes when the language is developed in the redesign meetings on language for the agreements reached on the items on AT&T's issues list that have been designated as level 1 in the redesign sessions.⁷ Those issues – there are twelve –

⁴ Hearing, Testimony of Judith Schultz, April 25, 2002, pages 7379-7380.

⁵ The Qwest change management web site can be found at the following URL:
<http://www.qwest.com/wholesale/cmp/index.html>.

⁶ See Wholesale CMP, which can be found at the following URL:
<http://www.qwest.com/wholesale/cmp/whatiscmp.html>

⁷ Hearing, Testimony of Mitchel Menezes, April 26, 2002, pages 7518-7519.

are set forth in Exhibit 1539. Since the hearing, the redesign parties have reached agreement on language for all Level 1 issues, except for four – issue I.A.11, issue I.A.1, issue I.A.6 and issue I.A.7 – all of which should be resolved during the next redesign meeting at the end of May. None of these issues is necessary for Section 271 relief.

The first issue, I.A.11, was resolved in the redesign meetings when Qwest and the CLECs agreed to institute a process where an arbitrator will be available to rule on a CLEC request that a proposed product and process change be stayed until a Commission rules on the dispute. By reaching this agreement, Qwest has gone well past any other company in the country in meeting CLEC concerns. No other change management program has a similar provision, and no other BOC has agreed to allow CLECs to request such a stay. Because such a provision is unprecedented, it cannot be required for Qwest's change management plan to be sufficient for 271 relief.

The remaining issues, I.A.1, I.A.6, and I.A. 7, while not insignificant, do not raise to the level that necessitates completion of language for Qwest to be granted Section 271 relief. Issue I.A.1 requires the parties to review the steps of the CR process to ensure that all status categories are defined. Issue I.A.6 relates to PID administration, which the parties have agreed will be handled through the ROC long term PID administration process. Qwest has drafted language memorializing the agreement, and the parties need to complete review of the language. The final issue, I.A.7, relates to how help desk issues will be handled if they effect more than one aspect of CMP. Once again, the parties have reached agreement on the issue, and language review needs to be completed.

When this issue was discussed during the hearing, the CLECs pointed to the KPMG draft final report, which contained a “not able to determine” for KPMG's evaluation of

whether Qwest's change management process is in place and documented, stating that the Wholesale CMP does not include all elements KPMG believes are essential.⁸ In support of this claim, KPMG points only to Exception 3094, which, as more fully discussed in section IV.C.1 below, relates to the fact that KPMG was unable to observe Qwest's adherence to the new Qwest-initiated product/process change process in practice. Since the Draft Final Report was issued, the redesign team agreed to the detailed process for Qwest-initiated product/process changes and that process is set forth in section 5.4 of the Wholesale CMP. Thus, this process clearly is documented.

Further, Qwest's Wholesale CMP includes -- and Qwest has implemented -- specific provisions that address all of the components of the Ordering and Billing Forum's ("OBF") Issue 2233 draft document regarding change management, with the exception of a single component -- training. No CLEC has ever raised any issue regarding including a provision regarding training as a significant issue to be addressed. Indeed, the OBF's provision consists of a single sentence providing that all changes to interfaces will be incorporated into available customer training programs. This minor, non-controversial issue does not affect Qwest's compliance with the FCC's evaluation criteria. Clearly, Qwest's comprehensive Wholesale CMP, which has been implemented and is in effect today, contains all essential components -- the process is in place and documented.

The bottom line is that Qwest and CLECs have reached agreement on all substantive aspects of change management. As a result, Qwest has implemented a change management process that is more comprehensive than any other process in the country.

⁸ Draft Final Report, Test 23, Table 23-2 (MTP criteria 23-2).

II. CLECS HAVE SUBSTANTIAL INPUT IN THE DESIGN AND CONTINUED OPERATION OF QWEST'S CMP.

During the hearing, CLECs did not dispute that they have had significant input into Qwest's change management process. CLECs have had -- and will continue to have -- substantial opportunities for meaningful input into the design and operation of Qwest's change management process. Qwest and the CLECs have met regularly, for more than 38 days since July 2001, to collaboratively redesign Qwest's change management procedures.

Indeed, in its Draft Final Report, KPMG specifically found that Qwest's CMP includes procedures for allowing input from all interested parties.⁹ Specifically, KPMG found that Qwest and CLECs attend monthly CMP meetings to discuss proposed changes and exchange information about change status.

KPMG further found that, beginning on July 11, 2001, Qwest and CLECs have held bi-weekly, collaborative CMP redesign sessions to address CLEC concerns regarding the Qwest change management process. During those sessions, Qwest and CLECs agreed to processes for Qwest -initiated, CLEC-impacting systems and product/process changes. The parties also agreed that both Qwest and CLECs may use the escalation and dispute resolution process to address issues. KPMG further found that Qwest had responded to issues raised during testing by implementing improvements to existing notification processes and addressing remaining issues in the redesign meetings.

Thus, Qwest's current change management process provides for substantial CLEC input into both the design and operation of the process.

⁹ Draft Final Report, Test 23, Table 23-2 (MTP criterion 23-4), p. 593.

III. QWEST'S CMP DEFINES A PROCEDURE FOR THE TIMELY RESOLUTION OF CHANGE MANAGEMENT DISPUTES.

Again, the CLECs have not significantly disputed this criterion. Qwest has implemented the escalation and dispute resolution procedures Qwest and the CLECs jointly developed through the redesign process. The procedures are set forth in the Wholesale CMP.¹⁰ As of April 25, 2002, the escalation procedures have been invoked on one occasion with regard to systems changes, and on five occasions with regard to product and process changes. The dispute resolution procedures have not yet been invoked as of April 25, 2002.

IV. THE EVIDENCE DEMONSTRATES THAT QWEST HAS ESTABLISHED A PATTERN OF COMPLIANCE WITH ITS CMP.

As set forth below, all of the core provisions of Qwest's redesigned CMP has been implemented for more than five months. The evidence establishes that Qwest has compiled a strong record of compliance with the redesigned CMP. Judith Schultz, in her affidavit and at the hearing, provided substantial, detailed evidence that Qwest is complying with its redesigned CMP.¹¹

A. The Core Provisions of Qwest's CMP have been Implemented for More than Five Months.

Significantly, most of the substantive provisions of the redesigned CMP have been in place for more than five months. The following core provisions have been implemented for more than five months: scope, types of changes, CR processing,

¹⁰ Wholesale CMP, Sections 14 and 15.

¹¹ Hearing, Testimony of Judith Schultz, April 25, 2002, pages 7379-7382.

introduction/change/retirement of OSS interfaces, prioritization, SATE, and the escalation and dispute processes.

While certain issues relating to these core provisions were decided more recently, the recent agreements relate primarily to issues that expand Qwest's CMP beyond what any other RBOC offers -- and beyond the parameters of the FCC's section 271 evaluation. For example, the recent Colorado impasse resolution regarding the definition of a Regulatory Change restricted the Regulatory Change definition and expanded the Qwest Originated Change definition to allow CLECs to prioritize changes that every other RBOC treats as Regulatory Changes. The FCC has approved several other RBOC change management processes that provide CLECs virtually no input, but that allow the RBOC total discretion to designate changes as regulatory and to determine how to implement such changes. At the hearing, AT&T, Covad and Worldcom each admitted that, other than prioritizing several regulatory changes, the prioritization of releases 10.0 and 11.0 followed the new process.¹²

Thus, the fact that some changes may have occurred fairly recently or have not yet been finalized has no impact on the evaluation of Qwest's CMP for section 271 purposes. Regardless of such issues, Qwest's core redesigned CMP has been in place for more than five months.

B. Qwest has met More than 98% of its Commitments under the Redesigned CMP.

Qwest tracks its compliance with various milestones set forth in the process. To date, Qwest has amassed an impressive compliance rate with the CMP:

¹² Hearing, Testimony of Thomas Dixon, April 25, 2002, pages 7419-20, Testimony of Mitchell Minezes, April 26, 2002, page 7501, Testimony of Megan Doberneck, April 26, 2002, page 7505.

- In processing CRs, Qwest has met more than 98% of its commitments.
- In introducing a new GUI, Qwest has met 100% of the milestones reached thus far.
- In changing an application-to-application interface, Qwest has met 100% of the milestones reached thus far.
- In changing a graphical user interface ("GUI"), Qwest has met 100% of the milestones reached thus far.
- In processing escalations, Qwest has met more than 98% percent of its commitments.

More detail regarding Qwest's implementation and compliance with the redesigned process is set forth below.

Section 1--Introduction and Scope. Qwest implemented the expanded scope more than six months ago. Between October 3, 2001 and March 26, 2002, Qwest has processed 154 new OSS interface CRs and 43 new product and process CRs. Qwest has rejected only a single process CR because it did not properly fall within the scope of the redesigned CMP. The CR requested a change to the method by which one of Qwest's performance indicator definitions ("PIDs") is measured. The redesign team subsequently agreed that changes to relating to PIDs and how they are measured are not within the scope of CMP.

Section 2 -- Managing the Change Management Process. The redesigned provisions have been in place for more than seven months. In fact, many of the requirements specified in this section have been in place for much longer. For example, CMP Managers have been in place since the inception of CMP in 1999. Qwest has modified the processes as agreements were reached by the redesign team. For example, CR Project Managers have been in

place and fulfilling the roles and responsibilities described in this section since August 2001.

Escalation/Dispute Resolution Managers have been in place and fulfilling the roles and responsibilities described in this section since September 2001.

Indeed, in its Draft Final Report, KPMG found that Qwest's CMP satisfactorily defines change management process responsibilities and activities.¹³ KPMG found that the CMP defines and describes the roles, responsibilities, and activities of the Qwest change management staff, other relevant Qwest employees, and CLEC representatives who participate in CMP. Specifically, KPMG further found that Qwest internal methods and procedures documentation contains information about the roles and responsibilities of the change management staff and relevant Qwest information technologies, product, and process groups. Further, the draft CMP document specifies that CLECs designate representatives as their respective points-of-contact ("POCs"). The POCs are responsible for submitting CRs, attending relevant CMP meetings, participating in the prioritization process, commenting on Qwest process documents, and providing feedback about proposed changes and CMP issues in accordance with specified processes and intervals. Finally, KPMG found that the draft CMP document is accessible on the Qwest CMP Web site, at which a Web-based POC update form and current POC information may be found.

Section 3 -- Meetings. The redesigned provisions have been in place for more than six months. In fact, many of the requirements specified in this section have been in place for much longer. For example, Qwest has conducted at least one CMP monthly meeting per month and provided meeting materials, referred to as distribution packages, since the inception

¹³ Draft Final Report, Test 23, Table 23-2 (MTP criterion 23-1), p. 528.

of CMP in 1999. In October 2001, CMP monthly meetings were extended to two full day sessions at the request of the CLEC participants. An improved distribution package format was introduced in September 2001 for the product/process CMP meetings and in October 2001 for the systems CMP meetings. Qwest has recorded meeting minutes since August 15, 2001 for product/process CMP meetings, and since September 19, 2001 for systems CMP meetings. In addition, Qwest has made a number of improvements to its CMP web site as a result of the redesign effort.

Qwest also has met its obligations to (1) track and document the status of change requests; (2) hold regular CMP meetings; (3) provide meeting materials in advance of the meetings; and (4) record meeting discussion, action items, and issues. This information may be found on Qwest's CMP web site.¹⁴

Section 4 -- Types of Change. While the redesigned provisions have been in place for more than seven months, it is important to note that CLECs have had the ability to submit CRs since the inception of Qwest's CMP in 1999.¹⁵ Indeed, between January 1, 2000 and September 30, 2002 Qwest processed and closed 68 OSS Interface CRs. The redesigned process provides for Regulatory, Industry Guideline, CLEC Originated, and Qwest Originated CRs. Qwest has processed CRs in all of these categories.

Section 5 -- Change Request Initiation Process. Qwest has complied with the redesigned process for over five months. Qwest processed 103 new OSS Interface CRs in

¹⁴ See, e.g., <http://www.qwest.com/wholesale/cmp/changerequest.html> (linking to status of change requests); <http://www.qwest.com/wholesale/cmp/calendar.html> (linking to CMP calendars, meeting materials, and minutes).

¹⁵ The redesign team reached impasse regarding an issue relating to the definition of Regulatory CRs. As discussed in Qwest's Brief regarding Change Management, that issue has been resolved. However, the redesign team had reached agreement on the other aspects of the Regulatory Change definition and the impasse resolution did not change the language contained in the definition.

accordance with the redesigned process between November 1, 2001 and March 26, 2002. Qwest tracks nine milestones for each such CR. For the time period specified, Qwest is responsible for missing only five out of a possible 599 milestones. This equates to an average compliance rate of more than 99%. During that same period, Qwest processed 36 new product/process CRs in accordance with the redesigned process. Qwest tracks nine milestones for each such CR. For the specified time period specified above, Qwest is responsible for missing only seven out of a possible 231 milestones. This equates to an average compliance rate of 97%. Thus, Qwest's overall compliance rate for these 830 CRs exceeds 98%.

Section 6 -- OSS Interface Release Calendar. Qwest has complied with the improved OSS Interface Release for over five months. Qwest already provided a calendar that set forth OSS release information. The redesigned process included additional customer-facing system information. The revised OSS Interface Release Calendar was posted on the web in November 2001. Quarterly updates were posted on the web in January 2002 and April 2002.

Section 7 -- Introduction of a New OSS Interface. The redesigned process for the introduction of a new OSS interfaces -- both application-to-application interfaces and GUIs -- has been in place for more than five months. Qwest has not introduced a new application-to-application OSS interface since agreement was reached. However, Qwest introduced a new GUI called FORCAST on March 8, 2002. There are six milestones Qwest tracks with the introduction of a new GUI. Qwest has complied with 100% of the five milestones that have already occurred with the introduction of FORCAST. The sixth milestone is the actual implementation date, which has not yet arrived.

Section 8 -- Change to Existing OSS Interfaces. The redesigned process incorporated many requirements that Qwest had already implemented for some time. For

example, for more than two years, Qwest has implemented not more than three major IMA releases and three IMA point releases within a calendar year, spaced at least three months apart. Similarly, Qwest has provided versioning -- pursuant to which Qwest supported the previous major IMA release for six months after the subsequent major IMA EDI release has been implemented -- for more than two years.

More specifically, the process for changes to application-to-application interfaces pursuant to Section 8.1 has been in place for more than five months. Qwest introduced changes to an existing OSS application-to-application interface (IMA) on April 4, 2001. Qwest tracks six milestones for such changes. Qwest has complied with 100% of the first two milestones.¹⁶ The remaining four milestones have not yet occurred.

Similarly, the process for changes to GUIs pursuant to Section 8.2 has been in place for more than five months. Qwest introduced changes to an existing GUI, the Customer Electronic Maintenance and Repair ("CEMR"), on April 7, 2001. Qwest tracks four milestones for such changes. Qwest has complied with 100% of the first three milestones. The remaining milestone has not yet occurred.

Qwest has implemented a performance indicator, PO-16, to measure the timeliness of release notifications for specified OSS interfaces.¹⁷ Results for PO-16 have been reported for November 2001 through March 2002. Qwest met the benchmark for all but one month.

¹⁶ Hearing, Testimony of Judith Schultz, April 25, 2002, pages 7379-7380.

¹⁷ *See also* discussion of PO-16 in section VI.B, below.

Section 9 -- Retirement of Existing OSS Interfaces. The redesigned process for the retirement of an existing OSS interfaces has been in place for more than five months.

However, Qwest has not retired any OSS interfaces since agreement was reached.

Section 10 -- Prioritization. Much of the redesigned prioritization process has been in effect for more than eight months. Beginning in August 2001, CLECs began prioritizing Qwest Originated CRs. In August 2001, and again in October/November 2001, CLECs and Qwest jointly prioritized CLEC-Originated CRs and Qwest-Originated CRs for the IMA 10.0 Release. In February 2002, CLECs and Qwest jointly prioritized CLEC-Originated CRs, Qwest-Originated CRs, and Industry Guideline CRs for the IMA 11.0 Release. At that time, there were only nine outstanding CLEC-initiated IMA CRs. At the hearing, AT&T, Covad and Worldcom each admitted that, other than prioritizing several regulatory changes, the prioritization of releases 10.0 and 11.0 followed the new process.¹⁸ Thus, CLECs have been able to prioritize Industry Guideline CRs, in addition to Qwest Originated and CLEC Originated CRs.

Section 11 -- Application-to-Application Interface Testing. SATE has been available to the CLECs since August 2001 and was used by CLECs to migrate their systems to the IMA 8.0 Release and later releases. Specifically, ten CLECs – five individually and an additional five through a service bureau -- have tested in SATE and are now in production.¹⁹

Section 12 -- Production Support. Qwest has complied with the redesigned process for more than two months. Between February 2, 2002 and April 15, 2002, there were three planned outages. In each instance, Qwest met the specified notification intervals. Further,

¹⁸ Hearing, Testimony of Thomas Dixon, April 25, 2002, pages 7419-20, Testimony of Mitchell Minezes, April 26, 2002, page 7501, Testimony of Megan Doberneck, April 26, 2002, page 7505.

it has been Qwest's practice for some time to conduct post-deployment meetings, as it did to review the recent IMA 9.01 Release. Between February 1, 2002 and March 31, 2002 Qwest processed no trouble tickets with a severity level of 1, eleven tickets with a severity level of 2, 496 tickets with a severity level of 3, and three tickets with a severity level of 4.

Section 14 -- Escalation Process. Qwest has complied with the redesigned escalation process for over five months. Between November 16 and March 26, Qwest processed one OSS Interface escalation and four product/process escalations in accordance with the redesigned process. Qwest tracks eight milestones for each escalation. Qwest is responsible for missing one out of a possible 40 milestones. This equates to an average compliance rate of 98%.

Section 15 -- Dispute Resolution. The redesigned dispute resolution process has been in place for over five months. However, the process has not been invoked since agreement on the process was reached.

Product Catalogs and Technical Publications. In compliance with its commitments during section 271 workshops, Qwest has also substantially revised or created 231 product catalogs ("PCATs") and 27 technical publications ("TechPubs"). Qwest notified CLECs of the opportunity for CLECs to provide comments or feedback regarding all of these PCATs and TechPubs. Moreover, as set forth in the Hubbard Affidavit, the TechPubs listed by the Joint CLECs in their brief are consistent the SGAT, with only a single exception.²⁰ That exception relates to Technical Publication 77391, UNE Switching, issue E. In accordance with the redesigned CMP, Qwest posted Technical Publication 77391 to the TechPub review web site to

¹⁹ Affidavit of Lynn V. Notarianni in Support of Qwest's Comments Demonstrating Satisfaction of the FCC's Section 271 Change Management Evaluation Criteria ("Notarianni Affidavit"), attached as Exhibit C, ¶ 4 to Qwest's Colorado filing on CMP filed as Exhibit 1617.

²⁰ See Affidavit of Robert J. Hubbard at ¶¶ 13-15.

allow CLECs to review and comment the Qwest proposed changes on December 28, 2001. In response to this posting, AT&T submitted comments suggesting several changes. Qwest agreed to incorporate two changes based on AT&T's comments. Thus, this single exception demonstrates that Qwest's process for managing changes to its TechPubs, and receiving CLEC comments regarding those changes, is functioning properly.

C. Qwest has Adequately Addressed All Significant Third Party Test Issues.

The Joint CLECs broadly claim that one closed/unresolved Exception, Exceptions 3094, and two Exceptions that KPMG closed in an inconclusive status, Exceptions 3110 and 3111, indicate that there are problems with Qwest's current CMP. Contrary to the Joint CLECs' vague claim, however, these Exceptions do not preclude Qwest from complying with the FCC's evaluation criteria.

1. Exception 3094

This exception relates to the product/process provisions of Qwest's CMP. In this exception, KPMG contended that Qwest did not adhere to its change management process in notifying CLECs about a particular proposed change.²¹

As an initial matter, it is important to note that the FCC has focused solely on OSS systems -- not product or process -- change management processes in its section 271 orders. Verizon has no formal change management process for product or process issues, yet it has received several 271 approvals. SBC has a forum for process issues, known as the CLEC User Forum, but the FCC has not even mentioned that forum in its discussion of SBC's change management process.

Exception 3094 resulted from uncertainty that arose during the initial discussions of product and process issues in the redesign effort. The confusion that resulted in this Exception related to a previous interim process for product/process changes that Qwest and CLECs developed during the early redesign sessions. The uncertainty relating to those issues has been resolved by the redesign team's agreement on a detailed process for product/process changes. As fully described in Qwest's Brief regarding Change Management, Qwest has implemented the agreed-upon process. However, KPMG was unwilling to close this Exception in a resolved status because it was unable to evaluate the new process in practice.

The initial confusion surrounding the process that gave rise to this Exception has been eliminated by the detailed agreement reached through the redesign process. Because the new product/process procedures apply to all Qwest-initiated changes, there should be no future confusion relating to the appropriate process that applies to a particular change. Moreover, with the implementation of the interim process, Qwest's CMP provisions for product/process changes is more complete and comprehensive than any other CMP in the country.

Finally, the unresolved status of this Exception does not affect the Commission's evaluation of Qwest's CMP for section 271 purposes because the FCC has not required an RBOC to establish a change management process for product/process.

2. Exception 3110

In Exception 3110, KPMG expressed concern that Qwest's CMP managers do not employ a centralized mechanism to track and ensure that documentation release intervals are followed for upcoming software releases. In its Disposition Report regarding this Exception, KPMG stated that it had "reviewed Qwest internal process documents and verified that software and product/process documentation teams have procedures to prepare documents and distribute them in accordance with the intervals specified in the *Master Redlined CLEC-Qwest CMP Redesign Framework*."²² Thus, KPMG was satisfied that Qwest had implemented procedures to ensure that it complies with its release notification intervals. However, because KPMG had not observed adherence to the documented process for notification interval management, KPMG recommended that Exception 3110 be closed as inconclusive. As noted above, Qwest has an overall 98% compliance rate on its CMP obligations. More to the point, Qwest has adhered to 100% of the OSS interface release documentation interval notification milestones it has reached thus far. Qwest's record of compliance, coupled with its success in adhering to the very notification intervals that are the subject of the Exception, demonstrate that Qwest's tracking and verification procedures are adequate.

3. Exception 3111

Exception 3111 relates to Qwest's process for prioritizing and packaging CRs for major IMA releases. In its Disposition Report, KPMG noted that it had "verif[ied] that Qwest had adequately addressed each of the five issues

²² KPMG Disposition Report for Exception 3110, is sued April 2, 2002 ("E3110 Disposition Report"), Exhibit 1598.

raised in the Exception through documentation modifications and enhancements to the process."²³ KPMG observed the prioritizing and packaging process for IMA Releases 10.0 and 11.0. However, because it observed portions of the processes for each release, KPMG believed that Qwest did not comply with the CMP processes because Regulatory Changes were not prioritized for IMA Release 10.0, Qwest did not provide CLECs with total capacity information prior to the prioritization votes on IMA 10.0, and that Qwest did not participate in the prioritization process for IMA 10.0. In its responses to this Exception, Qwest addressed all three of these issues.

First, there were Regulatory CRs in both the IMA 10.0 and 11.0 Releases that were subject to the prioritization process as defined for Regulatory CRs, which included "above the line" treatment -- meaning that Regulatory CRs appeared at the top of the list of CRs to which resources are assigned. In addition, both the IMA 10.0 and 11.0 Releases included ordinary normal CRs that were subjected to the prioritization process as ranked CRs -- meaning that those CRs were ranked below the Regulatory CRs. Thus, KPMG had ample opportunity to review the prioritization process for both types of CRs.

The fact that Qwest and the CLECs were at impasse over whether PID/PAP related CRs should be treated as Regulatory CRs or as normal CRs during the prioritization process for the IMA 10.0 and 11.0 Release did not affect KPMG's ability to evaluate Qwest's adherence to the prioritization process. The

²³ KPMG Disposition Report for Exception 3111, issued April 2, 2002 ("E3111 Disposition Report"), Exhibit 1599.

resolution of this issue did not change the prioritization process itself, but simply determined which path ("above the line" or ranked) an individual CR will take through the process. KPMG has already observed both paths.

Second, Qwest provided the CLECs with the total capacity of the IMA 11.0 Release prior to the packaging. Thus, KPMG was able to observe Qwest's adherence to the process in that respect.

Third, Qwest demonstrated that it did participate in the prioritization process for IMA 10.0.

Thus, the issues KPMG raised did not prevent KPMG from observing Qwest's adherence to the various aspects of the prioritization and packaging process. However, because KPMG had not observed Qwest's adherence to the complete end-to-end prioritization and packaging process for a single major system release, KPMG recommended that this Exception be closed as inconclusive. KPMG has already observed Qwest's adherence to each phase of the prioritization and packaging processes for major system releases that were in place and agreed to via CMP at the time of executing the process. These observations demonstrated Qwest's compliance with the process. No further showing is necessary.

D. Qwest is Adhering to the Procedural Safeguards Contained in the Redesigned CMP.

The evidence set forth above establishes that Qwest is adhering to its redesigned CMP. CLECs have raised only four situations in which they claim Qwest failed to adhere to its

established processes.²⁴ Of these, two do not involve any deviation from Qwest's established CMP and one is not supported by the facts. Thus, the Joint CLECs could only point to a single instance where Qwest did not meet its obligations under the CMP. This single instance provides little support to the CLECs' claims because it arose outside of the ordinary CMP processes. This scant showing is consistent with the evidence that, as discussed above, establishes that Qwest's overall compliance rate exceeds 98%.

1. Qwest Adheres to its Notification Provisions.

Exhibit I to the Joint CLEC Brief is an "Event Notification" dated April 4, 2002. The CLECs claim that this notification failed to comply with the Qwest-initiated product/process change process, which Qwest agreed to implement for new product/process changes initiated on or after April 1, 2002, by changing NC/NCI codes without notice, i.e., effective immediately. This claim is misguided because the Event Notification neither changed NC/NCI codes, nor was it effective immediately.

This Event Notification was plainly sent in accordance with the CMP's production support provisions. The Event Notification indicates that it is a closure notification and that the initial notification was sent on March 4, 2002. Thus, in the March 4, 2002 Event Notification, Qwest notified the CLECs that it had discovered a problem. This notice did not purport to change any NC/NCI codes, but simply advised that outdated codes that do not appear in the relevant TechPub would no longer be considered valid. Because this was not a notice that changed the NC/NCI codes, but only

²⁴ See Joint CLEC Brief.

identified NC/NCI codes that were invalid, the product/process change provisions cited by the Joint CLECs do not apply.

The April 4, 2002 Event Notification represents Qwest's adherence to the CMP's production support provisions. At the hearing, Covad admitted that the issue was not whether Qwest sent a proper notification, but whether Qwest should include more complete titles.²⁵ That is the sort of detail that will continue to be worked in CMP, and does not rise to the level of noncompliance with the terms of CMP.

2. The Facts Show that Qwest has Provisioned ISDN Loops for CLECs where Integrated Pair Gain is Present.

Qwest developed a checklist that is reviewed when changes are made to Qwest's retail products, processes, center operations, or systems to determine whether any action is necessary to maintain retail and wholesale parity. Qwest discussed the checklist and associated methods and procedures with the CLECs during a redesign meeting and the CLECs agreed the process was adequate.

The Joint CLECs now claim that Qwest has not adhered to the process, claiming that Qwest failed to notify its wholesale customers of a "change in retail product and process" relating to the availability of ISDN loops on which there is integrated pair gain ("IPG").²⁶ There was no change in Qwest's retail product or process, as demonstrated by Covad's admission that it

²⁵ Hearing, Testimony of Megan Doberneck, April 26, 2002, page 7473-75 and 7510.

²⁶ In this context, IPG also refers to integrated digital loop carrier ("IDLC"). See Hubbard Affidavit at ¶ 2.

has been ordering ISDN loops on which there is integrated pair gain since 1999.²⁷ Qwest has continuously provisioned such loops for CLECs for more than three years.

Thus, Covad's own order history establishes that there was no "change" in Qwest's provisioning ISDN loops where IPG is present. The Joint CLECs' claim to the contrary has no merit.

3. Qwest is Working with CLECs through the CMP to Address the Issues Relating to its Preferred Local Carrier Freeze.

The Joint CLECs concede that changes in processes will not always occur seamlessly and without impacts to CLECs. Nonetheless, they point to one particular issue in an attempt to discredit Qwest's CMP. Rather than support their claims, however, the Joint CLECs' contentions regarding Qwest's Local Service Freeze ("LEFV") actually establish that Qwest's CMP is working properly to address AT&T's issues.

Qwest's LEFV removal process has been in place for many months. The process provided that a CLEC can submit a local service request ("LSR") to convert a Qwest retail customer to a CLEC customer the day after the customer removed its LEFV. In late February 2002, AT&T began experiencing problems with the process.

At the hearing AT&T admitted that Qwest has treated this issue on an expedited basis, pursuant to the Exception Process. AT&T admitted that Qwest has met with the CLECs several times on this issue, that Qwest has implemented new processes to address CLECs' concerns, and that the parties are "working through" the issue.²⁸

²⁷ Hearing, Testimony of Megan Dobernick, April 26, 2002, pages 7502-7504.

²⁸ Hearing, Testimony of Mitchel Menezes, April 26, 2002, pages 7498-7501.

Thus, through the existing CMP procedures, Qwest quickly responded to AT&T's most pressing concerns by establishing new processes and discussing the issues with CLECs. While the parties continue to work through all of AT&T's concerns relating to this issue, the existing CMP procedures are working.

4. Qwest has Observed the CMP Production Support Process.

The Joint CLECs have identified a single circumstance in which Qwest failed to notify the CLECs of changes made in conjunction with the Arizona third party OSS test. The third party tester in Arizona identified issues relating to the information Qwest sends to CLECs in the daily usage feed ("DUF"). Under normal circumstances, a CLEC would contact Qwest's help desk and open a trouble ticket to report such issues. However, because the issues arose during the third party test, the tester notified Qwest of the issues through the incident work order process established for purposes of the OSS test. While the closure of the trouble ticket would ordinarily trigger Qwest's issuance of a production support notification, these DUF issues arose during the third party test, outside of the normal CMP process. Accordingly, the production support notification was not triggered.

It is important to note that, despite this isolated occurrence, Qwest has complied with more than 98% compliance rate for its production support obligations. This occurrence is one of the few that fall within the remaining less than 2%.

V. QWEST ADEQUATELY ASSISTS COMPETITORS IN IMPLEMENTING AND USING QWEST'S OSS.

As part of its change management analysis, the FCC evaluates whether the BOC "is adequately assisting competing carriers to understand how to implement and use all of the

OSS functions available to them.²⁹ The Third Party Test results demonstrate that Qwest adequately assists CLECs in their use of available OSS functions.

The ROC Third Party Test evaluated Qwest's CLEC support programs in several evaluations: (1) several tests contained within the Qwest CLEC Support Processes and Procedures Review (Test 24); (2) an Evaluation of Qwest's Order and Transaction Creation Documentation and Maintenance (Test 10); (3) a P-CLEC OSS Interface Evaluation (Test 12-B); (4) a P-CLEC Account Management Evaluation (Test 12-C); (5) a POP Manual Order Processing Evaluation (Test 12.8); (6) a M&R Work Center Support Evaluation (Test 18.7); (7) an End-to-End M&R Process Evaluation (Test 18.8); and (8) a Daily Usage Feed Returns, Production and Distribution Process Evaluation (Test 19.6). As explained more fully below, Qwest successfully passed these tests with regard to technical support functions as reflected in the *Draft Final Report*.

In Test 24, the Qwest CLEC Support Processes and Procedures Review, KPMG evaluated all facets of the systems, processes and documentation provided by Qwest for the establishment and maintenance of business relationships with Qwest.³⁰ KPMG evaluated the following five³¹ areas of support that Qwest provides to CLECs:

- Account Establishment & Management
- CLEC Training
- Interface Development

²⁹ Arkansas/Missouri 271 Order, 16 FCC Rcd at 20865, App. D at ¶ 40, quoting Bell Atlantic New York 271 Order, 15 FCC Rcd at 3999-4000, ¶102.

³⁰ See Qwest OSS Evaluation Project, Master Test Plan, Version 5.2, April 9, 2002, at Section 24, p. 110, available at <http://www.nrri.ohio-state.edu/oss/master/master.htm>.

- Wholesale Systems Help Desk Support
- Interconnect Service Center (ISC) Support

The Account Establishment & Management Review ("AE&M Review")

evaluated Qwest's methods and procedures, processes and practices for establishing and managing CLEC account relationships.³² The object of the AE&M Review was to determine the adequacy and completeness of Qwest's account management procedures.³³

In its *Draft Final Report*, KPMG concluded that Qwest's account establishment and management processes meet the needs of the CLEC community.³⁴ Specifically, KPMG found that account establishment and management responsibilities and activities are defined; account management staff is organized to provide account coverage; instructions for contacting account managers are defined and published; and procedures for escalating critical and unresolved customer issues are defined and adhered to.³⁵ Of 11 evaluation criteria, HP concluded that Qwest had satisfied 10 criteria in the Draft Final Report.³⁶ One criterion resulted in an unable to determine finding, but as noted in the *Draft Final Report*, this and all other exceptions and observations were closed satisfied prior to the issuance of the *Draft Final Report*.³⁷ Further details on the results of the AE&M Review can be found in Section 24.3 of the *Draft Final Report*.

³¹ Test 24 included three additional reviews that are not discussed herein because they are outside the scope of technical assistance: Test 24.4 (CLEC Forecasting Review); Test 24.9 (Network Surveillance & Outage Support Review); and Test 24.10 (ISC/Billing and Collection Center Support Review).

³² See Draft Final Report, Test 24.3, §1.0, p. 545.

³³ Id.

³⁴ See Draft Final Report, Test 24.3, Table 24.3-2, p. 548.

³⁵ Id.

³⁶ Id.

³⁷ Id.

The CLEC Training Review ("CLEC TR") evaluated Qwest's training practices and documentation for CLECs engaged in establishing and maintaining a business relationship with Qwest.³⁸ The objective of the CLEC TR was to determine the existence and functionality of Qwest's procedures for developing, announcing, conducting and monitoring its CLEC training programs.³⁹

The results of the CLEC TR appear in Table 24.5-2 of the *Draft Final Report*. As noted in that table, Qwest satisfied every component of the examination.⁴⁰ Specifically, KPMG found that training process responsibilities and the scope of the training process are defined and documented, and that the essential elements of the training process are in place and documented.⁴¹ KPMG also found that Qwest's training offerings are scalable in response to additional demand, and that training process performance metrics are defined and measured.⁴² Of 10 evaluation criteria, HP concluded that Qwest had satisfied all 10 criteria in the Draft Final Report.⁴³ Within this test, every exception and observation noted by KPMG was closed satisfied prior to the issuance of the *Draft Final Report*.

The Wholesale Systems Help Desk Review ("WSHD Review") evaluated Qwest's IMA help desk functions that provide technical support for Qwest's OSS interfaces and for other systems-related issues.⁴⁴ The object of the WSHD Review was to determine the adequacy,

³⁸ See Draft Final Report, Test 24.5, § 2.0, p. 568.

³⁹ Id.

⁴⁰ See Draft Final Report, Test 24.5, Table 24.5-2, p. 570.

⁴¹ Id.

⁴² Id.

⁴³ Id.

⁴⁴ See Draft Final Report, Test 24.7, § 1.0, p. 620.

completeness, and consistency of WSHD processes and whether WSHD procedures are followed by Qwest personnel.⁴⁵

In its *Draft Final Report*, KPMG concluded that Qwest's WSHD and its procedures meet the needs of the CLEC community.⁴⁶ Specifically, KPMG found that WSHD responsibilities and activities are defined and documented; customers can initiate the trouble ticket process and access the status of a trouble ticket; and customer escalation procedures are defined and documented.⁴⁷ Of 13 evaluation criteria, HP concluded that Qwest had satisfied all 13 criteria in the Draft Final Report.⁴⁸ Within this test, every exception and observation noted by KPMG was closed satisfied prior to the issuance of the *Draft Final Report*. Further details on the results of the WSHD Review can be found in Section 24.7 of the *Draft Final Report*.

The Interconnect Service Center Support Review ("ISCS Review") evaluated Qwest's service center processes developed by Qwest to support resellers and CLECs with OSS-related questions, escalations, problems and issues.⁴⁹ As it relates to the ISC Call Center, the object of the ISCS Review was to determine the completeness and consistency of ISC processes and responses, determine whether the escalation procedure is documented and known to ISC representatives and management, and determine the accuracy and completeness of procedures for measuring ISC performance.⁵⁰

45 Id.

46 See Draft Final Report, Test 24.7, Table 24.7-4, p. 627.

47 Id.

48 Id.

49 See Draft Final Report, Test 24.8, § 1.0, p.24.8-A-1.

50 Id.

In its *Draft Final Report*, both HP and KPMG concluded that Qwest's ISC and its procedures meet the needs of the CLEC community.⁵¹ Specifically, HP was able to reach the ISC Call Center and obtain complete and accurate information when HP required assistance with transaction processing or interpretation of information.⁵² KPMG found that ISC support processes are documented, followed, and meet the needs of the CLEC community.⁵³ Of two applicable evaluation criteria contained within the evaluation, HP concluded that Qwest had satisfied both criteria in the *Draft Final Report*.⁵⁴ Similarly, KPMG concluded that Qwest had satisfied all 12 test criteria.⁵⁵ Within this test, every exception and observation noted by HP or KPMG was closed satisfied prior to the issuance of the *Draft Final Report*. Further details on the results of the ISCS Review can be found in Tables 24.8-1.4 and 24.8-4 of the *Draft Final Report*.

In the Evaluation of Qwest's Order and Transaction Creation Documentation and Maintenance, HP examined "the guidelines and business rule documentation available to the CLEC community to instruct them on how to prepare the forms and other documents required to submit orders and other transactions to Qwest's OSS."⁵⁶ In the *Draft Final Report*, HP concluded that Qwest's guidelines and business rules documentation, including Qwest training materials, meet the needs of the CLEC community.⁵⁷ Specifically, HP found that Qwest's

⁵¹ See Draft Final Report, Test 24.8, Table 24.8-1.4 (MTP criteria 24.8-1-1 to 24.8-1-3), p. 24.8-A-6; id. at Table 24.8-4 (MTP criteria 24.8-1 to 24.8-12), p. 645.

⁵² Id.

⁵³ See Draft Final Report, Test 24.8, Table 24.8-4 (MTP criteria 24.8-1 to 24.8-12), p. 645.

⁵⁴ See Draft Final Report, Test 24.8, Table 24.8-1.4 (MTP criteria 24.8-1-1 to 24.8-1-3), p. 24.8-A-6.

⁵⁵ See id. at Table 24.8-4 (MTP criteria 24.8-1 to 24.8-12), p. 645.

⁵⁶ Draft Final Report, Test 10, § 1.0, p. 10-A-1.

⁵⁷ Id. at Table 10-1.26, p. 10-A-35.

training and other documentation are readily available to the CLEC community, comprehensive in their nature, and are accurate and consistent with other materials provided to the CLEC community.⁵⁸ Of 107 evaluation criteria, HP concluded that Qwest had satisfied all 107 criteria in the Draft Final Report.⁵⁹ The criteria applicable to technical assistance are contained within Table 10-1.26 of the *Draft Final Report*. Within this test, every exception and observation noted by HP was closed satisfied prior to the issuance of the *Draft Final Report*.

The P-CLEC Interface Evaluation "analyzed [HP's] ability to establish interface connectivity with Qwest to carry out various wholesale activities."⁶⁰ During this evaluation, HP examined the documentation and support processes that Qwest makes available to support its interfaces, including IMA-EDI, billing, and M&R interfaces. In general, HP's findings relating to the documentation and support processes of Qwest were favorable. Further information on HP's findings can be found in Test 12-B of the *Draft Final Report*.

In the P-CLEC Account Management Evaluation, HP evaluated "all aspects of the Qwest CLEC account relationship that arose during [HP's] execution of its planned testing activities."⁶¹ The purpose of this evaluation was to ensure that Qwest's Wholesale account establishment and management processes allows CLECs to compete within Qwest's local service territory.⁶²

58 Id.

59 Id.

60 Draft Final Report, Test 12-B, § 1.0, p. 12-B-1.

61 Draft Final Report, Test 12-C, § 1.0, p. 12-C-1.

62 Id.

As noted in the *Draft Final Report*, HP found that Qwest's account establishment and management processes meet the needs of the CLEC community.⁶³ Specifically, HP "found the overall relationship with its Qwest Account Team to be positive,"⁶⁴ and that "Qwest's published Account/Service Management guidelines, in conjunction with the approach Qwest takes to address the needs of CLECs, on a case-by-case basis for issues, special requests, escalations and other issues, was sufficient to meet [HP's] needs."⁶⁵ During the course of Test 12-C, HP cited a few deficiencies relating to the account establishment process and the quality of input provided by Qwest subject matter experts, but noted in the *Draft Final Report* that all observations and exceptions were subsequently closed satisfied.⁶⁶

The Daily Usage Feed Returns, Production and Distribution Evaluation was an "operational analysis of the processes and related documentation used by Qwest to create and transmit the DUF files, accept DUF returns, and investigate potential errors."⁶⁷ With regard to technical assistance, KPMG found that CLECs are provided with sufficient contacts for DUF production and distribution issues and that Qwest's DUF documentation is adequate to meet the needs of the CLEC community.⁶⁸ In addition, KPMG found that changes to DUF interface specifications are subject to change management techniques.⁶⁹ Results for the criteria relevant to technical assistance appear within Table 19.6-2 of the *Draft Final Report*.

⁶³ Id. at § 3.1, p. 12-C-4.

⁶⁴ Id. at § 3.1.1, p. 12-C-4.

⁶⁵ Id. at § 3.1.3, p. 12-C-5.

⁶⁶ See Draft Final Report at Appendix A.

⁶⁷ Draft Final Report, Test 19.6, § 1.0, p. 430.

⁶⁸ See Draft Final Report, Test 19.6, Table 19.6-2, p. 433.

⁶⁹ Id. at Table 19.6-2 (MTP criterion 19.6-1-10), p. 440.

VI. QWEST'S EDI DOCUMENTATION ENABLES COMPETITORS TO SUCCESSFULLY BUILD AN ELECTRONIC GATEWAY.

As part of its CMP analysis, the FCC evaluates the "efficacy of the documentation [a BOC] makes available for the purpose of building an electronic gateway."⁷⁰ Specifically, the FCC has required BOCs to make available "sufficiently detailed interface design specifications to enable competing carriers to modify or design their systems in a manner that will enable them to communicate with the [BOC's] systems and any relevant interfaces."⁷¹ The efficacy of Qwest's EDI documentation is demonstrated by commercial data, which show that 29 CLECs (excluding two pseudo-CLECs) have been able to construct and use EDI interfaces. The Third Party Test results also support the conclusion that Qwest's EDI documentation provides CLECs with sufficiently detailed interface design specifications.

Qwest provides CLECs with assistance in developing an EDI interface in the following ways: (1) providing CLECs with a well-documented EDI implementation process and individually working with CLECs via a CLEC-specific IMA-EDI development team; (2) making available detailed interface design specifications and other documentation; and (3) working collectively with CLECs on EDI development through the change management process.

Qwest provides a well-documented process to assist CLECs in their implementation of EDI interfaces through the IMA-EDI Implementation Guidelines, which is available online.⁷²

To aid in the CLEC EDI implementation process, Qwest makes a CLEC-specific IMA-EDI Implementation Team available to CLECs who are planning to use the application-to-

⁷⁰ Arkansas/Missouri 271 Order, 16 FCC Rcd at 20865, App. D at ¶ 40.

⁷¹ Texas 271 Order, 15 FCC Rcd at 18411 (¶ 119).

⁷² See <http://www.qwest.com/wholesale/ima/edi/document.html>.

application interface. The IMA-EDI Implementation Team for each CLEC is composed of a project manager, technical support engineer, and a business analyst. The IMA-EDI Implementation Team also provides technical assistance to CLECs by answering business and interface-related questions. During implementation, all CLEC issues are tracked and reviewed on a weekly basis to ensure closure and to assist the CLEC in completing their EDI implementation.⁷³

Through the change management process, CLECs have an active role in Qwest's continuing development of its OSS interfaces and related documentation. As part of CMP, CLECs can submit change requests to alter Qwest EDI documentation, add additional features to IMA-EDI, or supplement its functionality.⁷⁴ In addition, during the CLEC/Qwest CMP redesign process, Qwest and CLECs agreed to procedures including advance notice of new releases, timeframes for issuance of documentation prior to implementation, opportunity for CLEC input into documentation, and prescribed content of documentation.⁷⁵

The FCC has previously evaluated the efficacy of a BOC's EDI documentation by considering the total number of CLECs who have successfully implemented EDI interfaces.⁷⁶ As of April 24, 2002, a total of 29 CLECs have been certified to use Qwest's EDI and three CLECs are in the process of EDI certification.⁷⁷ The volume of transactions submitted via EDI provide additional evidence of the efficacy of Qwest's EDI documentation. For instance, from April 1, 2001 to March 31, 2002, Qwest processed approximately 957,000 pre-order transactions

⁷³ See *id.*

⁷⁴ See Wholesale CMP, § 2.

⁷⁵ See Wholesale CMP, § 4.

⁷⁶ See, e.g., *Texas 271 Order*, 15 FCC Rcd at 18411 (¶ 119); *Massachusetts 271 Order*, 16 FCC Rcd at 9049-50 (¶ 112).

via EDI for 17 individual CLECs.⁷⁸ Similarly, from April 1, 2001 to April 14, 2002, Qwest processed approximately 586,000 order transactions via EDI for 22 individual CLECs.⁷⁹ In addition, the fact that two CLECs were able to construct EDI interfaces and certify products within 107 days of contacting Qwest is also evidence of the efficacy of Qwest's EDI documentation.⁸⁰

The results of the Third Party Test also confirm that Qwest has satisfied this aspect of the FCC's 271 requirements. The Third Party Test evaluated the efficacy of Qwest's documentation in three reviews: (1) the Order and Transaction Creation Documentation Evaluation (Test 10); (2) the P-CLEC OSS Interface Evaluation (Test 12-B); and (3) the OSS Interface Development Review (Test 24.6). As described more fully below, Qwest has satisfied all of these tests.

The Order and Transaction Creation Documentation Evaluation was a "comprehensive review of the public documentation that Qwest provides to the CLEC community to assist in the preparation and submission of transactions."⁸¹ As part of this review, HP examined three types of IMA-EDI documentation: (1) the IMA-EDI Disclosure Document, (2) the IMA-EDI Implementation Guidelines, and (3) IMA Release Certification/Recertification Notices.⁸²

77 *See* Notarianni Affidavit at ¶ 4.

78 *Id.* at ¶ 7.

79 *Id.* at ¶ 7.

80 *Id.* at ¶ 5. *See Texas 271 Order*, 15 FCC Rcd at 18414 (¶ 124) (holding that the fact that one CLEC was able to test and go into production quickly in EDI was good evidence of the efficacy of the BOC's EDI documentation).

81 Draft Final Report, Test 10, § 1.0, p. 10-A-1.

82 *Id.* at Section 10.2.1.1.

In the *Draft Final Report*, HP concluded that Qwest's IMA-EDI documentation meet the needs of the CLEC community.⁸³ Specifically, HP found that IMA Disclosure documentation and the EDI Implementation Guidelines are readily available to CLECs, are comprehensive in their detail, and can be easily understood by the intended audience.⁸⁴ Of 107 applicable evaluation criteria, HP concluded that Qwest had satisfied all 107 criteria in the Draft Final Report.⁸⁵ Within this test, every exception and observation noted by HP was closed satisfied prior to the issuance of the *Draft Final Report*. Further details on the results of the OSS ID Review can be found in Table 10-1.26 of the *Draft Final Report*.⁸⁶

The P-CLEC OSS Interface Evaluation analyzed HP's "ability to establish interface connectivity with Qwest to carry out various wholesale activities."⁸⁷ This evaluation covered HP's activities for the IMA-EDI implementation and release migration processes, billing data and the M&R implementation process. As noted in the *Draft Final Report*, HP successfully migrated to and conducted certification activities in three IMA-EDI Releases (6.0, 7.0, and 8.0) as part of this evaluation using Qwest's documentation and EDI Implementation Team.⁸⁸ During this test, HP certified 13 pre-order transactions, 16 order transactions, and five post-order transactions.⁸⁹

The OSS Interface Development Review ("OSS ID Review") evaluated Qwest's documentation, specifications and support provided to CLECs in developing, providing, and

⁸³ See Draft Final Report, Test 10, Table 10-1.26, p. 10-A-35.

⁸⁴ Id.

⁸⁵ Id.

⁸⁶ Id.

⁸⁷ See Draft Final Report, Test 12-B, § 1.0, p. 12-B-1.

⁸⁸ Id. at § 3.0, p. 12-B-10.

maintaining OSS interfaces.⁹⁰ The object of the OSS ID Review was to determine the adequacy, consistency and completeness of Qwest's specifications, documentation and technical assistance provided to the CLECs to develop their interfaces.⁹¹

In its *Draft Final Report*, KPMG concluded that Qwest had satisfied 46 of 48 evaluation criteria for Test 24.6.⁹² Specifically, KPMG found that Qwest has a documented methodology for interface development; makes available to customers interface specifications that define applicable business rules, data formats/definitions, and transmission protocols; and has integrated procedures for updating interface specifications with formal change management procedures involving customers.⁹³ The two evaluation criteria that Qwest has not yet satisfied relate to SATE, and will be discussed below.⁹⁴ Further details on the results of the OSS ID Review can be found in Test 24.6 of the *Draft Final Report*.

VII. QWEST MAKES AVAILABLE A STABLE TESTING ENVIRONMENT THAT MIRRORS PRODUCTION.

One of the factors that the FCC has identified as part of its Section 271 change management review is whether a BOC has implemented a stable test environment that mirrors the production environment.⁹⁵ As part of the end-to-end interface testing process, Qwest provides two alternative testing environments to CLECs, each of which is a "stable test

⁸⁹ Id. at Table 12-B-1.1, p. 12-B-10.

⁹⁰ See Draft Final Report, Test 24.6, § 1.0, p. 576.

⁹¹ Id.

⁹² See Draft Final Report, Test 24.6, Table 24.6-2.1, p. 588.

⁹³ Id.

⁹⁴ Id.

⁹⁵ See Application by Verizon New England Inc., et al., for Authorization to Provide In-Region, InterLATA Services in Rhode Island, FCC 02-63, released February 22, 2002, ____ FCC Rcd ____ (2002), App. D at ¶ 42 ("Rhode Island 271 Order").

environment that mirrors production.⁹⁶ One is Qwest's stand-alone test environment ("SATE"), and the other is Qwest's Interoperability environment. CLECs may test in either or both, as they choose.

Before a CLEC may interface with Qwest's EDI, a CLEC completes a certification process that demonstrates that its EDI is capable of effectively interacting with Qwest's EDI. This certification process consists of three stages: (1) establishing connectivity; (2) progression testing; and (3) controlled production.⁹⁷

Establishing Connectivity. To establish connectivity, Qwest and the CLEC verify that they are able to pass transactional information to each other over a dedicated connection.⁹⁸ The purpose of this initial stage is to verify the physical network lines are properly connected and that data can be transmitted using the defined network protocol.

*Progression Testing.*⁹⁹ After a CLEC has established connectivity with Qwest, the CLEC progresses to the next stage. In this stage of testing, CLECs submit test transactions to Qwest via the EDI interface to determine whether they receive appropriate responses from Qwest's systems. Qwest provides two distinct environments for testing: Interoperability and SATE.¹⁰⁰ CLECs can choose to test in the Interoperability environment, SATE, or both; testing

⁹⁶ See *Arkansas/Missouri 271 Order*, 16 FCC Rcd at 20865, App. D. at ¶ 40.

⁹⁷ See Draft Final Report, Test 24.6, § 2.1.1.1, p. 577. See generally "Overview of Interface Testing," Attachment B to the Notarianni Affidavit.

⁹⁸ See Draft Final Report, Test 24.6, § 2.1.1.1, p. 577.

⁹⁹ Progression testing permits a CLEC to test the functioning of its interface for a new release. Regression testing, by contrast, is selective retesting of a system or component to verify that modifications have not caused unintended effects and that the system or component still complies with its specified requirements. Regression testing is not a separate testing activity; rather it is ongoing and grows with every release.

¹⁰⁰ See Draft Final Report, Test 24.6, § 2.1.1.4, p. 580.

in these environments is not mutually exclusive. These two environments are discussed in more detail below.

Controlled Production. After successfully completing the initial stages of the EDI certification process (establishing connectivity and progression testing), CLECs must complete Controlled Production ("CP") before being fully certified for EDI use. This stage is really a controlled test in the production environment prior to the free flow of transactions. It also affords both Qwest and the CLEC the assurance that all necessary production connectivity and environment activities have been successfully completed on both sides of the gateway. During CP, CLECs submit requests to the Qwest production environment for provisioning as real production orders. Qwest considers all CP orders to be live orders that are processed through provisioning and billing. This allows the CLEC to have Qwest's assistance in monitoring their first production transactions through all provisioning and billing systems.

1. The Interoperability Environment

Qwest established its first CLEC test environment in 1997, which subsequently evolved into the Interoperability environment in 1998. To date, 26 individual CLECs have tested in the Interoperability environment and subsequently have gone into production.¹⁰¹ When a CLEC tests in the Interoperability environment, it submits IMA data transactions through EDI to Qwest's Interoperability environment. This environment uses a copy of the production IMA EDI software, thereby providing a production-like environment in which CLECs may test. A general description of the Interoperability environment is set forth in the attached "Overview of Interface

¹⁰¹ Notarianni Affidavit at ¶ 4.

Testing."¹⁰² The IMA Implementation Guide document provides a greater level of detail on testing in the Interoperability environment.¹⁰³ The following description relies on these documents.

The Interoperability environment validates transactions against actual production data using real production legacy systems to validate the data for pre-order and order transactions, including validation of account data. These transactions are then submitted by the system into a test database that is a copy of the production IMA database, yet is physically separate from production. Because these transactions are not sent to the production databases, post-order transactions in the Interoperability environment are manually generated. Each of the transaction types for pre-order, order and post-order activities that is supported by the production IMA release is likewise supported in the Interoperability environment.

The Interoperability environment supports all of the releases that are maintained in production, providing CLECs with the ability to test different versions of IMA releases at the same time. New versions of IMA are released in the Interoperability environment approximately 30 calendar days prior to their release in production unless that release is deemed to be in "red testing status."¹⁰⁴ Red testing status indicates that the release's system testing effort has discovered significant issues that place the release in jeopardy. Additionally, Qwest supports releases of IMA in the Interoperability environment for an extended testing period. Each release is available to CLECs for six

102 Notarianni Affidavit, Attachment B.

103 *See* Exhibit H.

104 *See* Draft Final Report, Test 24.6, § 2.1.1.4, p. 580.

months after the next subsequent major IMA-EDI release is made available in production.

To aid CLECs in their implementation of IMA in the Interoperability environment, Qwest makes available a CLEC-specific IMA-EDI Implementation Team.¹⁰⁵ The IMA-EDI Implementation Team works directly with a CLEC's EDI team during the testing and certification of the CLEC's interface software. As described above, the IMA-EDI Implementation Team for each CLEC is composed of a project manager, technical support engineer and a business analyst. The 9.0 version of the IMA-EDI Implementation Guide document includes a staffing plan appendix that details Qwest's implementation organization, including organization structure, roles and responsibilities, as well as process flow diagrams.¹⁰⁶

In addition to a CLEC-specific implementation team, Qwest provides CLECs with the IMA-EDI Implementation Guide document to aid in their use of the Interoperability environment. The IMA-EDI Disclosure Document is also provided to CLECs to assist with the development of their EDI interfaces. Both documents are discussed more fully above in Section VI (A).

As with other interface systems, Qwest provides CLECs with the opportunity to submit CMP Change Requests for the Interoperability environment. Interoperability CRs are managed by CMP in the same manner as IMA-EDI Production CRs.

¹⁰⁵ See Draft Final Report, Test 24.6, § 2.1.1.4, p. 581.

¹⁰⁶ See IMA-EDI Implementation Guide, Exhibit H, which is also available at <http://www.qwest.com/wholesale/ima/edi/document.html>.

2. The Stand-Alone Test Environment (SATE)

Qwest implemented SATE on August 1, 2001, as an alternative testing environment to the interoperability environment.¹⁰⁷ Testing in the SATE environment can be performed in place of, or in addition to, conventional testing in the Interoperability environment, for both initial certification that CLEC systems will interface with Qwest's IMA-EDI systems and for subsequent testing of new releases of IMA-EDI software.

SATE provides a CLEC with the ability to learn how Qwest's IMA-EDI functions work and the ability to test its interface in a test environment that returns pre-defined test scenarios that mimic production responses. Qwest provides the account data and scenario information (test decks) to users through the IMA-EDI Data Document for SATE.¹⁰⁸ Scenario submissions do not leave SATE during testing. By providing CLECs with a self-contained, production-like environment for sending transactions, CLECs have the opportunity to experience an environment that acts like production IMA-EDI without interfacing with the actual production environment. SATE uses test account data and requests that are subjected to the same IMA-EDI edits as those used in production.¹⁰⁹ SATE also permits CLECs to perform "regression testing," in which a CLEC determines whether systems changes on its end will affect its ability to interface via EDI with Qwest.

Qwest makes available in SATE the same support teams to CLECs to assist in testing and certifying CLEC interface software as it does in the Interoperability

¹⁰⁷ See Draft Final Report, Test 24.6, § 2.1.1.4, p. 580.

¹⁰⁸ CLECs may also request additions or changes to the test decks. Qwest generally is able to meet such requests within two weeks of approval.

¹⁰⁹ IMA (GUI and EDI) edits ensure that LSRs are populated in accordance with Qwest business rules as well as with the correct data characteristics and field length.

environment. Qwest's IMA-EDI Implementation Team works directly with CLECs using SATE. In addition, a SATE Users' Group meets regularly under the aegis of the Change Management Forum to discuss SATE-related issues and to recommend changes to SATE as appropriate. Qwest also provides CLECs with the IMA-EDI Implementation Guide and other documentation to aid in the utilization of SATE.¹¹⁰ Beginning with version 9.0, the IMA-EDI Implementation Guide has included a staffing plan which details Qwest's CLEC testing organizational structure and the roles and responsibilities of all resources that directly support SATE, as well as diagrams that describe the process flows of SATE.¹¹¹

Qwest built SATE to provide products and transactions that were currently being ordered by CLECs through IMA-EDI.¹¹² Qwest continues to monitor the products that CLECs express interest in and has created CMP CRs to add products to SATE.¹¹³ In addition, to ensure that CLECs have the functionality available in SATE that they require, CLECs may request through the change management process that Qwest include additional products and functionality in its suite of SATE transactions.¹¹⁴ SATE CRs are managed by CMP in the same manner that IMA-EDI CRs are managed. A SATE Users' Group was formed in November 2001 as part of the CMP Forum, to give Qwest and

110 See <http://www.qwest.com/wholesale/ima/edi/document.html>.

111 See <http://www.qwest.com/wholesale/ima/edi/document.html>.

112 See Notarianni Affidavit, ¶ 11. The list of products can be found in the IMA-EDI Implementation Guide, which is available at <http://www.qwest.com/wholesale/ima/edi/document.html>. KPMG's closed unresolved Exception 3095, which questions whether products ordered through GUI interfaces should be included in SATE, is addressed below, in the third party test section.

113 Notarianni Affidavit, ¶ 11.

114 See EDI Implementation Guide, Exhibit H, available at <http://www.qwest.com/wholesale/ima/edi>

CLECs an opportunity to communicate their current plans and needs, respectively, as well as to jointly present a list of change requests to CMP that ensures that future SATE enhancements meet the needs of CLECs.¹¹⁵

As a further enhancement to SATE, Qwest has provided automated post-order responses in SATE since Release 9.0 (January 26, 2002), through the Virtual Interconnect Center Knowledge Initiator ("VICKI"). VICKI is described in detail in the attached "White Paper on the Virtual Interconnect Center Knowledge Initiator."¹¹⁶ This new functionality provides CLECs with the ability to experience the behavior of IMA-EDI consistent with production timing of post-order transactions.¹¹⁷ It also ensures that CLECs receive automated responses consistent with those received in production.¹¹⁸

Although CLECs currently use SATE with success, SATE will continue to be enhanced in the coming months. For instance, despite the FCC's view that a BOC's test environment is not required to test flow-through,¹¹⁹ Qwest is in the process of implementing flow-through for all products in SATE that are

/document.html/wholesale/ima/edi/document.html. The process states that "additional functionality can be agreed upon and added in later releases. Requests for transactions not currently supported may be requested via CMP." *See id.*

¹¹⁵ *See* SATE Users' Group Meeting Minutes, November 13, 2001 (Exhibit L). The Users' Group has within its scope all EDI interface testing issues. *See id.* In addition to the SATE Users' Group, Qwest and individual CLECs can request changes to test environments.

¹¹⁶ "White Paper on the Stand Alone Test Environment (SATE) Virtual Interconnect Center Knowledge Initiator," Dec. 7, 2001, Version 1.00 ("VICKI White Paper") (Exhibit M).

¹¹⁷ VICKI is a tool that Qwest provides in the SATE environment to automatically generate valid production order and post-order responses to CLEC-generated test transactions. This further strengthens the CLEC's ability to test their EDI interface in a stand-alone fashion, with reduced requirements for CLEC/Qwest interaction. *See* VICKI White Paper (Exhibit M).

¹¹⁸ Those post-order transactions that currently are done manually by an Interconnect Service Center ("ISC") representative in production are not automated in SATE. Those transactions are completed manually in SATE, as they are in production by ISC representatives.

¹¹⁹ *See Texas 271 Order*, 15 FCC Rcd at 18421 (¶ 138).

flow-through eligible. Adding flow-through to SATE gives a CLEC the capability of testing whether a given local service request would flow through if had been sent to production.¹²⁰ Flow-through components for POTS and UNE-P were added to the Western Region (Oregon and Washington) on February 25, 2002.¹²¹ The implementation of flow-through should be completed throughout the entire Qwest territory by mid-May 2002.¹²² Once the transition to flow-through is complete, a CLEC will have the option of (1) sending its SATE transaction to a copy of the production service order processor, where only flow-through eligible LSRs will successfully flow, or (2) receiving a specified test scenario response.¹²³

3. Comparison of the Interoperability Environment with SATE

SATE is distinct from the Interoperability environment in several respects. The "Overview of Interface Testing" provides an explanation of those differences.¹²⁴ These differences also are described briefly below.

First, the Interoperability test environment uses real customer account data and uses production systems for preorder and LSR validation prior to the submittal of the LSR. In contrast, SATE utilizes test data provided by Qwest that is physically separate

¹²⁰ Testing using flow-through is described in more detail in Qwest's "White Paper on Flow Through in the Stand Alone Test Environment," January 3, 2002, Version 1.00 ("Flow Through White Paper") (Exhibit T).

¹²¹ See Flow Through White Paper, Exhibit T.

¹²² *Id.*

¹²³ *Id.* Unlike BellSouth's CLEC Application Verification Environment, SATE will utilize distinct service order processors for SATE to avoid confusing test and production data. See *Evaluation of the Department of Justice Comments on BellSouth Georgia/Louisiana 271 Application*, CC Docket No. 01-277, filed Nov. 6, 2001, at 34.

¹²⁴ Attachment B to the Notarianni Affidavit. See also Draft Final Report, Test 24.6, §2.1.1.4, p. 580.

from production systems. CLECs are provided with customer accounts to perform testing in SATE. In addition, the SATE environment returns predefined responses. This permits CLECs to test scenarios to learn Qwest's response utilizing a Qwest-provided test deck and accounts.¹²⁵

Second, effective January 26, 2002, SATE permits CLECs to receive automated post-order responses through VICKI, as described above. This functionality provides CLECs with the ability to experience the behavior of IMA consistent with production timing of post-order transactions. Those CLECs who test in the Interoperability environment receive EDI messages generated by Qwest personnel.

Third, with the full implementation of flow-through in SATE in May, 2002, CLECs will have the option of testing the ability of their orders to flow through to a copy of the production service order processor. This capability is not present in the Interoperability environment. Qwest has chosen to implement flow-through capability in SATE even though the FCC does not require this under Section 271.¹²⁶

In evaluating Qwest's satisfaction of the Section 271 criteria for interface testing, it is important for the Commission to examine the full picture of Qwest's testing opportunities. SATE and the Interoperability environment both are successful testing environments, each of which independently meets the FCC's criteria. But they also offer CLECs different options for testing.

¹²⁵ CLECs may request additional predefined responses for existing SATE products and functionality through the IMA-EDI Implementation Team using the SATE Data Request form. This form is available on the Qwest Wholesale Website at <http://www.qwest.com/wholesale/ima/edi/document.html>. Pursuant to procedures set forth in the IMA-EDI Implementation Guide, once the request has been reviewed and approved, Qwest will load the data into SATE within ten business days. See IMA-EDI Implementation Guide, Exhibit H at 39.

¹²⁶ See *Texas 271 Order*, 15 FCC Rcd at 18421 (¶ 138).

Stable Test Environment that Mirrors Production.

Qwest's Interoperability environments and SATE each independently satisfy the FCC's requirements that BOCs make available a "stable testing environment that mirrors production."¹²⁷

Stability of the Test Environment. The FCC has defined a "stable testing environment" as "one in which the BOC makes no changes to the proposed release during the test period."¹²⁸ First, both the Interoperability environment and SATE are stable because Qwest has undertaken to make no changes (other than bug fixes) during the 30-day period prior to implementation of a major release. Effective with the release of IMA-EDI 9.0 in February 2002, this is now true for SATE as well as for Interoperability. This requirement has been incorporated into Qwest's change management procedures in the section titled "Change to Existing OSS Interfaces."¹²⁹ If a serious code issue is found during the 30-day window, however, Qwest will implement the bug (emergency) fix. The implementation of bug fixes allows CLECs to test with the fixed code prior to the production deployment and therefore increases the stability of the test environment. KPMG found that Qwest made available both testing environments to CLECs "approximately 30 calendar days prior to production deployment of a new version of IMA."¹³⁰

Qwest also makes the both the Interoperability environment and SATE available to CLECs for an extended testing period. They are available to CLECs approximately 30 days

127 See *Rhode Island 271 Order*, App. D. at ¶ 42.

128 See *Massachusetts 271 Order*, 16 FCC Rcd at 9048 (¶ 109).

129 See Wholesale CMP, § 5.1.8.

130 Draft Final Report, Test 24.6, § 2.1.1.4, p. 580.

prior to and six months after each major IMA-EDI release.¹³¹ This practice, known as "versioning," allows CLECs to remain using a prior release even after implementation of a new release, to give them time to decide when to migrate to the new release. Thus, beginning with the release of EDI 9.0 in February 2002, CLECs will be able to test in both Interoperability and in SATE for any one of three releases (7.0, 8.0, and 9.0) at the same time.¹³² (In the Interoperability environment, versioning had already been possible).¹³³ The FCC has approved of versioning because it "ensures that system changes and enhancements do not adversely affect a carrier's ability to access the BOC's OSS."¹³⁴

Mirroring the Production Environment. Both the Interoperability environment and SATE satisfy the FCC's requirement that the interface testing environment mirror the production environment. The FCC has held that in order to satisfy its "mirroring production" standard, a BOC need not provide a testing environment that is "identical to its production environment."¹³⁵ Rather, it is sufficient for a BOC to show that "the testing and production environments perform the same key functions."¹³⁶

The Interoperability environment by definition mirrors the production environment. The Interoperability test environment uses a copy of the EDI software used in

¹³¹ See Draft Final Report, Test 24.6, § 2.1.1.4, p. 580. SATE is available for testing of both major EDI releases and point releases, but the 30-day stable testing period prior to release is available only for major releases. This is consistent with the FCC's requirements and with the CMP redesign procedures agreed to by CLECs and Qwest. See, e.g., *Massachusetts 271 Order*, 16 FCC Rcd at 9016 (¶ 111).

¹³² See OSS Calendar, which can be found on the Qwest Wholesale Website, available at <http://www.qwest.com/wholesale/cmp/osscalendar.html>.

¹³³ See IMA-EDI Implementation Guide, Exhibit H, available at <http://www.qwest.com/wholesale/ima/edi/document.html>.

¹³⁴ Application of Verizon New England Inc., et al., for Authorization to Provide In-Region, InterLATA Services in Massachusetts, 16 FCC Rcd 8988 (2001) at ¶ 107, quoting Texas 271 Order, 15 FCC Rcd at 18408, ¶ 115.

¹³⁵ *Texas 271 Order*, ¶ 138.

production, uses real production pre-order and order databases to validate and accept the LSR, and provides EDI responses generated by Qwest personnel that mirror production responses.¹³⁷ SATE also mirrors production because it allows CLECs to run transactions that generate the same responses as in production without actually using production data or production systems. Qwest provides CLECs with test decks of predefined responses to test in SATE, and those responses mirror production. Transactions submitted by CLECs through SATE use the same IMA-EDI software that is used in production, as well as the same CLEC EDI software. All known differences between production and SATE are documented on an on-going basis.¹³⁸ If the implementation of IMA-EDI functionality into SATE causes the system behavior to differ from production, Qwest will likewise document this information.^{139/} Transactions between Qwest and CLECs submitted through SATE therefore operate almost identically to those submitted through the actual pre-ordering, ordering and post-ordering processes.^{140/} This enables CLECs to, in effect, run transactions with Qwest without using their own account data. CLECs also can use SATE to evaluate products they are considering offering to determine whether they can do so effectively through their IMA-EDI interfaces. To further enhance SATE, Qwest now provides

¹³⁶ *Id.*

¹³⁷ *See generally* "Overview of Interface Testing," Attachment B to the Notarianni Affidavit.

¹³⁸ KPMG, in the ROC third party test, and Hewlett Packard, in the Arizona third party test, both initially challenged the comparison of errors generated in SATE with the errors generated in the production environment. This issue is discussed in the third party test section, below.

¹³⁹ While SATE mirrors production, it is not a complete replica of the production environment. Because of the nature of the test environment, some differences arise. For details on the differences between SATE and production, see the Overview section of the IMA-EDI SATE Data Document, Exhibit J, which can also be found on the Qwest Wholesale Website at <http://www.qwest.com/wholesale/ima/edi/document.html>.

¹⁴⁰ The structure of data in SATE mirrors the structure of production data, but the actual content of SATE data is not identical to the content of any instance of production data. SATE does not contain production data so that a CLEC can easily test any production scenario without concern for any privacy issues. While the responses may occasionally differ between production and SATE, the test environment utilizes the same processing logic as the production system. As a result, the structure of the response should mirror production.

automated post-order responses (since January 26, 2002), and it has begun implementing test flow-through components, even though the FCC has not required this capability under Section 271.¹⁴¹

Commercial Data

Commercial results support these conclusions. To date, five individual CLECs, as well as five others through a service bureau,¹⁴² have successfully completed testing using SATE and have achieved production status for EDI implementation of pre-ordering capabilities.¹⁴³ In approving SBC's 271 application in Texas, the FCC found it compelling evidence of the adequacy of SBC's new test environment that three carriers had used it to achieve production status, with two carriers using it for a new release.¹⁴⁴ Here, the commercial data is even stronger. As noted above, a total of ten carriers have achieved production status after testing through SATE (individually or through a service bureau).

There is one PID that is relevant to SATE (PO-19). This SATE PID "evaluates Qwest's ability to provide accurate production-like tests to CLECs for testing both new releases and between releases in the SATE environment."¹⁴⁵ Specifically, PO-19 measures the percentage of SATE test transactions that are successfully completed for a software release or mid-release performance test based upon the transactions reported in the Qwest SATE

¹⁴¹ See *Texas 271 Order*, 15 FCC Rcd at 18421 (¶ 138).

¹⁴² Several CLECs interested in testing their EDI interfaces are represented by service bureaus. A service bureau is a company that provides a variety of outsourced services to CLECs, including, but not limited to, establishing and maintaining connectivity between BOCs and CLECs, administering databases and managing associated hardware, as well as producing and transmitting EDI transactions.

¹⁴³ See Notarianni Affidavit at ¶ 4.

¹⁴⁴ See *Texas 271 Order*, ¶ 134.

¹⁴⁵ ROC PID Version 4.0 at 26 (PO-19), available at <http://www.qwest.com/wholesale/results/roc.html>.

Document. In a January meeting, the ROC TAG agreed that a 95% benchmark would apply to PO-19 beginning in March.¹⁴⁶ As reflected in the commercial performance results, Qwest met the 95% standard in Colorado for March.¹⁴⁷ For the three months prior to March, Qwest also met or came close to meeting this 95 percent standard. For the four month period between December 2001 and February 2002, Qwest successfully executed 98.73, 94.57, 95.38, and 97.10 percent of test transactions within SATE.¹⁴⁸ Thus, Qwest either met the current benchmark or fell only a fraction of a percentage point short of it during the past four months.¹⁴⁹

Although Qwest has negotiated the current PO-19 PID with the CLECs, Qwest is currently proposing a modification to PO-19 based on feedback from AT&T in the most recent Arizona OSS Test workshop. This modification would include a sub-measure to execute the same transactions in production and in SATE, to further measure the extent to which SAT mirrors production. Once Qwest has provided initial results for this updated PID, AT&T has requested that HP (or another vendor) evaluate the execution and the results. Although we do not yet have the transcript available, in the Arizona workshop last week, the Arizona Corporation Commission Staff indicated that this update and subsequent evaluation would be outside of the Arizona 271 proceeding.

¹⁴⁶ See ROC Steering Committee, "Impasse Issue on Benchmark for PO-19 SATE Accuracy," January 28, 2002, Exhibit N.

¹⁴⁷ See Colorado Commercial Performance Results at 67 (PO-19), which can be found at www.qwest.com/wholesale/results/roc.html.

¹⁴⁸ See Colorado Commercial Performance Results at 67 (PO-19), which can be found at www.qwest.com/wholesale/results/roc.html.

¹⁴⁹ The Joint CLECs refer to HP performance data listed without citation, but Qwest assumes that the data are taken from the *HP 9.0 Report, supra*, at 24. Joint CLEC Brief at 22. The Joint CLECs neglect to mention HP's conclusion that SATE was adequate to permit CLECs to test new releases, or that Qwest had met, or came very close to meeting, the 95 percent benchmark established for PO-19 by the ROC.

Commercial data also support the conclusion that the Interoperability test environment provides an effective means for CLECs to test and certify their EDI interfaces. To date, 26 CLECs have successfully tested through Interoperability and achieved production status.¹⁵⁰ There is no PID to measure the ability of test transactions in the Interoperability environment to mirror production. As discussed above, however, because test transactions go directly to legacy production databases, they will match the production responses.

Third Party Test Results

1. KPMG/HP Draft Report for ROC States Third Party Test

KPMG evaluated Qwest's SATE in Test 24.6, the OSS Interface Development Review Test.¹⁵¹ KPMG found that Qwest had satisfied the vast majority of the test criteria related to interface development.¹⁵² Of the 23 separate test criteria evaluated, KPMG found that 21 were satisfied. Many of these are directly related to EDI interface testing. KPMG found, for example, that (1) "Qwest has a documented methodology for conducting carrier-to-carrier testing with customers seeking to interconnect;" (2) "Carrier-to-carrier test environments are available and segregated from Qwest production and development environments;" (3) On call customer support for interface testing is provided; (4) Carriers are provided with documented specification for active test environments; (5) "Active test environments are subject to version control, and carriers are notified before changes are made to active test environments;" (6) Procedures

¹⁵⁰ Notarianni Affidavit at ¶ 4.

¹⁵¹ Draft Final Report, Test 24.6 (p. 576).

¹⁵² Draft Final Report, Test 24. 6, Table 24.6-2-1, p. 588.

are defined to log software 'bugs,' errors, and omissions in specifications and other issues discovered during carrier-to-carrier testing."¹⁵³

Many other criteria found satisfied in Test 24.6 are also closely related to the adequacy of EDI interface testing. As one example, "methods and procedures are defined for ensuring that changes found during all phases of testing are incorporated into instances of software code."¹⁵⁴

The only EDI interface test criterion that KPMG found "unsatisfied" is whether "a functional test environment is made available to customers for all supported interfaces."¹⁵⁵ KPMG identified the following issues as remaining at the close of its testing, which resulted in two closed unresolved exceptions.¹⁵⁶ First, it noted that "SATE transactions are manually generated, and that the environment does not support flow-through transactions."¹⁵⁷ Qwest has addressed both of these issues, through the implementation of automated responses (VICKI) in January 2002 and through the implementation of flow-through capability, which will be complete by May 20 (before the issuance of the Final Report). Moreover, as discussed below, the FCC does not even require flow-through capability under Section 271.¹⁵⁸ Second, KPMG raised concerns about "the process for adding new IMA products for testing as well as adding

¹⁵³ Draft Final Report, Test 24.6, Table 24.6-2-1, (MTP criteria 24.6-1-7, 24.6-1-9 to 24.6-1-13), pp. 591-92, 594-97.

¹⁵⁴ Draft Final Report, Test 24.6, Table 24.6-2-1 (MTP criterion 24.6-1-18), p. 600.

¹⁵⁵ Draft Final Report, Test 24.6, Table 24.6-2-1 (MTP criterion 24.6-1-8), pp. 592-94. The other test criterion that KPMG found unsatisfied is related to testing of the maintenance and repair electronic interface (EB-TA). We discuss this issue below, in connection with closed unresolved Exception 3109. As discussed below, this is not a Section 271 issue.

¹⁵⁶ These SATE-related closed unresolved exceptions, E3077 and E3095 are discussed in detail in Section VII(D)(3) below.

¹⁵⁷ Draft Final Report, Test 24.6, Table 24.6-2-1 (MTP criterion 24.6-1-8), pp. 592-94.

¹⁵⁸ See *Texas 271 Order*, 15 FCC Rcd at 18421 (¶ 138).

existing products not currently supported in SATE."¹⁵⁹ These concerns have been fully addressed by Qwest's redesigned change management process, which permits CLECs and Qwest to submit and to jointly prioritize change requests to add functionality and new products to SATE. As discussed in more detail below, all but two such CRs have been given a low priority.¹⁶⁰

KPMG did not evaluate the Interoperability testing environment, although it did evaluate and reach positive conclusions on Qwest's technical support and EDI documentation.¹⁶¹ KPMG initially opened an exception on the Interoperability environment, but closed it on the basis of Qwest's decision to develop SATE.¹⁶² It stated that "[b]y asserting that CLECs may use a combination of the environments for EDI implementation, KPMG Consulting believes that each of the issues raised in this Exception is addressed by SATE functionality and its proposed enhancements."¹⁶³ KPMG also found that Qwest's documentation was adequate to help CLECs understand the combined test environment (Interoperability and SATE).¹⁶⁴ HP, the pseudo-CLEC in the ROC test, tested the Interoperability environment. The resulted exceptions were all closed resolved.¹⁶⁵

¹⁵⁹ Draft Final Report, Test 24.6, Table 24.6-2-1 (MTP criterion 24.6-1-8), pp. 592-94.

¹⁶⁰ Section VII(D)(3), below. *See* Notarianni Affidavit, ¶ 11.

¹⁶¹ *See* Sections V and VI, *supra*.

¹⁶² KPMG identified three issues with Interoperability: (1) no end-to-end testing to provisioning and billing systems; (2) no flow-through capability; and (3) the need to use valid production account data for test transactions. *See* KPMG Disposition Report for Exception 3029, issued March 14, 2002, ("E3029 Disposition Report"), (Exhibit Y) at 1; *see also* Draft Final Report, Test 24.6, Table 24.6-2-1, (MTP criterion 24.6-1-8), p. 592. The availability of SATE addresses the second two issues. The first (as well as the second) are unrelated to FCC Section 271 requirements, as discussed below.

¹⁶³ E3029 Disposition Report, Exhibit Y, at 3.

¹⁶⁴ *Id.*; *see also* Draft Final Report, Test 24.6, Table 24.6-2-1, (MTP criteria 24.6-1-1 to 24.6-1-2), p 588.

¹⁶⁵ Draft Final Report, Test 24.6, Table 24.6-2-1, (MTP criterion 24.6-1-8), pp. 593-94.

HP also evaluated Qwest's interface testing program in Test 12-B, the P-CLEC OSS Interface Evaluation.¹⁶⁶ HP's evaluation was limited to the adequacy of Qwest's documentation for supporting Qwest's interface testing process utilizing Interoperability testing. HP was satisfied with Qwest's performance. It is also significant that HP successfully conducted certification and migration activities for releases 6.0, 7.0 and 8.0 for a number of functionalities.¹⁶⁷ HP also tested SATE in the Arizona third party test, and found it adequate, as we discuss in the next section.

2. HP's Evaluation for Arizona Third Party Test

Hewlett-Packard's ("HP's") comprehensive evaluation of SATE in Arizona¹⁶⁸ provides additional support for the conclusion that SATE is adequate to meet the Section 271 requirements. The purpose of HP's evaluation was to "determine whether the SATE provides an adequate means of testing and support to CLECs seeking to compete in the Arizona Marketplace."¹⁶⁹ After completing this comprehensive evaluation, HP concluded "SATE is adequate to support Qwest CLEC Testing in the State of Arizona, given the current level of CLEC usage."¹⁷⁰ In that report, HP also

¹⁶⁶ Draft Final Report, § Test 12-B, § 1.0, p. 12-B-1.

¹⁶⁷ Draft Final Report, Test 12-B, § 3.1.1 and Table 12B-1.1, p. 12-B-10.

¹⁶⁸ The Joint CLECs refer to this evaluation in their April 8 filing. They claim without citation or support that "HP failed to record all errors" during its testing. Joint CLEC Brief at 22. The CLECs also claim that "eight releases" were made in SATE 9.0 and that "eight known problems" identified by HP are still unresolved. *Id.* at 24. Qwest is unable to respond to these claims because they are made without citations, data, identifying information, or other support. The Commission therefore should disregard these claims.

¹⁶⁹ Hewlett-Packard Company's SATE Summary Evaluation Report for Qwest IMA-EDI SATE, Final Release Version 2.0, December 21, 2001 ("HP SATE Summary Report") at § 1.1 (Exhibit P).

¹⁷⁰ *Id.*

offered a list of recommended actions for the future.¹⁷¹ In a December 31, 2001, response, Qwest outlined its plans to address HP's recommendations.¹⁷²

HP's second evaluation was based on HP's recommendation #7 in the initial evaluation: "To ensure that the SATE is adequate for full release testing, HP recommends that IMA SATE release 9.0 be tested."¹⁷³ After completing this second evaluation, HP concluded, "the Qwest SATE is adequate to support New Release Testing by a CLEC."¹⁷⁴ Thus, the results of the Arizona pseudo-CLEC evaluation, under which HP was able to successfully test its EDI interface using SATE, confirm that SATE is a proven test environment that can be used with good results by CLECs.

3. KPMG's Closed Unresolved Exceptions Related to Interface Testing Do Not Present Section 271 Issues.

In this section we discuss the three closed unresolved KPMG exceptions that relate to interface testing (E3077, 3095, and 3109).¹⁷⁵ For the reasons given below, KPMG has articulated requirements that are not part of the FCC's requirements for

¹⁷¹ *Id.* at 8 (Section 2.1)

¹⁷² Qwest's Response to HP's SATE Recommendations, ACC Docket No. T-00000A-97-0238, December 31, 2001 (Exhibit V). On February 14, 2002, HP filed a response to Qwest's filing, in which it indicated it would initiate a further review of SATE in connection with its evaluation of IMA 9.0. HP Comments on Qwest Response to Recommendations, February 14, 2002 (Exhibit W). The Arizona Corporation Commission did not provide for further written response from Qwest regarding the HP recommendations, but in Qwest's view, the HP recommendations have all been met or are in the process of being met.

¹⁷³ *Id.*

¹⁷⁴ Hewlett-Packard Company's SATE New Release Test Summary Report – 9.0 Transaction Test for Qwest IMA EDI SATE, Version 2.0, March 29, 2002 ("HP SATE New Release Test Summary Report") at § 2.1 (Exhibit Q).

¹⁷⁵ Exception 3109 has to do with testing of an electronic interface for maintenance and repair. The FCC does not require BOCs to provide electronic interface for maintenance and repair, and its interface testing requirements apply only to preordering and ordering. *See* New York 271 Order, 15 FCC Rcd at 4069 (¶ 215) (EB-TA not required); Texas 271 Order, 15 FCC Rcd. at 18419 (¶ 132) (pre-order and ordering environments). Because it is a closed unresolved exception, however, we discuss it below.

Section 271 approval of Qwest's interface testing. In addition, most of KPMG's concerns have been addressed or will be shortly with enhancements to SATE.

a. Exception 3077

During its initial review of SATE, KPMG issued Exception 3077, identifying the following issues:

- SATE does not generate post-order responses in the same manner in which they are created in the production environment.
- Flow-through orders are not supported in SATE.
- The volume of order responses supported in SATE is restricted due to manual response handling.
- The data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses.

We address each of KPMG's initial concerns in light of the disposition report it issued on April 15, 2002, when it closed the exception.¹⁷⁶

The first KPMG concern was that "SATE does not generate post-order responses in the same manner in which they are created in the production environment."¹⁷⁷ KPMG agreed that VICKI appears to have enhanced some aspects of EDI interface testing.¹⁷⁸ However, KPMG believed that VICKI had the following limitations:

¹⁷⁶ See KPMG Disposition Report for Exception 3077, issued April 15, 2002 ("E3077 Disposition Report"), attached as Exhibit R.

¹⁷⁷ E3077 Disposition Report at 1.

¹⁷⁸ E3077 Disposition Report at 3; KPMG Second Supplemental Recommendation on E3077 (April 3, 2002) at 13.

- VICKI response times may not match production response times.
- VICKI response detail may not match production response detail.
- VICKI does not support “real world scenario testing.”

As KPMG acknowledged in its Disposition Report, the first and second items have been addressed by April 15, 2002 modifications to VICKI supporting documentation.¹⁷⁹ The third KPMG concern noted above is that, in its view, SATE does not provide "real world scenario testing."¹⁸⁰

KPMG's concerns about "real world scenario testing" should be largely addressed by Qwest's planned implementation of flow-through capability in SATE. We note, at the outset, that the FCC has not required that test environments have flow-through capability under Section 271.¹⁸¹ In any case, as discussed above, flow-through capability should be fully implemented throughout Qwest's region by mid-May.¹⁸² With flow-through, when a CLEC sends an LSR request to Qwest, the CLEC is asking what would happen to this specific LSR if the telephone numbers, circuits, and facilities in SATE existed in Qwest's production environment and this specific LSR were sent to production. Flow-through will allow CLECs to test the exact message they would receive in production for an

179 E3077 Disposition Report at 2.

180 E3077 Disposition Report at 3.

181 See *Texas 271 Order*, ¶ 138.

182 See SATE Flow-Through White Paper at 3 (Exhibit T).

LSR. VICKI also allows CLECs to test message formats, messages, and maps for specific pre-determined test scenarios. To the extent VICKI is different from the production environment, this is an intended aspect of SATE's design.¹⁸³ VICKI allows CLECs to test specific desired responses to ensure that the CLEC can correctly process the Qwest response.¹⁸⁴

Qwest believes that it has provided real world testing scenarios for CLECs through the introduction of SATE and its flow through capability. As noted above, the FCC does not require that the testing environment be "identical" to the production environment, but only that it provide "the same key functions."¹⁸⁵ This SATE clearly does.

¹⁸³ See E3077 Disposition Report at 2. See also Qwest Response to KPMG's Second Supplemental Recommendation on E3077 (April 8, 2002). There, in response to KPMG's assertion that "VICKI response detail may not match production response detail," Qwest undertook to clarify the discussion of this issue in the VICKI Path Document (Exhibit U). Qwest has added the following language to the VICKI Path Document:

Due to the complexities of certain responses, the detail data on these transactions may not match the detail received on a production response for a similar transaction. The structure of the EDI response will mirror production. FOCs are provided with varying quantities of service orders. Also, with respect to the Service and Equipment detail of a Completion notice, VICKI is built to allow a CLEC to understand the EDI Map structure and content of a Completion. It does not return a Service and Equipment section specific to the CLEC's test LSR. If a CLEC desires a specific detail data in the Service and Equipment section to be returned, they can request it be added to VICKI via the Data Request Process.

¹⁸⁴ When desired responses are triggered by the CLEC for a specific LSR, the responses received may not be the same responses as those a similar production LSR would have received. This is purposeful and allows the CLEC to determine if it can process the response through their EDI system.

¹⁸⁵ *Texas 271 Order*, ¶ 138.

A second KPMG concern is that "[f]low-through orders are not supported in SATE."¹⁸⁶ As discussed above, Qwest has enhanced SATE to add a test flow-through system and test Service Order Processors ("SOPs"). The option to send the test LSR to the flow-through systems allows the CLEC to experience an immediate response once the flow-through order is successfully processed, or to receive a manual response if flow-through is not successful. As discussed above, flow-through implementation is scheduled to be completed on or before May 20, 2002. Because of the future implementation timeline of flow-through for additional products in other regions, however, KPMG closed this issue unresolved.¹⁸⁷ Qwest fully expects to satisfactorily implement flow-through as planned.¹⁸⁸

A third KPMG concern was that the "volume of order responses supported in SATE is restricted due to manual response handling."¹⁸⁹ KPMG noted that limitations appeared to stem from the manual response generation required for SATE, and that with the implementation of VICKI, the resource requirements necessary to support SATE transactions were diminished. It therefore considered this aspect of E3077 to be resolved.¹⁹⁰

The fourth KPMG concern was that the "data contained within the order responses is not consistent, and may not mirror the data that would be found in production responses."¹⁹¹ Qwest explained in its response to this exception that it documents all known

¹⁸⁶ E3077 Disposition Report at 3.

¹⁸⁷ See E3077 Disposition Report at 3.

¹⁸⁸ In the case of Southwestern Bell, the FCC concluded, based on the "totality of the evidence," that its testing environment was adequate, even though SWBT did not test flow-through or response times, and did not evaluate the ability of an order to post to billing. *Texas 271 Order*, ¶¶ 138.

¹⁸⁹ E3077 Disposition Report at 3.

¹⁹⁰ E3077 Disposition Report at 4.

¹⁹¹ *Id.*

differences between IMA and SATE in the Overview section of the SATE Data Document.¹⁹² SATE contains all IMA-EDI generated errors that occur in production, as well as commonly triggered legacy system errors. Through the data request process, a CLEC can request that Qwest code any other legacy system errors into SATE. Additionally, Qwest has compared the errors generated from the legacy systems returned through Qwest's 8.0 production EDI interface over a 6-month period with the errors contained in SATE. Qwest has published this list and discussed it in the CMP forum.¹⁹³ Beginning with IMA-EDI release 9.0, Qwest generated the IMA EDI Errors List twice per IMA-EDI release – with the initial availability of the new release and the deployment of that release in production. This showing is adequate under Section 271. The FCC does not require a BOC to provide a testing environment that is "identical to its production environment."¹⁹⁴ Rather, it is sufficient for a BOC to show that "the testing and production environments perform the same key functions."¹⁹⁵

The commercial data discussed above, Section VII(C), also strongly support the adequacy of SATE. The CLECs' experience during testing need not be flawless under Section 271, moreover. As the FCC concluded in approving Southwestern Bell's Section 271 application in Texas, while some problems arose during testing, they "did not significantly impede any carrier's ability to test adequately the release prior to implementation."¹⁹⁶ Similarly, any issues identified by KPMG do not "significantly impede any carrier's ability to test" under SATE.

¹⁹² Qwest Response to KPMG Second Supplemental *Recommendation* on E3077 at 16.

¹⁹³ See <http://www.qwest.com/wholesale/cmp>.

¹⁹⁴ *Texas 271 Order*, ¶ 138.

¹⁹⁵ *Id.*

¹⁹⁶ *Id.*, ¶¶ 138, 134 & n.360. We also note that there was not even a third party test evaluation of the Texas testing environment, and the FCC approved it nonetheless.

In sum, given the commercial evidence here, which shows that CLECs have successfully used SATE, and given the limited nature of open issues remaining in this exception, the Commission can and should conclude that SATE meets the FCC's requirement that SATE mirror production.

b. Exception 3095

Exception 3095 also relates to SATE. In this exception, KPMG notes that there are resale products and UNEs that are supported by IMA-EDI that are not also supported by SATE.¹⁹⁷

Qwest built SATE to support every resale product and UNE offering for which CLECs had built IMA-EDI interfaces. Certain other products therefore were not automatically included in SATE. Nothing in the FCC's prior Section 271 orders specifically requires a BOC to make a stand-alone test environment available for products that CLECs do not currently order via the EDI interfaces.

Through the CMP Redesign Process, CLECs and Qwest have agreed upon a process for CRs to be submitted to add products and make other changes to SATE.¹⁹⁸ Both CLECs and Qwest are free to submit CRs to add products or capabilities to SATE. Through the CMP process, Qwest and CLECs also jointly prioritize the SATE CRs for inclusion in future EDI releases.¹⁹⁹ In addition, a SATE Users' Group, composed of representatives of CLECs, Qwest, HP, and KPMG, meets monthly as part of the CMP

¹⁹⁷ See KPMG Disposition Report for Exception 3095, issued April 11, 2002 ("E3095 Disposition Report"), attached as Exhibit S.

¹⁹⁸ See Wholesale CMP §§ 4, 5.

¹⁹⁹ Id., § 10.

Forum.²⁰⁰ It gives SATE users the opportunity to provide regular feedback to Qwest and to work jointly with Qwest to develop new SATE CRs.

Pursuant to the CMP process, Qwest submitted CRs this winter to add the resale products and UNEs that are not currently supported by SATE.²⁰¹ (At the time SATE was implemented, these products were ordered by CLECs through IMA-GUI interfaces, if they were ordered at all.) Also pursuant to the agreed-upon CMP prioritization process, Qwest and CLECs jointly prioritized these CRs. As described in the CMP prioritization rules, Qwest participated equally with each CLEC in voting on prioritization of these CRs.²⁰² The timing of the addition of new products to SATE is not entirely within Qwest's control, since CLECs participate in the prioritization of SATE CRs under the CMP,. The outcome of the prioritization process was that all but two of the CRs to add additional products to SATE were prioritized toward the bottom of the list of CRs.²⁰³ Qwest will use the prioritized list to determine what functionality the 11.0 SATE release should include.

The fact that Qwest did not include in its initial rollout of SATE those products that CLECs were not ordering through Qwest's IMA-EDI interfaces is not an issue under Section 271. The FCC's standard for evaluating electronic interface testing -- that the testing environment be "stable" and "mirror production" -- is fully satisfied by SATE, as shown above. SATE is available for those products that are ordered via electronic interfaces. It is not essential that it be available for every product offered by

200 *See* SATE Users' Group Meeting Minutes, November 13, 2001 (Exhibit L).

201 Notarianni Affidavit, ¶ 11.

202 Wholesale CMP, § 10.

Qwest. The CLECs' decision not to assign a high priority to most of the CRs adding products to SATE is evidence of this.

Again, the commercial data also demonstrate that SATE is adequate to permit CLECs to test EDI interfaces and achieve production status. As noted above, five individual CLECs have tested in SATE and achieved production status, as have five others through a service bureau that tested in SATE. In addition, 26 CLECs have successfully developed EDI interfaces with Qwest using the Interoperability testing environment.²⁰⁴ Thus, to the extent there might be a CLEC that would be interested in testing an EDI interface for a product that is not yet available in SATE, that CLEC may use the Interoperability testing environment to certify the EDI interface, and may pursue adding that product to SATE through the CMP process.

In sum, any remaining issues identified by KPMG in this exception have been adequately addressed through the efficacy of the CMP process and through Qwest's available interface testing options.

c. Exception 3109

This exception relates to Qwest's testing environment for CLECs that are building interfaces to its Mediated Access Electronic Bonding for Trouble Administration (MEDIACC EB-TA).²⁰⁵ EB-TA is Qwest's computer-to-computer maintenance and repair interface, and is used by both CLECs and Interexchange Carriers. EB-TA is

203 *Id.*

204 Notarianni Affidavit at ¶ 4.

205 KPMG Disposition Report for Exception 3109, issued March 19, 2002 ("E3109 Disposition Report"), attached as Exhibit X.

offered as an alternative to Customer Electronic Maintenance and Repair ("CEMR"), an online system for maintenance and repair.

As an initial matter, the FCC has never required that BOCs provide CLECs with an electronic interface for maintenance and repair activities in order to obtain Section 271 approval. As the FCC has stated:

The FCC has in the past held that the provision of an integrated, computer-to-computer maintenance and repair interface is not required to satisfy the "substantial same time and manner" test, provided that the BOC otherwise demonstrates that it provides equivalent access to its maintenance and repair functions.²⁰⁶

Because access to an electronic interface for maintenance and repair is not required for Section 271, the test environment for EB-TA cannot be a Section 271 requirement. In addition, the FCC has not applied its "stable test environment that mirrors production" requirement beyond pre-ordering and ordering transactions.²⁰⁷ The closed unresolved status of this exception thus is not an issue under Section 271, and the Commission need not consider it in its Section 271 evaluation of Qwest.

We nevertheless address in this filing the issues raised by KPMG in this Exception, in order to provide the Commission with the full picture of interface testing for EB-TA, and because EB-TA was included within the scope of the OSS test. As discussed below, Qwest believes that the testing environment it provides is more than sufficient to enable CLECs successfully to test their electronic interface with Qwest's

²⁰⁶ See *New York 271 Order*, 15 FCC Rcd at 4069 (¶ 215).

²⁰⁷ See, e.g., *Kansas/Oklahoma 271 Order*, 16 FCC Rcd at 6319 (¶ 168).

maintenance and repair functions prior to production. This conclusion is supported by the commercial data.²⁰⁸

EB-TA is a robust, computer-to-computer interface that allow CLECs to submit, modify, and track repair tickets for resale, UNEs, and UNE-P for both designed and non-designed services.²⁰⁹ The interface, which is based on ANSI standard documents, was developed for interexchange carrier trouble tickets in 1996 and began supporting CLECs in 1997.²¹⁰ To date, four CLECs have successfully built and tested to Qwest's EB-TA interface.²¹¹ The testing process is rigorous, and includes gateway to gateway testing, stack to stack testing, end to end system testing, and operational readiness testing. Qwest provides carriers with all necessary documentation and technical assistance.²¹² The testing environment permits CLECs to test all capabilities of production EB-TA.

KPMG tested several aspects of the EB-TA interface, and found it satisfactory in every respect other than that identified in E3109. It determined that CLECs were able to test all of the agreed-upon scenarios, and it did not have criticisms of the scope or functionality of the test environment. In Test 17, it examined the existence and expected behavior of the EB-TA interface by submitting trouble tickets through a CLEC's gateway. It compared the actual results with expected results. Qwest satisfied all criteria with 100 percent results and without the issuance of any observations or

208 Notarianni Affidavit, ¶ 6.

209 See Draft Report, Test 17, § 2.1, p. 344. At a high level, the term "designed services" refers to POTS.

210 Notarianni Affidavit, ¶ 6.

211 *Id.*

exceptions.²¹³ In Test 24.6, with the sole exception of Criterion 24.6-2-9 (the issue in E3109), KPMG found that all test criteria were satisfied, including methodology, interface specifications, carrier-to-carrier testing, production interface support, and capacity management of the interface.²¹⁴

KPMG issued Exception 3109 because, during end-to-end EB-TA testing, test scenarios for non-designed services are processed by the Loop Maintenance Operating System ("LMOS") production mainframe.²¹⁵ Apparently, in KPMG's view, the test environment for all components of the testing process should be physically separate from the production environment, with access provided to a duplicate of the LMOS production database.²¹⁶ As noted above, however, the FCC has never established a Section 271 requirement that a test environment be physically separate from production or mirror production for functions other than preordering and ordering.²¹⁷

²¹² A description of the MEDIACC--EB-TA implementation process is provided on the Qwest Wholesale Website at <http://qwest.com/wholesale/systems/mediacc-ebta.html>.

²¹³ Draft Final Report, Test 17.3, Table 17-3 (MTP criteria 17-1-1 to 17-1-8), p. 352.

²¹⁴ Draft Final Report, Test 24.6, Table 24.6-2.1, p. 588.

²¹⁵ See E3109 Disposition Report at 1. When a CLEC submits a repair ticket through EB-TA, the ticket is electronically generated and passed to one of two Qwest backend systems. It is passed to LMOS for non-designed tickets and to the Work Force Administration/Control (WFA/C) for designed tickets. See Draft Final Report, Test 24.6, Table 24.6-2-1 (MTP criterion 24.6-2-9), pp. 610-11. The tickets are then processed, as are all Qwest repair tickets, by LMOS and WFA and all attending statuses are electronically passed back to the CLEC through EB-TA.

²¹⁶ KPMG also found the process of testing non-designed services cumbersome, due to the necessary manual intervention of the Qwest Tester. E3109 Disposition Report at 2-3. It cited an instance in which a CLEC had two of its test trouble reports pass by the Qwest Tester to the Qwest Production Screeners. See Draft Final Report, Test 24.6, Table 24.6-2-1, (MTP criterion 6-2-9), p. 611. The Screeners proceeded to call the CLEC's production operation center to obtain additional information and/or dispatch permission, and the trouble reports were cancelled. The production environment was not ultimately impacted. See KPMG Comments (2/21/02) on E3109 at 4. Moreover, as discussed above, Qwest believes there are advantages for CLECs in having access to production systems for testing, and the commercial data show that the EB-TA testing process works.

²¹⁷ See, e.g., *Texas 271 Order*, 15 FCC Rcd. at 18419 (¶ 132).

There is no question that the EB-TA test environment provides CLECs with a true representation of how transactions will function and respond in Qwest's EB-TA production environment. In Qwest's experience, the fact that EB-TA testing uses the LMOS production applications is not detrimental or limiting, but rather it is advantageous to the CLEC, because it permits the full functionality of EB-TA to be tested. The EB-TA test environment encourages cooperative testing, provides interface test management controls, and provides a true representation of how transactions will function and respond in the production environment. As noted above, four CLECs have tested successfully using EB-TA, and the interface has been utilized successfully by CLECs and interexchange carriers for six years.²¹⁸ For these reasons, Qwest satisfies the applicable Section 271 FCC test for CLEC access to maintenance and repair functions.

E. Conclusion

In sum, the interface testing process and testing environments provided to CLECs by Qwest fully satisfy Section 271. The commercial data, which show that numerous CLECs have tested EDI interfaces and gone to production using Qwest's interface testing process, including both the Interoperability environment and SATE, provide strong support for this conclusion. The ROC third party test results show that for the most part, Qwest has satisfied the test criteria. Those issues remaining unresolved in the third party test go to areas beyond that which the FCC has required to satisfy Section 271, and are not, in any event, significant enough to affect the conclusion that Qwest has met the checklist requirements under the FCC's applicable standards. And, as noted in previous sections, Qwest's technical assistance and EDI

²¹⁸ Notarianni Affidavit, ¶ 6.

documentation are effective in enabling CLECs to build and EDI interface and test it through to production and after. The Commission therefore should conclude that Qwest has provided CLECs with a "stable test environment that mirrors production."²¹⁹

CONCLUSION

In conclusion, for the reasons given above, Qwest's change management process fully satisfies each of the requirements of the FCC's Section 271 evaluation. Through its change management process, and through its technical assistance, EDI documentation, and interface testing environments, Qwest provides nondiscriminatory access to its OSS and provides competitors with a meaningful opportunity to compete.

Dated this 6th of May, 2002.

By:

Andrew D. Crain
1801 California Street, Suite 4900
Denver, CO 80202
Phone: (303) 672-2926

Lisa Anderl, WSBA # 13236
Qwest
1600 7th Avenue, Room 3206
Seattle, WA 98191
Phone: (206) 398-2500

Attorneys for Qwest Corporation

²¹⁹ *Rhode Island 271 Order*, App. D (¶ 42).