

Attachment

11, 12, 13

14, 15, 16, 17

BOYCE, MURPHY, McDOWELL & GREENFIELD, L.L.P.
ATTORNEYS AT LAW

General Office
Special Counsel
Litigation
Corporate Counsel
Real Estate
Construction
Insurance
Banking
Securities
Tax
Intellectual Property
Environmental
Energy
Transportation
Healthcare
Governmental
Litigation

101 North Phillips Avenue, Suite 600
Sioux Falls, South Dakota 57104
P.O. Box 5015
Sioux Falls, South Dakota 57117-5015

Tamara A. Wilke
Jeffrey C. Clapper

Of Counsel
John R. McDowell

Telephone 605 336-2424 Direct Dial 605-731-0208
Facsimile 605 334-0618 tjwelk@boycemurphy.com

J.W. Boyce (1884-1915)
John S. Murphy (1924-1966)

October 25, 2001

RECEIVED

OCT 25 2001

HAND DELIVERY

Debra Elofson, Executive Director
Public Utilities Commission
500 East Capitol
Pierre, SD 57501

SOUTH DAKOTA PUBLIC
UTILITIES COMMISSION

Re: In The Matter Of The Investigation Into Qwest Corporation's Compliance With Section
271 (C) Of The Telecommunications Act Of 1996
Our File No 2104.006

Dear Ms. Elofson:

Please find enclosed the original and ten (10) copies of the Petition of Qwest Corporation for Commission Recommendation that the FCC Grant Entry into the In-Region InterLATA Market Under Section 271 of the Telecommunications Act of 1996. Accompanying the petition are:

- ATTACHMENT 1 Affidavit of Larry W. Toll, South Dakota Issues
- ATTACHMENT 2 Affidavit of Thomas R. Freeberg, Checklist Item 1 – Interconnection
- ATTACHMENT 3 Affidavit of Margaret S. Bumgarner, Checklist Item 1 – Collocation
- ATTACHMENT 4 Affidavit of Lori A. Simpson, Checklist Item 2 – Unbundled Network Elements - Platform
- ATTACHMENT 5 Affidavit of Karen A. Stewart, Checklist Item 2 – Access to Unbundled Network Elements
- ATTACHMENT 6 Affidavit of Lynn M. V. Notarianni, Checklist Item 2, Operations Support Systems (OSS)
- ATTACHMENT 7 Affidavit of Karen A. Stewart, Checklist Item 2 – Emerging Services
- ATTACHMENT 8 Affidavit of Thomas R. Freeberg, Checklist Item 3 – Poles, Ducts, Conduit, ROW

- ATTACHMENT 9 Affidavit of Jean M. Liston, Checklist Item 4 - Unbundled Loops, NIDs and Line Splitting
- ATTACHMENT 10 Affidavit of Karen A. Stewart, Checklist Item 5 - Unbundled Local Transport
- ATTACHMENT 11 Affidavit of Lori A. Simpson, Checklist Item 6 - Unbundled Network Elements - Switching
- ATTACHMENT 12 Affidavit of Margaret S. Bumgarner, Checklist Item 7 - 911 and E911 Access
- ATTACHMENT 13 Affidavit of Lori A. Simpson, Checklist Item 7 - Operator Services and Directory Assistance Services
- ATTACHMENT 14 Affidavit of Lori A. Simpson, Checklist Item 8 - White Pages Directory Listings
- ATTACHMENT 15 Affidavit of Margaret S. Bumgarner, Checklist Item 9 - Numbering Administration
- ATTACHMENT 16 Affidavit of Margaret S. Bumgarner, Checklist Item 10 - Call Related Databases and Associated Signaling
- ATTACHMENT 17 Affidavit of Margaret S. Bumgarner, Checklist Item 11 - Number Portability
- ATTACHMENT 18 Affidavit of Margaret S. Bumgarner, Checklist Item 12 - Dialing Parity
- ATTACHMENT 19 Affidavit of Thomas R. Freeberg, Checklist Item 13 - Reciprocal Compensation
- ATTACHMENT 20 Affidavit of Lori A. Simpson, Checklist Item 14 - Resale
- ATTACHMENT 21 Affidavit of David L. Tietzel, Public Interest
- ATTACHMENT 22 Affidavit of Mark Reynolds, Performance Assurance Plan (QPAP)
- ATTACHMENT 23 Affidavit of Michael G. Williams, Performance Measures (PIDs)
- ATTACHMENT 24 Affidavit of Judith L. Brunsting, Section 272
- ATTACHMENT 25 Affidavit of Marie E. Schwartz, Section 272
- ATTACHMENT 26 Revised version of Qwest's Statement of Generally Available Terms, which reflects the consensus reached with CLECs in Section 271

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S

AFFIDAVIT

OF

LORI A. SIMPSON

CHECKLIST ITEM 6 – UNBUNDLED NETWORK ELEMENTS - SWITCHING

OCTOBER 24, 2001

TABLE OF CONTENTS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

I. EXECUTIVE SUMMARY 1

II. QWEST PROVIDES UNBUNDLED LOCAL SWITCHING IN COMPLIANCE WITH THE ACT AND THE FCC'S RULES 3

 A. Qwest Provides Unbundled Local Circuit Switching in Compliance with the Act and the FCC's Rules. 5

 B. Qwest Provides Unbundled Local Tandem Switching in Compliance with the Act and the FCC's Rules. 6

 C. Qwest Provides Vertical Switch Features with Unbundled Switching 8

 D. Qwest Provides Customized Routing 13

 E. Unbundled Switching Provided in South Dakota 14

 F. Qwest Bench Test for Unbundled Switching 15

 G. Exception to Requirement to Provide Unbundled Switching 16

 H. Unbundled Switching Billing Data 16

III. RESOLUTION OF ISSUES IN MULTISTATE AND OTHER STATE WORKSHOPS 17

IV. CONCLUSION 19

1
2
3
4
5
6
7
8
9
10
11

AFFIDAVIT

OF

LORI A. SIMPSON

Checklist Item 6 — Unbundled Network Elements – Switching

Lori A. Simpson states as follows:

12
13
14
15
16
17

My name is Lori A. Simpson. My business address is 301 West 65th Street, Minneapolis, Minnesota. I am Director – Legal Issues for Qwest Corporation ("Qwest"). I submit this Affidavit in support of Qwest's application for authority to provide interLATA services originating in South Dakota. In this Affidavit, I show that Qwest has complied with Checklist Item 6 of Section 271 of the Telecommunications Act of 1996 ("1996 Act" or "Act") as it relates to local switching.¹

18
19
20

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records regularly kept in the course of business by Qwest.²

21
22
23
24

I. EXECUTIVE SUMMARY

Qwest provides competitive local exchange carriers ("CLECs") unbundled local switching ("unbundled switching") in compliance with the requirements of both Section 271(c)(2)(B)(vi) (Checklist Item Number 6) and Section -Switch-1(b)(3) of the 1996 Act

¹ See 47 U.S.C. § 271(c)(2)(B)(vi).

² A description of my professional experience and education is included in Exhibit LAS-Switch-1 to this Affidavit.

1 regarding unbundled switching. Qwest provides CLECs with unbundled switching
2 pursuant to Qwest's Statement of Generally Available Terms and Conditions ("SGAT")
3 and Qwest's Commission-approved interconnection agreements with CLECs.

4 Qwest provides local circuit switching unbundled from transport, local loops and
5 other services. All the features, functions, and capabilities of Qwest's switches are
6 available to CLECs that obtain unbundled local switching. Unbundled local circuit
7 switching, available as a line-side or a trunk-side port, consists of access to all of the
8 vertical switch features available to Qwest's retail end user customers and local switch
9 usage. In addition, Qwest is prepared to provide CLECs with access to vertical switch
10 features either (1) currently resident, or (2) not currently loaded in its switches, but
11 technically feasible, that Qwest does not offer to its retail end user customers. As part
12 of its unbundled local circuit switching offering, Qwest provides CLECs with details of
13 local originating minutes of use for use of the switch and for use of shared transport,
14 and provides billing details necessary to bill interexchange carriers for interexchange
15 access to the CLECs' end users. Qwest also provides access to unbundled local
16 tandem switching facilities. Unbundled local tandem switching consists of access to
17 tandem trunk ports and local tandem use.

18 Qwest, therefore, provides unbundled switching in compliance with the 1996 Act
19 and the FCC's rules. For these reasons, the South Dakota Public Utilities Commission
20 should find that Qwest has satisfied all of the requirements of Checklist Item 6.

1 **II. QWEST PROVIDES UNBUNDLED LOCAL SWITCHING IN COMPLIANCE**
2 **WITH THE ACT AND THE FCC'S RULES**

3 Section 271(c)(2)(B)(vi) of the 1996 Act requires a Bell Operating Company
4 ("BOC") to provide "local switching unbundled from transport, local loop transmission, or
5 other services."³ Qwest provides CLECs unbundled access to the following types of
6 local switching in compliance with the Act and the FCC's rules: (1) local circuit
7 switching unbundled from transport, local loops and other services; and (2) local tandem
8 switching facilities.⁴

9 In previous orders concerning Section 271 applications of other BOCs, the FCC
10 outlined eight individual items that a BOC must demonstrate it provides in order to
11 comply with checklist item 6: (1) line-side and trunk-side facilities; (2) basic switching
12 functions; (3) vertical features; (4) customized routing; (5) shared trunk ports; (6)
13 unbundled tandem switching; (7) usage information for billing exchange access; and (8)
14 usage information for billing for reciprocal compensation.⁵ As detailed below, Qwest
15 provides all of these items to requesting CLECs. The switching element is unbundled

3 See 47 U.S.C. § 271(c)(2)(B)(vi).

4 See 47 C. F.R. §§ 51.319(c)(1), (3) and (4).

5 Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York, Memorandum Opinion and Order, CC Docket No. 99-295, FCC 99-404, 15 FCC Rcd 3953, ¶ 346 (rel. Dec. 22, 1999) ("Bell Atlantic New York Order"); Joint Application by SBC Communications, Inc., Southwestern Bell Telephone Co., and Southwestern Bell Communications Services, Inc. dba Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Kansas and Oklahoma, Memorandum Opinion and Order, CC Docket No. 00-217, FCC 01-29, 16 FCC Rcd 6237, ¶ 242 (rel. Jan. 22, 2001) ("SBC Kansas Oklahoma Order").

1 from transport, local loops and other services and the FCC's rules.⁶ As required by the
2 FCC, Qwest also provides access to line-side and trunk-side facilities, basic switching
3 functions, vertical features, and customized routing.

4 The features, functions, and capabilities of the local switch available to CLECs
5 include, but are not limited to, the basic switching function of connecting lines to lines,
6 lines to trunks, trunks to lines and trunks to trunks.⁷ It also includes the same basic
7 capabilities available to Qwest retail end users, on a line-by-line basis, such as
8 telephone number; directory listing; dial tone; signaling; on/off hook detection; audible
9 and power ringing; automatic message recording; blocking options; access to 911,
10 Qwest's operator services, and Qwest's directory assistance service.⁸

11 Intervals for provisioning unbundled local switching elements and activating
12 vertical switch features are provided in Exhibit C to the South Dakota SGAT. A CLEC
13 may purchase unbundled local switching on a stand-alone basis or in combination with
14 other unbundled network elements ("UNEs") in order to provide local service to its end
15 user customers.⁹

16 Qwest provides competitors with access to unbundled switching pursuant to
17 Section 9 of its South Dakota SGAT and pursuant to its Commission-approved
18 interconnection agreements with CLECs. Qwest's SGAT was updated as a result of

6 See 47 U.S.C. § 251(c)(3) and 47 C.F.R. § 51.319(c)(1).

7 See SGAT § 9.11.1.1.

8 See SGAT §§ 9.11.1.1 and 9.11.1.6.

9 See SGAT §§ 9.23 and 9.11.

1 consensus reached in collaborative Section 271 workshop processes from twelve other
2 states, conducted on an open basis with full, active, and equal participation by
3 competitors, facilitators, administrative law judges, and state commission staffs. Qwest
4 witnesses were subject to cross-examination throughout the rigorous workshop
5 process. Specifically, Qwest's SGAT was updated with the input of competitors and
6 commission staffs through collaborative Section 271 workshops in Arizona, Colorado,
7 Oregon, Washington, and the seven-state collaborative Section 271 workshops
8 involving Idaho, Iowa, Utah, Montana, North Dakota, Wyoming, and New Mexico.¹⁰
9 Although South Dakota did not participate in the Section 271 collaborative workshops,
10 Qwest has filed an updated SGAT in South Dakota that includes the consensus
11 language developed through the collaborative workshop processes in other states, so
12 that South Dakota CLECs would also benefit from agreements reached in those
13 workshops. Through these multiple, rigorous workshops, Qwest has reached
14 consensus on all issues for which consensus is possible.

15 **A. Qwest Provides Unbundled Local Circuit Switching in Compliance with the**
16 **Act and the FCC's Rules.**

17
18 Qwest provides the unbundled local circuit switching element to CLECs in South
19 Dakota in a nondiscriminatory manner.¹¹ The unbundled local switching capability
20 network element available to CLECs is defined as (1) line-side facilities, which include,
21 but are not limited to, the connection between a loop termination at a main distribution

¹⁰ Additionally, Nebraska conducted formal hearings, but also incorporated the entire record from the multi-state collaborative process.

¹¹ See SGAT § 9.11.

1 frame and a switch line card; (2) trunk-side facilities, which include, but are not limited
2 to, the connection between the trunk termination at a trunk-side cross-connect panel
3 and a switch trunk card; and (3) all features, functions and capabilities of the switch.¹²
4 Qwest offers analog and digital line ports. Qwest also offers several types of trunk
5 ports, including, but not limited to, DS1, DS3 and OCN trunk ports (including local
6 message); PRI ISDN trunk ports; DIDPBX trunk ports; and DS0 analog trunk ports,
7 which can be configured as DID, DOD and two-way.¹³ If unbundled local circuit
8 switching is ordered on a stand-alone basis, the CLEC may connect its loops to the
9 unbundled local switched network for termination of its local traffic, to access switch
10 functionality for its local exchange access service, and to provide billing detail for its
11 local exchange access.¹⁴

12 **B. Qwest Provides Unbundled Local Tandem Switching in Compliance with**
13 **the Act and the FCC's Rules.**
14

15 Qwest offers unbundled local tandem switching to CLECs, as required by the Act
16 and the FCC's rules. The FCC's requirement, found at 47 C.F.R. § 51.319(c)(3), to
17 provide access to unbundled local tandem switching includes (1) trunk-connect facilities,
18 including but not limited to the connection between trunk termination at a cross-connect
19 panel and a switch trunk card; (2) the basic switching function of connecting trunks to
20 trunks; and (3) the functions that are centralized in local tandem switches (as

¹² See 47 C.F.R. § 51.319(c)(1).

¹³ See SGAT §§ 9.11.1.5. and 9.11.1.12.

¹⁴ See SGAT § 9.11.5.

1 distinguished from separate end-office switches), including, but not limited to, call
2 recording, the routing of calls to operator services, and signaling conversion features.
3 Qwest's South Dakota SGAT incorporates these requirements.¹⁵

4 If a Qwest wire center subtends only an access tandem and does not subtend a
5 local tandem, Qwest will provide unbundled access to that access tandem.¹⁶ The local
6 tandem switching element includes the facilities connecting the trunk distribution frames
7 to the switch and all the functions of the switch itself, including those facilities that
8 establish a temporary transmission path between two other switches, but does not
9 include the transport needed to complete the call.¹⁷ The local tandem switching
10 element also includes the features, functions and capabilities that are centralized in
11 local tandem switches, and their adjuncts, if any, rather than in separate end office
12 switches.¹⁸

13 Qwest will perform testing through the unbundled local tandem switching element
14 for CLECs in the same manner and frequency that it performs such testing for itself. To
15 the extent that Qwest manages congestion for local tandem switching for itself, it would
16 also control congestion points for CLECs purchasing the unbundled local tandem
17 switching element.

¹⁵ See SGAT § 9.10.2.2.

¹⁶ See SGAT § 9.10.1.2.

¹⁷ See SGAT § 9.10.1.1.

¹⁸ See SGAT § 9.10.1.1.

1 **C. Qwest Provides Vertical Switch Features with Unbundled Switching**

2
3 Qwest provides CLECs that purchase use of the unbundled switching element
4 with access to all vertical switch features, which are software attributes on end office
5 switches, that the switch is capable of providing, including, but not limited to, custom
6 calling, CLASS features, and Centrex capabilities, as well as any technically feasible
7 customized routing, automatic message accounting ("AMA") recording, and call type
8 blocking options.¹⁹ Access to vertical switch features includes access to all features
9 that are loaded in a Qwest switch.²⁰ Additionally, Qwest has established the Special
10 Request Process ("SRP") to allow CLECs to request activation of features that are
11 resident in the switch but that Qwest does not provide to its retail end users. Exhibit F
12 to the South Dakota SGAT describes the SRP. Qwest also goes beyond what is
13 required by the FCC by allowing CLECs to request that features that are not currently
14 resident in the switch be loaded into the switch.²¹ CLECs also request these features
15 through the SRP.

16 Exhibit E to the South Dakota SGAT includes the general list of vertical features
17 available with unbundled switching. CLECs may also obtain the list of vertical switch

¹⁹ See SGAT §§ 9.11.1.1, 9.11.2.1, 9.12.1.

²⁰ See SGAT § 9.11.2.1.

²¹ See SGAT §§ 9.11.2.1 and 9.11.4.4. See also Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order, CC Docket No. 98-121, FCC 98-271, 13 FCC Rcd 20599, ¶ 218 (rel. Oct. 13, 1998) ("BellSouth Louisiana II Order").

1 features available in each of Qwest's switches from Qwest's web site.²² In addition, a
2 CLEC that uses the Interconnection Mediated Access - Graphical User Interface ("IMA-
3 GUI") can determine switch feature availability, by Qwest switch, through that interface.
4 Both the PCATs and the IMA-GUI provide switch features with their universal service
5 order codes ("USOCs") that may be used by CLECs for ordering the features, as well as
6 narrative descriptions of the features.

7 CLECs may order individual vertical switch features with each unbundled switch
8 element, and are not required to order bundled features, unless features are only
9 technically available in a bundle.²³ CLECs may request that feature packages be
10 developed via the SRP for ease of ordering.

11 Qwest's Advanced Intelligent Network ("AIN") services are not available with
12 unbundled switching. Qwest complies with the FCC's UNE Remand Order, where the
13 FCC found that an ILEC is not required to unbundle AIN service software or features if
14 the incumbent LEC provides access to its AIN platforms, which Qwest does.²⁴ Qwest
15 provides access to its AIN databases, its Service Creation Environment ("SCE"), its
16 Service Management System ("SMS"), and its Signaling Transfer Points ("STPs") so

²² Vertical features available, by switch, may be found on Qwest's web site at:
http://www.qwest.com/cgi-bin/iconnswitch_features.cgi.

²³ See SGAT § 9.11.3.4.

²⁴ Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98, FCC 99-238, 15 FCC Rcd 3696, ¶¶ 409, 418-419. (rel. Nov. 5, 1999) ("UNE Remand Order").

1 ~~the CLECs may develop their own AIN features.~~²⁵ However, if features that are loaded
 2 ~~on Qwest's switches~~ are migrated to Qwest's AIN platform for Qwest's own use, Qwest
 3 ~~will retain software~~ for such features on its switches for the use of CLECs.²⁶

4 The FCC stated in the UNE Remand Order:

5 We agree with Ameritech that unbundling AIN service software such as
 6 "Privacy Manager" is not "necessary" within the meaning of the standard in
 7 section -Switch-1(d)(2)(A). In particular, a requesting carrier does not need
 8 to use an incumbent LEC's AIN service software to design, test, and
 9 implement a similar service of its own. (820) Because we are unbundling the
 10 incumbent LECs' AIN databases, SEC, SMS, and STPs, requesting carriers
 11 that provision their own switches or purchase unbundled switching from the
 12 incumbent will be able to use these databases to create their own AIN
 13 software solutions to provide services similar to Ameritech's "Privacy
 14 Manager." They therefore would not be precluded from providing service
 15 without access to it. **Thus, we agree with Ameritech and BellSouth that**
 16 **AIN service software should not be unbundled.**²⁷

17 All of the AIN features Qwest has deployed in its network are proprietary to
 18 Qwest and are covered by patents, copyright, trade secret, and trademarks. While
 19 Qwest uses platforms developed by Telcordia for the development and deployment of
 20 all Qwest AIN services, those platforms have a component, called SPACE (Service

21 See SGAT § 9.14.1.1 (SCE); § 9.13.1.1 (STPs); § 9.13.1.1 (SMS); and § 9.14.1.2
 22 and 9.14.2.2. (AIN platform). To clarify, SGAT § 9.14.1.1 does not use the term
 23 "Service Creation Environment" or "SCE". Section 9.14.1.1. describes the
 24 "Service Creation Environment" by the use of the phrase "Qwest's AIN service
 25 application development process." Local Competition Provisions in the
 26 Telecommunications Act of 1996; Interconnection between Local Exchange
 27 Carriers and Commercial Mobile Radio Service Providers, Order, CC Docket No.
 28 96-98, FCC 96-3-Switch-, 11 FCC Rcd 15499, ¶ 488 (rel. Aug. 8, 1996) ("Local
 29 Competition Order").

30 See SGAT § 9.11.1.3.1.

31 See UNE Remand Order, ¶ 419 (emphasis added) (footnotes 820 and 821 were
 32 omitted).

1 Programming and Creation Environment), that is used to create new and unique
2 services. SPACE is software owned by Telcordia and is proprietary to Telcordia.
3 SPACE is a programming language that Qwest uses to compile and create its own AIN
4 services. SPACE converts computer programs written in a text format into computer
5 code. All features are programs that Qwest's engineers create and write. Qwest has
6 developed the AIN services and features it has deployed. The former Advanced
7 Technologies (AT) organization within Qwest wrote the service requirements and design
8 documents. In all cases but one, the AT organization did the development (that is, the
9 "coding") of the service using the SPACE software mentioned above. This one
10 exception was due to a resource constraint at AT, and the work was contracted to
11 Telcordia to do the actual "coding" of the service on SPACE.²⁸ In all cases for all
12 services, AT then did the product testing and deployment of the service into the Qwest
13 network.

14 In addition to the requirements, design, implementation, and testing, AT assisted
15 various Qwest business units in performing end user customer testing on various AIN
16 features and functions. In addition to Qwest's engineers, developers, and testers, AT
17 employed several staff personnel who would work with end user customer participants
18 to discover the end user customers' reactions to different feature sets. Based on these
19 tests and the analysis of AT staff personnel, specific recommendations were made to
20 the requirements, design, and implementation of most of these AIN features.

²⁸ This exception was a work for hire.

1 The AIN features that Qwest has developed are also unique as to their actual
2 design based on unique aspects of Qwest's retail business. Qwest has specified the
3 requirements for all such features based on its unique retail end user customer base,
4 based on the unique aspects to the demographics in Qwest's particular region, and in
5 some cases, based on state PUC requirements. In addition, feature implementation is
6 also unique because of the framework that Qwest has developed for the execution and
7 support of AIN services. For example, Qwest has developed several feature managers
8 (for which a patent was granted in 1995) that allows Qwest to provision more than one
9 AIN service to an end user customer.

10 All of the AIN features that Qwest has deployed in its network are covered by
11 patents or pending patents. Confidential Exhibit LAS-Switch-2 is a list that identifies
12 Qwest's patents that cover Qwest's AIN features. All of the patents that have a seven
13 digit number preceding them, all of which start with the number "5", are existing patents.
14 All of the patents that have a two digit number (like "08" or "09"), followed by a
15 backslash and a six digit number, are pending patents as of October 26, 2000. The AIN
16 features are proprietary independent of the patents and are also protected by copyright
17 and Qwest has trademarks on several of the service names.

18 The work on these patents is substantially performed first, and then the patent
19 application is filed. An exception to this rule is patent number 5,448,631, which is listed
20 as a patent under every AIN feature. This patent was filed before AIN was deployed.
21 This patent covers the basic concept of how Qwest sets up more than one AIN feature

1 on a line and allows AIN features to be added on an automated basis. It also resolves
2 execution conflicts among AIN features regarding which one should execute first (e.g.,
3 the "No Solicitation" feature vs. the "Do Not Disturb" feature).

4 In sum, the FCC has determined that an ILEC's AIN features do not have to be
5 provided with unbundled switching when ILECs make the AIN platform available for
6 CLECs to develop their own AIN features, as Qwest does. Because CLECs can
7 develop their own AIN features, this restriction in no way disadvantages CLECs in
8 providing features with unbundled switching.

9 **D. Qwest Provides Customized Routing**

10 A CLEC using unbundled switching elements will have its unbundled switching
11 traffic routed onto Qwest's common network (*i.e.*, shared transport facilities) according
12 to the same criteria that Qwest applies to its own retail end users' calls.²⁹ All such
13 routing to the shared transport facilities is done using the existing Qwest switch routing
14 table. This means, for example, that a CLEC's end users' calls to directory assistance
15 would be routed to Qwest's directory assistance platform using Qwest's shared
16 transport facilities and routing tables.

17 However, if a CLEC using unbundled switching wishes to have some or all of its
18 traffic routed differently than Qwest's end user traffic is routed, the CLEC can order
19 customized routing.³⁰ For example, if the CLEC wishes to have its end users' directory
20

²⁹ See SGAT § 9.12.2.2.

³⁰ See SGAT § 9.12.1.1.

1 assistance calls routed its own or a third party's directory assistance platform, the CLEC
2 uses customized routing. With customized routing, the CLECs' directory assistance
3 traffic is identified and routed to the CLEC's dedicated transport facilities that would
4 transport the traffic to the CLECs' designated directory assistance platform.³¹

5 **E. Unbundled Switching Provided in South Dakota**
6

7 South Dakota CLECs have not made any requests for stand-alone unbundled
8 switching. The Regional Oversight Committee ("ROC"), which oversees the
9 collaborative process between Qwest and numerous CLECs to negotiate wholesale
10 performance measures, has not adopted specific performance measurements for stand-
11 alone switching. However, unbundled network element – platform ("UNE-P")
12 combination service necessarily includes the unbundled switching element. As of
13 August 31, 2001, Qwest provides 16,411 UNE-P combination services to five CLECs in
14 South Dakota. Thus, Qwest is also providing five CLECs with 16,411 unbundled
15 switching elements, in combination with other UNEs, in South Dakota. Performance
16 data for UNE-P combination services for South Dakota demonstrate that Qwest is
17 successfully and promptly installing and repairing UNE-P combinations, and thus, also
18 unbundled switching, for South Dakota CLECs in commercial quantities.

19 Notwithstanding the lack of CLEC demand for stand-alone switching and the
20 ROC's decision that performance measures were unnecessary, Qwest has developed
21 methods and procedures for providing stand-alone unbundled local switching and is
22 prepared to provision it upon request in a manner that allows CLECs a meaningful

³¹ See SGAT § 9.12.2.2(b).

1 opportunity to compete. Qwest provides unbundled switching using a defined order and
2 provisioning flow. Exhibit LAS-Switch-3 to this Affidavit contains a task list that identifies
3 the tasks to be performed by Qwest systems and personnel when Qwest receives an
4 order for stand-alone unbundled local switching. Qwest will also maintain unbundled
5 local switching using the defined task flow described above. Qwest will follow the steps
6 outlined in the process flow when it receives a repair call for stand-alone unbundled
7 local switching.

8 **F. Qwest Bench Test for Unbundled Switching**

9
10 Qwest has conducted a "bench test" that demonstrates that Qwest can, upon
11 CLEC request, provision and maintain unbundled local switching in a timely and
12 nondiscriminatory manner. Under the bench test, the provisioning of unbundled local
13 switching, as well as the repair, maintenance and the billing related to the switching
14 element, were tested. In the test, actual "CLEC" unbundled network element orders
15 were successfully placed and the orders were provisioned following the provisioning
16 processes outlined in the provisioning task list contained in Exhibit LAS-Switch-3. An
17 ASR or LSR was completed and sent to the Service Delivery Coordinator, and orders
18 were then sent through the entire provisioning process, using all of the appropriate
19 operations support systems ("OSS"). Unbundled switching was successfully
20 provisioned, and billing was established.

21 The bench test also included the transmission of "test calls" over the unbundled
22 elements that were provisioned. The test calls generated local minutes of use that were
23 captured by recording equipment, allowing a summary bill to be created. After

1 provisioning was completed, trouble reports were processed to test and validate Qwest
2 processes and procedures for the repair and maintenance of these services. A
3 complete description of the 1999 bench test methodology and the results of the test are
4 contained in Exhibit LAS-Switch-4 to this Affidavit.

5 **G. Exception to Requirement to Provide Unbundled Switching**
6

7 Notwithstanding the general requirements to provide access to unbundled
8 switching, the FCC has ruled that an incumbent local exchange carrier ("ILEC") is not
9 required to provide access to unbundled switching in those instances when the
10 requesting telecommunications carrier serves an end user customer with four or more
11 voice grade lines or equivalents, provided that the ILEC provides nondiscriminatory
12 access to combinations of loops and transport (commonly known as "Enhanced
13 Extended Link" or "EEL"), in the top 50 metropolitan statistical areas (MSAs) in the
14 country, in "density zone 1" areas.³² Because no such density zones are located within
15 South Dakota, this exception does not apply.³³

16 **H. Unbundled Switching Billing Data**
17

18 Under the terms of its South Dakota SGAT, Qwest provides CLECs with a
19 monthly summary bill listing charges for all CLEC unbundled switching elements.

³² See 47 C.F.R. § 51.319(c)(2); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, Supplemental Order, CC Docket No. 96-98, FCC 99-370, 15 FCC Rcd 1760 (rel. Nov. 24, 1999) ("Supplemental Order"); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Supplemental Order Clarification, CC Docket No. 96-98, FCC 00-183, 15 FCC Rcd. 9587 (rel. June 2, 2000) ("Supplemental Order Clarification").

³³ See SGAT § 9.11.2.5.1.

1 including switch port rate, including local originating switch and shared transport
2 minutes of use, and intrastate toll (if applicable).³⁴ Qwest also provides CLECs with
3 switched access records for switched access usage. Switched access records may be
4 used by the CLEC to bill interexchange carriers for use of the CLEC's unbundled
5 switching elements for purposes of providing interLATA toll calls.

6 Qwest provides CLECs with local originating billing information. Qwest does not
7 provide CLECs billing records for terminating local calls completed to the CLECs'
8 unbundled local switching ports. Qwest does not have the technical capability to
9 capture such terminating local usage. Furthermore, when CLECs purchase unbundled
10 local switching, Qwest does not charge those CLECs for any terminating local calls that
11 are completed to their end user customers using the local switching element provided
12 by Qwest. Because Qwest does not charge these carriers for these calls, they do not
13 incur any costs to terminate such calls, and, therefore, are not entitled to charge
14 reciprocal compensation to any carrier and have no need for billing records.

15 **III. RESOLUTION OF ISSUES IN MULTISTATE AND OTHER STATE**
16 **WORKSHOPS**

17 A collaborative 271 workshop was conducted for this checklist item as part of
18 Multi-state 271 proceedings, and it included participation by CLECs, by other interested
19 parties, by the commission staffs from the states of Idaho, Iowa, Montana, New Mexico,
20 North Dakota, Utah and Wyoming. Interested parties made written and oral comments
21 concerning Qwest's compliance with the Act's and the FCC's requirements for

³⁴ See SGAT § 9.11.5.3.

1 unbundled switching, and seeking changes to numerous SGAT provisions. Qwest
2 collaborated with and made concessions to CLECs on many issues and made
3 numerous SGAT changes.

4 At the close of the multi-state workshops on unbundled switching, four issues
5 remained unresolved. The facilitator made recommendations concerning the resolution
6 concerning the four unresolved issues in Qwest's favor, and no SGAT changes were
7 recommended by the facilitator.³⁵

8 Qwest, CLECs, Commission staffs, and other parties also participated in 271
9 collaborative workshops concerning unbundled switching in Washington, Oregon,
10 Colorado, and Arizona, as well as in a hearing in Nebraska. Qwest received many
11 requests from CLECs for changes to SGAT language concerning unbundled switching
12 during the course of most of those proceedings. Qwest collaborated with and made
13 concessions to CLECs resulting in changed SGAT language.

14 Thus far, all state commissions that have considered Qwest's compliance with
15 Checklist Item 6 have found that Qwest satisfies the requirements subject to satisfactory
16 performance in the ROC OSS test.

17 All SGAT changes agreed to in other states for unbundled switching have been
18 included in the South Dakota SGAT filed on the same date that this Affidavit was filed

³⁵ See Facilitator's Multi-State Report on Unbundled Network Elements, at 92-96
(Multi-State Workshop Aug. 20, 2001).

1 **IV. CONCLUSION**

2 For the foregoing reasons, Qwest has satisfied the requirements of Section
3 271(c)(2)(B)(vi) for the Act regarding unbundled local switching. The South Dakota
4 Public Utilities Commission should conclude that Qwest has satisfied this checklist item.

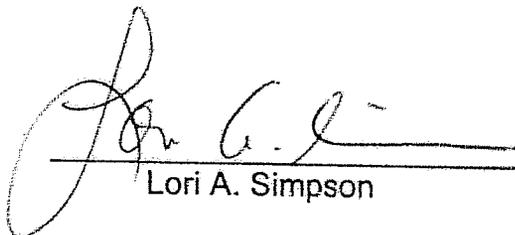
5

6

7

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

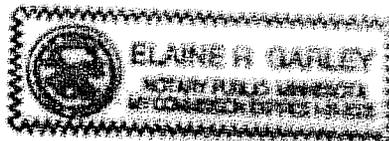
Executed on this 28th day of September, 2001.



Lori A. Simpson

STATE OF MINNESOTA

COUNTY OF HENNEPIN



Subscribed and sworn to before me this 28th day of September, 2001.



Notary Public

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION
INTO QWEST CORPORATION'S
COMPLIANCE WITH SECTION 271 (C) OF THE
TELECOMMUNICATIONS ACT OF 1996

) DOCKET TC 01-
)
)
)

QWEST CORPORATION'S

EXHIBITS to the AFFIDAVIT

OF

LORI A. SIMPSON

CHECKLIST ITEM 6 - UNBUNDLED NETWORK ELEMENTS - SWITCHING

OCTOBER 24, 2001

INDEX TO EXHIBITS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

| <u>DESCRIPTION</u> | <u>EXHIBIT</u> |
|--|----------------|
| Witness Qualifications | LAS-Switch-1 |
| Qwest Patents Related to Deployed AIN Features (PROPRIETARY AND CONFIDENTIAL)..... | LAS-Switch-20 |
| Unbundled Switching Task List..... | LAS-Switch-3 |
| Unbundled Switching Bench Test..... | LAS-Switch-4 |

QUALIFICATIONS OF LORI A. SIMPSON

I have been employed by Qwest Corporation, formerly Northwestern Bell Telephone Company and U S WEST Communications, for 25 years. During that time I have worked in the network organization, the carrier organization, Operator and Information Services, the large and small business retail organizations, as well as the residence retail organization. Prior to my work on the 271 team, I most recently held positions related to the Company's legal and regulatory compliance.

I have a Bachelor of Arts degree from the University of Minnesota in Minneapolis, Minnesota, and a Juris Doctor degree from William Mitchell Law School in St. Paul, Minnesota.

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records regularly kept in the course of business by Qwest. As part of Qwest's work to ensure its compliance with Section 271, I have participated extensively for more than one year in all of the collaborative state workshops addressing this checklist item in Arizona, Colorado, Oregon, Washington, and the seven-state joint Section 271 workshops involving Idaho, Iowa, Utah, Montana, North Dakota, Wyoming, and New Mexico. Each of these five workshop processes were collaborative, conducted on an open basis with full, active, and equal participation by competitors and state commission staffs. I also participated in the Section 271 proceedings in Nebraska.

Confidential and Proprietary Exhibit LAS-SWITCH-2C

Qwest Corporation

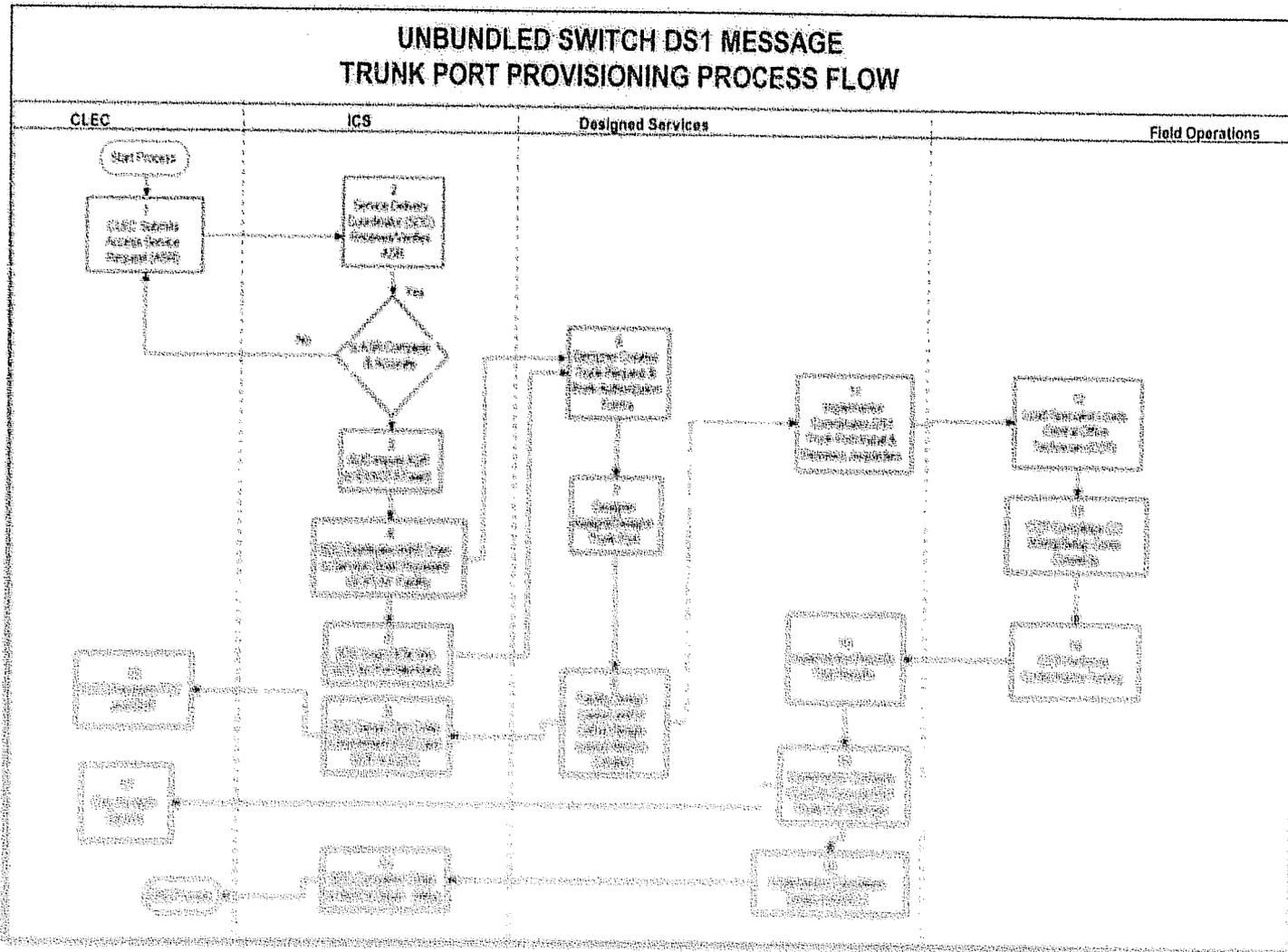
Docket No. TC 01-___

Checklist Item 6 – Unbundled Network Elements – Switching

October 24, 2001

CONTINUATION

[1]



CONTINUATION

[2.]

Scan ~

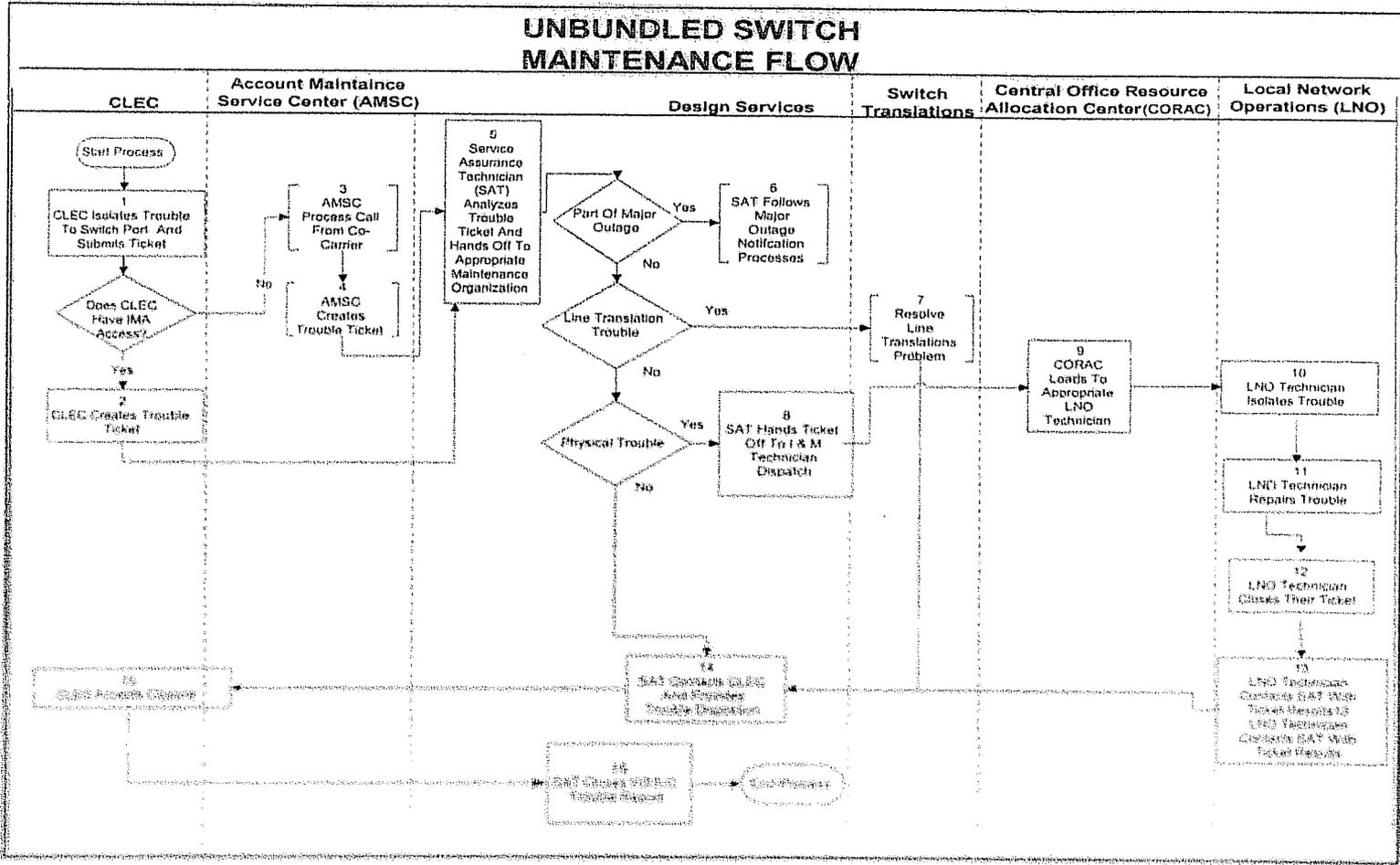
~ # Pgs []

Switched DS1 Message Trunk Port Provisioning Task List

| Task | Description |
|------|---|
| 1 | Access Service Request (ASR) form submitted by CLEC |
| 2 | ASR and associated forms reviewed for completeness |
| 3 | Service Delivery Coordinator (SDC) inputs Fixed ASR into EXACT |
| 4 | SDC distributes IABS service order into service order processor (SOP) |
| 5 | SDC logs order into TIRKS to start provisioning process of Port |
| 6 | Trunk request and work authorization forms completed by Designer |
| 7 | Trunk port is designed in TIRKS |
| 8 | Design layout record (DLR) created |
| 9 | SDC creates and sends firm order confirmation and DLR to CLEC |
| 10 | CLEC receives firm order confirmation and DLR from USMC |
| 11 | Trunk port installation is coordinated by implementor |
| 12 | Load Central Office work steps |
| 13 | Central Office wiring completed |
| 14 | Central Office conformance testing completed |
| 15 | Test results recorded |
| 16 | Implementor contacts CLEC for turn up, completes order in WFAC |
| 17 | CLEC accepts Service |
| 18 | Implementor completes order in WFAC |
| 19 | SDC completes order in EXACT and IABS to begin billing |

CONTINUATION

[3]



CONTINUATION

[4.]

Unbundled Switch Maintenance Task List

| Assoc. Task # | Process |
|------------------|---|
| 1 or 2 | Trouble ticket submitted NOTE: If CLEC has a system interface they may submit report electronically Otherwise CLEC calls AMSC to report trouble and steps 3 and 4 are required. |
| 3 | Process ticket received from CLEC |
| 4 | Trouble ticket created |
| 5 | Analyze trouble ticket, identify location, and assign to appropriate organization |
| 6 | If part of major outage SAT follows major outage notification processes Note: then skip to step 13 |
| 7 | Translations Trouble is resolved Note: then skip to step 13 |
| 8 | SAT hands off physical trouble to network operations |
| 9 | CORAC loads to appropriate LNO Technician |
| 10 | Trouble is isolated |
| 11 | Trouble repaired |
| 12 | Trouble ticket updated |
| 13 | Contact SAT with ticket results |
| 14 | CLEC notified |
| 15 and 16 | CLEC accepts service and Trouble ticket closed |

Bench Test of Unbundled Elements

VERSION 1.0
JULY 21, 1999

| | |
|--------------------------|--|
| SUBJECT: | 1999 BENCH TEST OF UNBUNDLED ELEMENTS |
| STATES INVOLVED: | ARIZONA & NEBRASKA |
| AUTHOR: | |
| AUTHOR TELEPHONE NUMBER: | |
| ISSUE | ONE 7-21-99 |

TABLE OF CONTENTS

1.0 GENERAL..... 3

2.0 DESCRIPTION &SCOPE..... 3

3.0 TEAM MEMBERS..... 6

4.0 TIMELINE..... 6

5.0 BUSINESS INTEGRATION TEST SUMMARY..... 7

6.0 TEST CALLING PLAN..... 16

7.0 MAINTENANCE..... 21

8.0 SUMMARY..... 27

APPENDIX A TIMELINE/SEQUENCE OF TASKS TABLE..... 29

1.0 GENERAL

1.01 In May and June of 1999, a bench test to support U S West's Section 271 flag was completed in Phoenix, Arizona and Omaha, Nebraska. The bench test was undertaken due to a lack of actual Co-Provider activity in the areas of unbundled switching and transport.

This test demonstrates and supports:

- ❖ U S West's advocacy on unbundled elements.
- ❖ That U S West processes and procedures allow for timely provisioning and maintenance of the following Section 271 Checklist items:
 - ❖ Number #5 (unbundled transport).
 - ❖ Number #6 (unbundled switching)
 - ❖ Including the feature Operator Services & Directory Assistance (OS/DA) call completion and branding
- ❖ Re-enforce results from the bench test conducted in a Lab-controlled test environment in June, 1998.

The purpose of this document is to provide test results and an assessment of our unbundled products, processes and systems.

1.02 Document issue number and date are found in the footer information of this document.

1.03 For information about this document, contact Jerry Shypucki at 612-790-2419.

2.0 DEFINITION AND SCOPE OF THE BENCH TEST

2.01 UNBUNDLED SWITCHING:

- ❖ Unbundled analog line ports were provisioned¹ and physically installed in the Phoenix, Arizona North East 5E switch.
- ❖ Unbundled analog line ports were provisioned¹ in the Omaha, Nebraska 54th Street 0475 100 switch.

See Figure one for diagram of Unbundled Element infrastructure.

The unbundled analog line ports required the establishment and deployment of a unique measured Line Class Code (LCC) with Shared Transport, blockage of 900 calls and Custom Routing to a dedicated trunk group for OS/DA traffic.

2.01.01 A dedicated combined OS/DA trunk group with branding was established between the Phoenix North East 5E switch and the Toll Operator Switch (TOS) switch in the Phoenix Main central office.

This was accomplished using the following combination of unbundled elements:

¹ Provisioned is defined as Service Order creation from a "simulated" Co-Provider's Access Service Request (ASR) or Local Service Request (LSR) and processed down through all the Operational Support Systems (OSS).

- ❖ Unbundled switching DS1 trunk port and unbundled trunk group members
- ❖ Unbundled interoffice transport.

The unbundled elements were terminated on designated Interconnection Distributing Frames (ICDF).

See Figure two for diagram of OS/DA infrastructure.

2.02 UNBUNDLED TRANSPORT

Unbundled interoffice transport (UDIT) orders were provisioned and physically installed between the Phoenix, Arizona North East central office and the Phoenix, Arizona Main central office. These were at the service levels of OC-n, DS3 and DS1. Orders were also provisioned and installed to test Unbundled Customer Control Reconfiguration Element (UCRCE).

Unbundled UDIT orders were provisioned between the Omaha 24th St central office and the Omaha Main central office.

2.03 The unbundled analog line ports were wired to a telephone within the central office in lieu of an unbundled loop to allow test calls. The test calls involved both local originating and terminating and OS/DA traffic.

2.04 Test calls were conducted which generated local minutes of use which were captured by Automatic Message Accounting (AMA).

Orders were completed and a summary bill created.

2.05 Test was completed by June 18, 1999. The billing results out of Customer Records Information System (CRIS) and Integrated Access Billing System (IABS) were available on the next billing cycle.

2.06 After provisioning was complete, trouble reports were processed to validate U & W's process and procedures for Repair/Maintenance.

**Figure One
 Section 271 Bench Test Diagram**

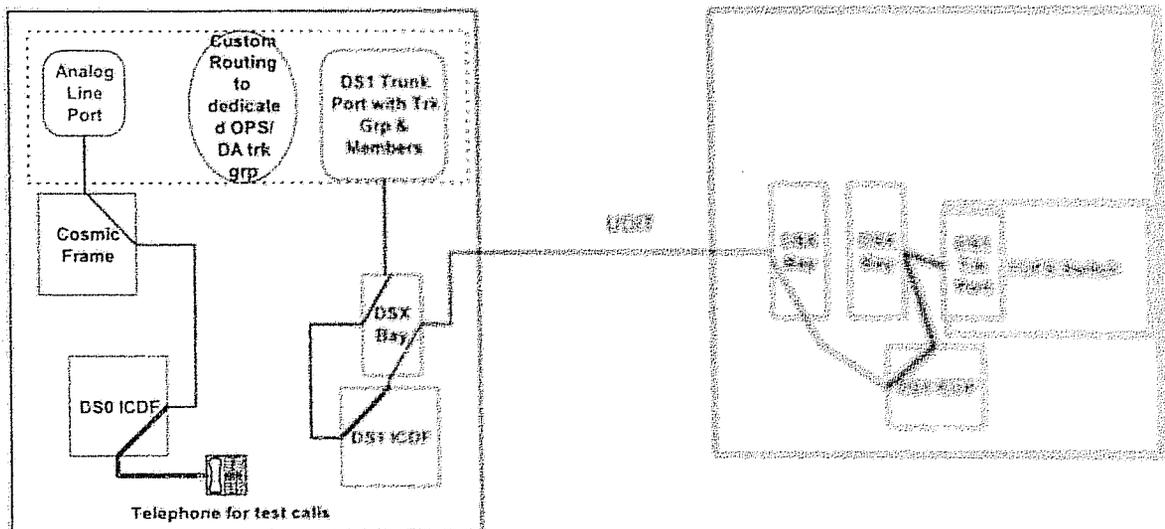
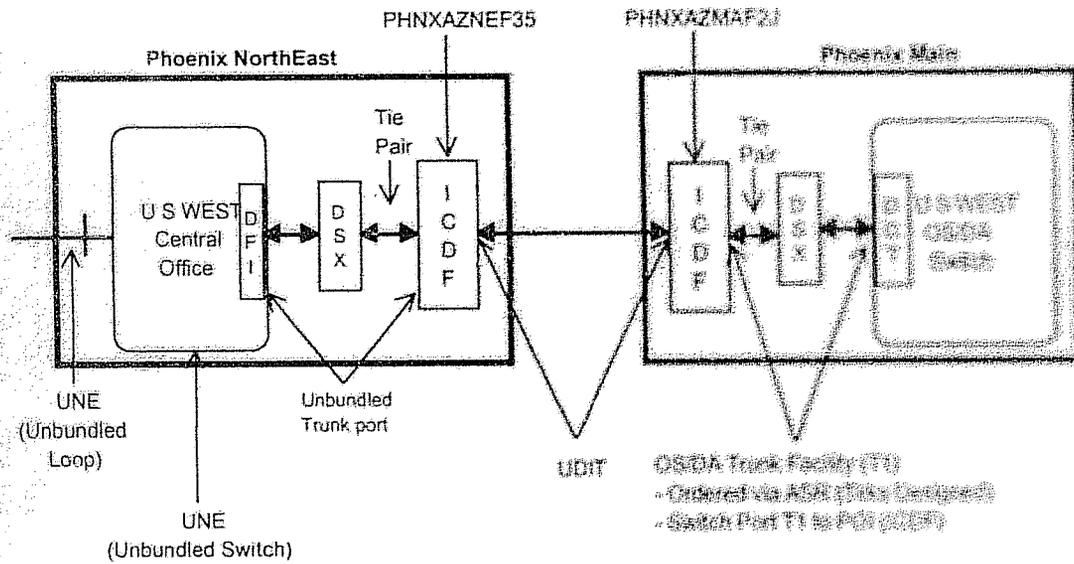


Figure Two

271 Bench Test - OS/DA Branding Network



4.0 Timeline

4.01 THE TIMELINE DISPLAYED IN APPENDIX A REFLECTS THE RECOMMENDED SEQUENTIAL FLOW OF ORDER ACTIVITY USED FOR BOTH THE ARIZONA AND NEBRASKA TRIALS. IT ALSO CONTAINS A TABLE TO REFLECT THE CORRESPONDING PROCESS FLOW TASKS (WHICH ARE FOUND IN CHAPTER 5) AND THE RESULTS FOR EACH OF THE SEQUENTIAL TASKS.

THE SEQUENCE USED WAS THE DOCUMENTED PROCESS TO BE FOLLOWED BY THE CO-PROVIDER. THE TEAM CONDUCTED A PRE-PLANNING MEETING WITH THE "SIMULATED" CO-PROVIDER AND PROCESSED ALL STANDARD CUSTOMER AND CUSTOM ROUTING QUESTIONNAIRES.

4.02 The below table summarizes the individual unbundled element products. The Application (APP) date column indicates the date that the team started the Business Integrated Test (BIT). The Due Date and Completion columns reflects the comparison between order due date and actual test completion.

ARIZONA (BETA)

| <u>Product</u> | <u>APP/BIT Test Call</u> | <u>Due Date²</u> | <u>Completion</u> |
|----------------|--------------------------|-----------------------------|-------------------|
| UDIT | 4/14/99 | 4/21/99 | 4/21/99 |
| UBSW Trk Port | 4/16/99 | 4/29/99 | 4/29/99 |
| UBSW Trk Grp | 4/16/99 | 4/29/99 | 4/29/99 |
| UBSW Line Port | 4/26/99 | 5/3/99 | 5/3/99 |
| Test Call Plan | 5/5/99 | 5/5/99 | 5/5/99 |

| <u>Product</u> | <u>APP/BIT Test Call</u> | <u>Due Date³</u> | <u>Completed</u> |
|----------------|--------------------------|-----------------------------|------------------|
| CR established | 4/12/99 | 4/13/99 | 4/13/99 |
| CR deployed | 4/14/99 | 4/30/99 | 4/30/99 |

ARIZONA (RE-TEST)

| <u>Product</u> | <u>APP/BIT Test Call</u> | <u>Due Date⁴</u> | <u>Completion</u> |
|----------------|--------------------------|-----------------------------|-------------------|
| UDIT | 6/2/99 | 6/7/99 | 6/7/99 |
| UBSW Trk Port | 6/2/99 | 6/7/99 | 6/7/99 |
| UBSW Trk Grp | 6/2/99 | 6/7/99 | 6/7/99 |
| UBSW Line Port | 6/2/99 | 6/4/99 | 6/4/99 |
| Test Call Plan | 6/7/99 | 6/18/99 | 6/18/99 |

NEBRASKA (RE-TEST)

| <u>Product</u> | <u>APP/BIT Test Call</u> | <u>Due Date</u> | <u>Completion</u> |
|----------------|--------------------------|-----------------|-------------------|
| UDIT | 6/14/99 | 6/18/99 | 6/18/99 |
| UBSW Trk Port | 6/14/99 | 6/18/99 | 6/18/99 |
| UBSW Trk Grp | 6/14/99 | 6/18/99 | 6/18/99 |
| UBSW Line Port | 6/14/99 | 6/18/99 | 6/18/99 |

² Represents the standard provisioning intervals for these unbundled products.

³ Projected Custom Routing and Line Class Code establishment/deployment interval requirements were based on the bench test completion date and the due dates of the orders. Normal procedures include establishing an interval through the Individual Case Basis (ICB) process, which may extend the interval required for these items. The trial LCC was deployed once and used for all subsequent testing.

⁴ Shortened intervals were used for the finalized tests to ensure the bench test results would be available for the pending Arizona and Nebraska Section 271 proceedings.

5.02.2 Task 2: Service Delivery Coordinator (SDC) receives ASR & validates ASR entries.

The only process issue encountered was the configuration of the Access Customer Termination Location (ACTL) code. The ACTL is a 11 character Common Language Location Identification (CLLI) code. The Beta UDIT order was processed with an 11 character ACTL which included a "F" in the 9th character. The "F" specifies the ICDF frame where the UDIT will terminate. The problem occurs when Trunks Integrated Record Keeping System (TIRKS) takes the ACTL and automatically looks for a planning design to use in the design process. TIRKS is 'hard-coded' to default to an 8 character CLLI when it encounters a "F" in that specified 9th position. The 8 character-based planning design only processed the design to the USW frames and not all the way to the ICDF frames where the UDIT would be terminated. The result is the design required a manual intervention to complete.

The on-going solution is to designate unique ACTLs of 11 characters without the "F" character for any Co-Provider where their only "presence" will be ICDF Collocation. This already occurs where the Co-Provider has a Physical, Virtual or Cageless Collocations.

Method and Procedures were updated and subsequent testing using an acceptable "simulated" ACTL proved successful.

5.02.3 Task 3: SDC validates ASR request.

The ASR was validated and all required entries were present.

5.02.4 Task 4: SDC obtains Billing Account Number (BAN)

We obtained 303L04 & 303I08 for use as our BAN number for our "simulated" Co-Provider account.

5.02.5 Task 5: SDC issues order to Service Order Processor (SOP) and issues Firm Order Commitment (FOC).

The Beta UDIT order encountered an error for missing Class of Service in SOPAD. The Class of Service was missing due to the fact this was the first UDIT order provisioned in the central region. The new UDIT Class of Service of "UTL1N" was added to the appropriate SOPAD table. This order was successfully redistributed and went to Service Order Administration Control (SOAC). Subsequent UDIT orders processed error-free.

In SOAC, a Request for Manual Assistance (RMA) was received on the Beta UDIT order. This was due to a missing Universal Service Order Code (USOC). The new UDIT USOC "TUGSX" was added to the SOAC table. The USOC "TUGSX" information was only missing in the Western and Central Region where no actual UDIT orders had been previously processed. In the Eastern Region the USOC was contained in the appropriate tables. All subsequent tests were successful.

Before the order was able to proceed successfully to TIRKS, another intervention was needed to change the setup of the new UDIT class of service, in the Central Region, from "non-access service/CRIS billed" to "access service/IABS billed". The order then proceeded to TIRKS where SOAC flow-through messages 1, 2, and 3 were processed successfully.

5.02.6 Task 6: Designer designs UDIT and sends Design Layout Record (DLR) to Co-Provider.

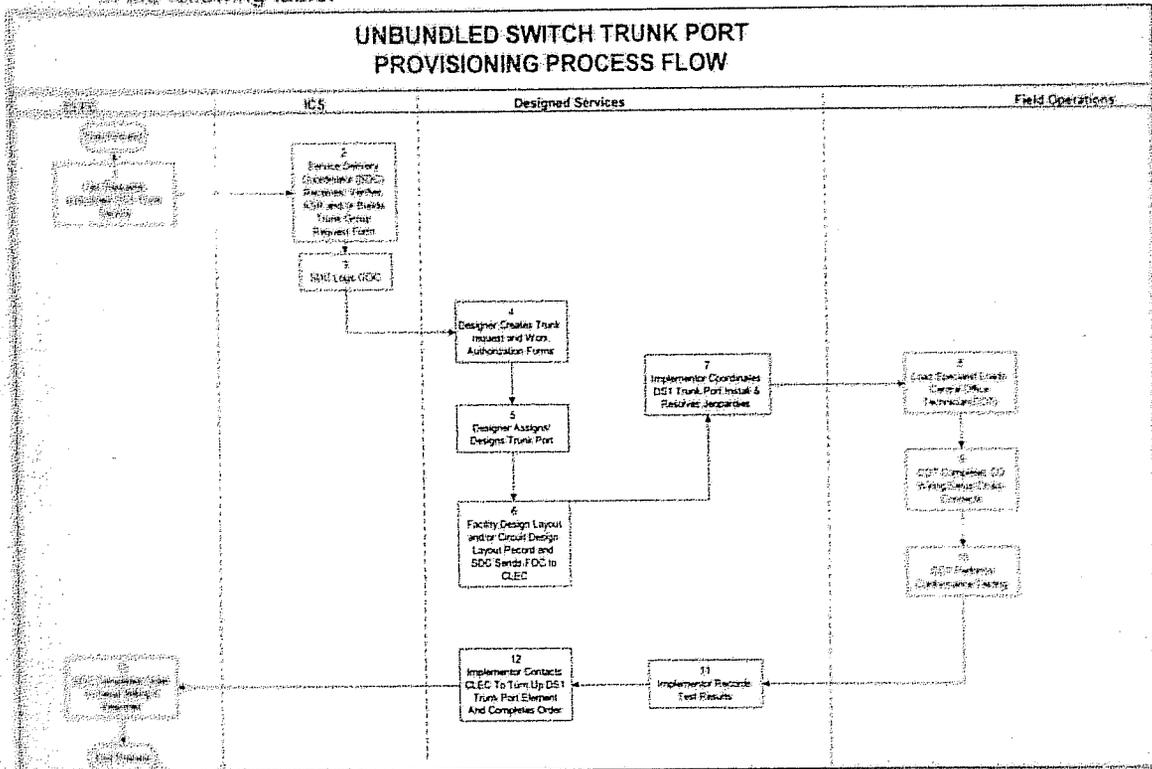
The orders processed successfully through TIRKS to Work Flow Administration (WFA). The appropriate output documents were:

- ❖ Design Layout Records (DLRs) which was sent to the "simulated" Co-Provider.
- ❖ Work Order Record Document (WORD) document which was issued to the Central Office and Design Center implementation personnel.

- 6.02.7 Task 7: Implementor contacts Central Office Resource Allocation Center (CORAC) to load appropriate central office technicians.**
This task was successfully completed and error-free.
- 6.02.8 Task 8: CORAC loads appropriate Central Office Personnel**
This task was successfully completed and error-free.
- 6.02.9 Task 9: Central Office Technician (COT) performs work steps**
This task was successfully completed and error-free.
- 6.02.10 Task 10: Implementor tests circuit**
This task was successfully completed and error-free.
- 6.02.11 Task 11: Order completed**
This task was successfully completed and error-free.
- 6.02.12 Task 12: Co-Provider notified**
This task was successfully completed and error-free. The "simulated" Co-Provider accepted service.
- 6.02.13 Task 13: Billing established**
IABS billing results indicated non-recurring and recurring billing information. Also the customer bill reflected the individual unbundled elements ordered and the rates elements entered for the test.

5.03 UNBUNDLED SWITCHING MESSAGE TRUNK PORT AND MESSAGE TRUNK GROUP AND MEMBERS

US West process and procedures for the provisioning of Unbundled Switch Trunk Port contains thirteen (13) process tasks. Each task was tested. The provisioning flow is described in the following table.



5.03.1 Task 1: Co-Provider requests unbundled DS1 Trunk Service (Includes DS1 Trunk Port and Associated Trunk Group/ Members.

The Unbundled Switch Trunk Port and Group/Member orders were released through EXACT via ASR. There were some typographic errors, which were caught by EXACT, on the Beta orders. This allowed for immediate correction and the orders re-released. Subsequent Trunk Port and Group/Member orders passed all formatting issues.

5.03.2 Task 2: Service Delivery Coordinator (SDC) receives/verifies ASR and/or builds trunk group request form.

This task was successfully completed and the trunk request form created.

5.03.3 Task 3: SDC logs into TIRKS Generic Order Control (GOC).

A process issue was encountered on the Beta orders when a USOC "TMECS" was present on the order and the Loop Facilities Assignment and Control Center (LFACS) system incorrectly assigned a local loop. "TMECS" is a line-assignable USOC that tells LFACS to assign a four-wire loop. TMECS should not have been on the orders and the Field Identifier (FID) "CTG" was substituted in its place. A check was made of the methods and the use of FID "CTG" was already documented.

The same issue from paragraph 5.02.2 around the ACTL information on UDIT, also surfaced on the Beta orders. The team used the "simulated" ACTL with an H in the 9th character and resolved the issue. There was an SOAC error with Message 1 on the Trunk Port orders (needed an allocation group assigned which occurs whenever a new ACTL is used for the first time). The Message 1 error was fixed and the order continued processing.

During the Trunk Group/Member Beta order release, it was determined that the traffic modifier in the circuit ID was not correct. The traffic modifier should be YY. The industry standard of YY traffic modifier identifies the trunk group as an unbundled element. Also the YY needed to be added in the EXACT tables because these were the first unbundled trunk group/member orders processed in "production" Central Region.

5.03.4 Task 4: Designer creates trunk request and Work Authorization forms.

The next orders to be processed were for the associated Unbundled Switch Trunk Group/Members. A key point to the overall order process is the timing for releasing these trunk group/member orders. The order will error out if it starts to go through the OSS systems before the trunk port order is in a pending "P" status (meaning design-processed through TIRKS).

5.03.5 Task 5: Designer assigns/designs trunk port and trunk group/members.

The Trunk Group/Member orders were released and were successfully loaded into TIRKS and appeared on the TIRKS list for processing. The orders continued, successfully, through TIRKS, a DLR was created and processed into WFA.

An issue arose concerning which internal design group would handle the request within the Des Moines Design Center. The Beta test orders went to two different groups, the trunk port orders went to the Unbundled Network Element design team in Des Moines and the trunk group/member orders went to the Feature Group/ LIS design team. After discussion with the appropriate design groups, it was decided that there is a functional synergy to have both orders designed in the same group.

Subsequent testing involved the single design group and processed smoothly through the Des Moines Design.

5.03.6 Task 6: Facility Design Layout and/or Circuit Design Layout record is created and SDC sends FOC to Co-Provider.

This task was successfully completed and error-free.

5.03.7 Task 7: Implementor coordinates DS1 trunk port and Trunk group installation and resolves jeopardies.

This task was successfully completed and error-free.

5.03.8 Task 8: Load Specialist loads Central Office technician (COT) with work steps

This task was successfully completed and error-free.

5.03.9 Task 9: COT completes CO wiring cross-connects

This task was successfully completed and error-free.

5.03.10 Task 10: COT performs conformance testing

This task was successfully completed and error-free.

5.03.11 Task 11: Implementor records test results and completes order.

This task was successfully completed and error-free.

6.03.12 Task 12: Co-provider notified

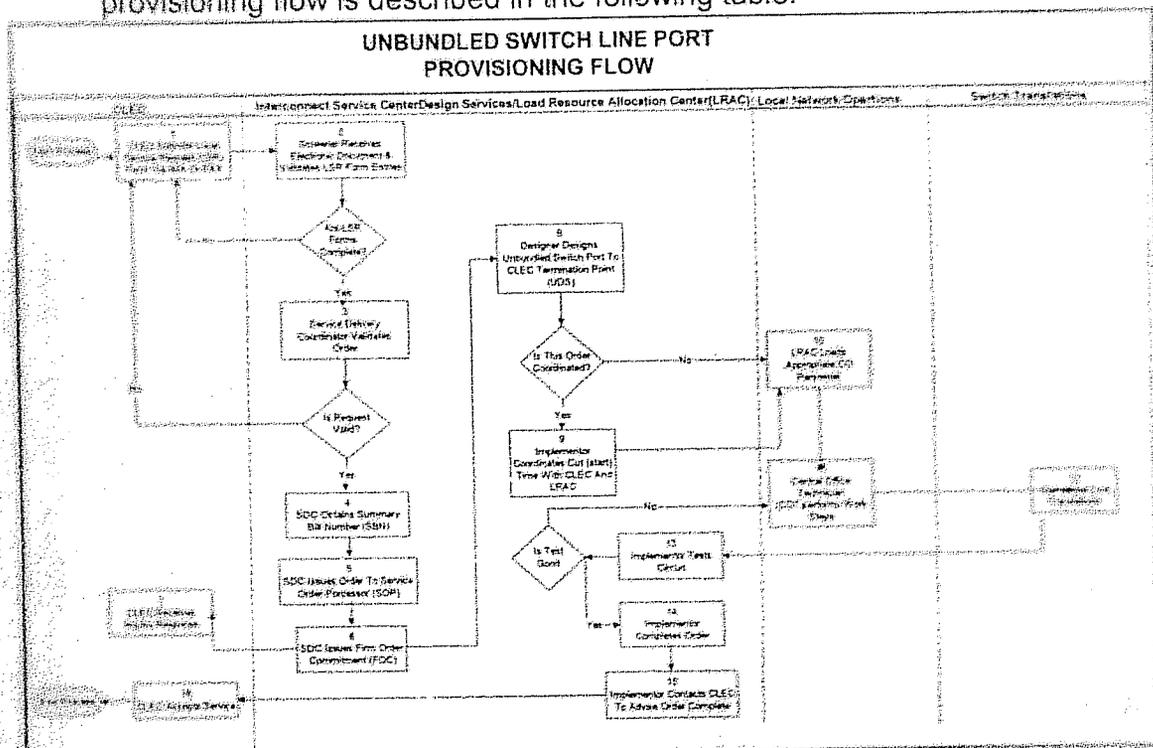
This task was successfully completed and error-free.

6.03.13 Task 13: Billing established

ABS billing results indicated non-recurring and recurring billing information. Also the customer bill reflected the individual unbundled elements ordered and the rates elements entered for the test.

5.04 UNBUNDLED SWITCH ANALOG LINE PORT

U S West's process and procedures for the provisioning of Unbundled Line Port contains sixteen (16) process tasks. Each task was tested. The provisioning flow is described in the following table.



5.04.1 **Task 1: Co-Provider submits Local Service Request (LSR) form submitted via IMA or FAX.**

Unbundled-Switch Analog Line-Port orders were processed in CRIS via the Local Service Request (LSR) and proceeded in SOPAD and SOLAR successfully.

5.04.2 **Task 2: Screener receives electronic document & validates LSR form entries.**
 This task was successfully completed and error-free.

5.04.3 **Task 3: Service Delivery Coordinator (SDC) validates order.**
 This task was successfully completed and error-free.

5.04.4 **Task 4: SDC obtains Summary Billing Number.**
 The summary billing number was the telephone numbers of our analog line ports.

5.04.5 **Task 5: SDC issues order to Service Order Processor (SOP).**
 This task was successfully completed and the order sent to SOPAD (central region) and SOLAR (eastern region).

5.04.6 **Task 6: SDC issues Firm Order Commitment (FOC)**
 This task was successfully completed and error-free.

5.04.7 **Task 7: Co-Provider receives inquiry response.**
 This task was successfully completed and error-free.

5.04.8 Task 8: Designer designs unbundled switch port to Co-Provider termination point.
The order processed successfully through LFACS, through the SOAC-TIRKS Interface and into TIRKS.

The only issue uncovered was, during the Nebraska test, the DMS-100 switch used required the SOAC USOC table field CONDUCTOR changed from 0 to 2. This allowed Office Equipment (OE) to be assigned. All tables within the three regions were updated for subsequent processing.

In the Order Automation process, the Beta Unbundled Switch Analog Line Port erred out because of a system issue around the tie pair inventory. A tie pair was located and assigned and the order was re-sent through the Order Automation process. The Order Automation process ended successfully. A DLR was produced and the order was distributed to the WFA Systems. Subsequent Analog Line Port orders processed were successful.

5.04.9 Task 9: Implementor coordinates cut (start) time with Co-Provider and Local Resource Allocation Center (LRAC).

This task was successfully completed and error-free.

5.04.10 Task 10: LRAC loads Central Office work steps

This task was successfully completed and error-free.

5.04.11 Task 11: Central Office technician (COT) performs work

This task was successfully completed and error-free.

5.04.12 Task 12: COT completes Line Translations

This task was successfully completed and error-free.

5.04.13 Task 13: Circuit is tested

This task was successfully completed and error-free.

5.04.14 Task 14: Order completed

This task was successfully completed and error-free.

5.04.15 Task 15: Co-Provider notified

This task was successfully completed and error-free.

5.04.16 Task 16: Billing established

CRIS billing results indicated non-recurring and recurring billing information. Also the customer bill reflected the individual unbundled elements ordered and the rates elements entered for the test.

The test successfully captured Minutes of Use (MOUs) in support of Shared Transport. However, there were system limitations preventing a billing separation of Intra-switch and Inter-switch MOUs. This will be available when a Change Request (CR) in CRIS is implemented in August of 1999.

5.05 CUSTOM ROUTING:

5.05.1 Pre-Planning questionnaires were filled out for the Custom Routing work required in both the 5E switch and the TOPS (DMS) switch. This work mirrored what would be required of the Co-Provider, up-front, which specifies the particular branding scenarios.

5.05.2 These questionnaires were sent to the appropriate internal work groups for the Translation work to begin. A request was made for an unique Line Class Code (LCC) to be established to direct OS/DA routing. Upon receipt of this new LCC, it was passed to the "simulated" Co-Provider for upcoming Local Service Requests (LSRs).

5.06 UNBUNDLED CUSTOMER CONTROL RECONFIGURATION ELEMENT (UCCRE):

Test orders for UCCRE were submitted successfully through the UDIT process flows with the following additional procedures:

-UCCRE requires a Co-Provider fill out a questionnaire specifying which network reconfiguration requirements are needed. This questionnaire asks whether a Co-Provider requires either Attendant (USW access) or Dial-Up (Co-Provider access) controller access options and was successfully processed by the team's "simulated" Co-Provider and sent to the appropriate internal work group.

-UCCRE process requires terminating one end of an UDIT in a U S West Digital Access Control System (DACS). Our test included successfully installing multiple UDITs in the DACS with designated ports that were programmed into the remote access system "Flex-Com".

-Remote reconfigurations of the multiple UDITs, through "Flex-Com", were successfully completed to test various port configurations. These were done both as Attendant option and "simulated" Co-Provider Dial-Up option.

6.0 TEST CALL PLAN

6.01 The test began with Dial Tone being verified and Automatic Number Identification (ANI) performed to validate installation of the Analog Line Port Translations. Terminating calls also were made to the telephone numbers of the unbundled line port to validate ability to call the port.

UNBUNDLED ANALOG LINE PORT (SAMPLE TEST CALL PLAN)
 TELEPHONE # 602-956-9255
 PHOENIX NORTH EAST CENTRAL OFFICE, PHOENIX, ARIZONA
 SWITCH=5E
 Custom Routing Unique Line Class Code=XYZ

Call Type Expectations

| CALL TYPE | NP ROUTE TYPE | 1+ ROUTE TYPE | 0+ ROUTE TYPE |
|-------------------------------------|------------------|------------------|------------------|
| LOCAL 7DIG (602-955- 1955) | LOC_RTE | 1+ACDE | 0+ACDE |
| LOCAL HNPA | LOC_RTE | 1+ACDE | CLEC_OPR |
| LOCAL FNPA | LOC_RTE | 1+ACDE | CLEC_OPR |
| ZERO MINUS | CLEC_OPR | | |
| 411 | CLEC_OPR | CLEC_OPR | 0+ACDE |
| 555 7DIGIT | CLEC_OPR | 1+ACDE | 0+ACDE |
| 911 | 911_RTE | 911_RTE | 911_RTE |
| | | | |

(ACND= Access code not dialed recording ACDE= Access code dial in error recording)

(Call Type Results in **Bold Green**)

6.02 Mechanized front end branding of "simulated" Co-Provider XYZ was received for both Operator Assistance and Directory Assistance.

The operator's terminal screen was not initially displaying the ANI of our Analog Line Port but rather a default NPA-NNX. The problem was found to be an error in the TOPS BC (Billing Code) table. Our Line Port telephone number was added and the problem was resolved.

The operator's terminal screen also was not displaying the Co-Provider branding designation of XYZ. This problem was resolved by adding XYZ as Service Provider Identification (SPID) to the switch translations at the TOPS switch.

Back-end mechanized branding was received for Toll Operator Assistance.

The back-end mechanized branding for Direct Assistance was received as a generic brand and not our XYZ brand. This was due to the current IVS equipment limitations in the Phoenix TOPS switch. This limitation allows only two (2) mechanized branding: a generic and U S West specific. A retrofit to ISN NAV equipment to TOPS switches across the region is on-going and should be completed by 10-25-99. This retrofit will allow multiple branding.

Manual back end Co-Provider branding for both OS and DA were received whenever the operator was involved in a charge-type calls (ie; Credit Card).

6.03 Upon completion of the above test calls, the LCC was changed on our analog line port to a U S West customer and the same calls made to test consistency and parity.

Change LCC on 602-956-9255 from XYZ to AW1

| CALL TYPE | NP ROUTE TYPE | 1+ ROUTE TYPE | 0+ ROUTE TYPE |
|---------------|------------------|------------------|------------------|
| LOCAL 7DIG | LOC_RTE | 1+ACDE | 0+ACDE |
| LOCAL HNPA | LOC_RTE | 1+ACDE | BOC_OPR |
| LOCAL FNPA | LOC_RTE | 1+ACDE | BOC_OPR |
| ZERO MINUS | BOC_OPR | | |
| 411 | BOC_OPR | BOC_OPR | 0+ACDE |
| 555 7DIGIT | BOC_OPR | 1+ACDE | 0+ACDE |
| 911 | 911_RTE | 911_RTE | 911_RTE |
| | | | |

(Call Type Results in **Bold Green**)

6.03.01 All call type routing was received as expected, including routing calls to USW-branded Operator Services and Directory Assistance.

6.04 The Analog Line Port and its LCC was changed to one existing in the Phoenix North East to verify blockage of 900, 960 and 976 calls. The test was performed and the call results were blocked with a VACANT call announcement.

****Change LCC on 602-956-9255 from 1MB to AM4***
to verify 900 Blocking*

| CALL TYPE | NP ROUTE TYPE | 1+ ROUTE TYPE | 0+ ROUTE TYPE |
|---------------|------------------|------------------|------------------|
| LOCAL 7DIG | LOC RTE | 1+ACDE | 0+ACDE |
| 900 | VACANT | VACANT | VACANT |
| 960 | VACANT | VACANT | VACANT |
| 976 | VACANT | VACANT | VACANT |
| ZERO MINUS | BOC_OPR | | |
| 411 | BOC OPR | BOC OPR | 0+ACDE |
| | | | |

(Call Type Results in Bold Green)

6.05 Figure Five displays the captured Automatic Message Accounting (AMA) data reflecting the actual minutes of use incurred by the unbundled line port while making local calls. The Shared Transport MOUs would represent the billed entity for Shared Transport.

Figure Five

Line Class Code XYZ

Call #1

S4AD-215744628 99-05-11 08:43:31 078678 AMA PHNXAZNEDC0
 M REPT AMATRC AMA:RECORD ON REQUESTED DIRECTORY NUMBER

ORIGINATING SM/PORT = 41/H'61B TERMINATING SM/PORT = 2/H'7BA

00 29 00 00 aa 00 50 2c 00 1c 90 51 1c 0c 00 0c 60 2c 95 69 25 5c 1c 00 60
 2c 95 77 40 3c 08 42 05 4c 00 00 01 24 1c 00 2c

| Field Name | Char. | Value | Meaning |
|----------------------|-------|-----------|--|
| RECORD DESCRIPTOR | 1-8 | 00290000 | RDW |
| RECORD HEADER | 1-2 | aa | No Fill Char Expected in This Record |
| STRUCTURE CODE | 1-5 | 00502 | Structure Code |
| CALL TYPE | 1-3 | 001 | Detailed Message Rate, Timed, With MBI |
| DATE | 1-5 | 90511 | 05/11/'9 |
| CLD PARTY OFF-HK IND | 1 | 0 | Called party off-hook detected |
| SERVICE FEATURE | 1-3 | 000 | Other (All Sensors) |
| ORIGINATING NPA | 1-3 | 602 | NPA |
| ORIGINATING NUMBER | 1-3 | 956 | NXX |
| | 4-7 | 9255 | Four Digit Number |
| OVERSEAS INDICATOR | 1 | 1 | Not Overseas Call (NPA not dialed) |
| TERMINATING NPA | 1-2 | 00 | Overseas Expander Position |
| | 3-5 | 602 | NPA |
| TERMINATING NUMBER | 1-3 | 957 | NXX |
| | 4-7 | 7403 | Four Digit Number |
| CONNECT/ANSWER TIME | 1-7 | 0842054 | 08:42:05.4 |
| ELAPSED TIME | 1-9 | 000001241 | 00001:24.1 |
| WATS BAND or MBI | 1-3 | 002 | WATS Band Or Type Indicator (MBI) |
| End of Record---- | | | |

Intra-Switch

Call #2

STAD-215741625 00-05-11 08:46:09 078785 AMA PHNXAZNEDCO
 M REPT AMATRC AMA:RECORD ON REQUESTED DIRECTORY NUMBER

ORIGINATING SM/PORT = 41/H'61B TERMINATING SM/PORT = 63/H'675

00 45 00 00 aa 40 50 2c 00 1c 90 51 1c 0c 00 0c 60 2c 95 69 25 5c 1c 00 60
 2c 37 00 31 4c 08 44 05 6c 00 00 02 02 5c 00 2c 72 0c 00 2c ff ff ff ff
 ff ff ff ff ff ff ff ff ff ff 10 10 00 0c 00 0c

| Field Name | Char. | Value | Meaning |
|----------------------|-------|-----------|--|
| RECORD DESCRIPTOR | 1-8 | 00460000 | RDW |
| RECORD HEADER | 1-2 | aa | No Fill Char Expected in This Record |
| STRUCTURE CODE | 1-5 | 40502 | Structure Code |
| CALL TYPE | 1-3 | 001 | Detailed Message Rate, Timed, With MBI |
| DATE | 1-5 | 00511 | 05/11/'9 |
| CLD PARTY OFF-HK IND | 1 | 0 | Called party off-hook detected |
| SERVICE FEATURE | 1-3 | 000 | Other (All Sensors) |
| ORIGINATING NPA | 1-3 | 602 | NPA |
| ORIGINATING NUMBER | 1-3 | 956 | NXX |
| | 4-7 | 9255 | Four Digit Number |
| OVERSEAS INDICATOR | 1 | 1 | Not Overseas Call (NPA not dialed) |
| TERMINATING NPA | 1-2 | 00 | Overseas Expander Position |
| | 3-5 | 602 | NPA |
| TERMINATING NUMBER | 1-3 | 379 | NXX |
| | 4-7 | 0314 | Four Digit Number |
| CONNECT/ANSWER TIME | 1-7 | 0844056 | 08:44:05.6 |
| ELAPSED TIME | 1-9 | 000002025 | 00002:02.5 |
| WATS BAND or MBI | 1-3 | 002 | WATS Band Or Type Indicator (MBI) |
| EBAF MODULE CODE | 1-3 | 720 | Local Number Portability Module Code |
| PARTY IDENTIFIER | 1-3 | 002 | Terminating Party Data |

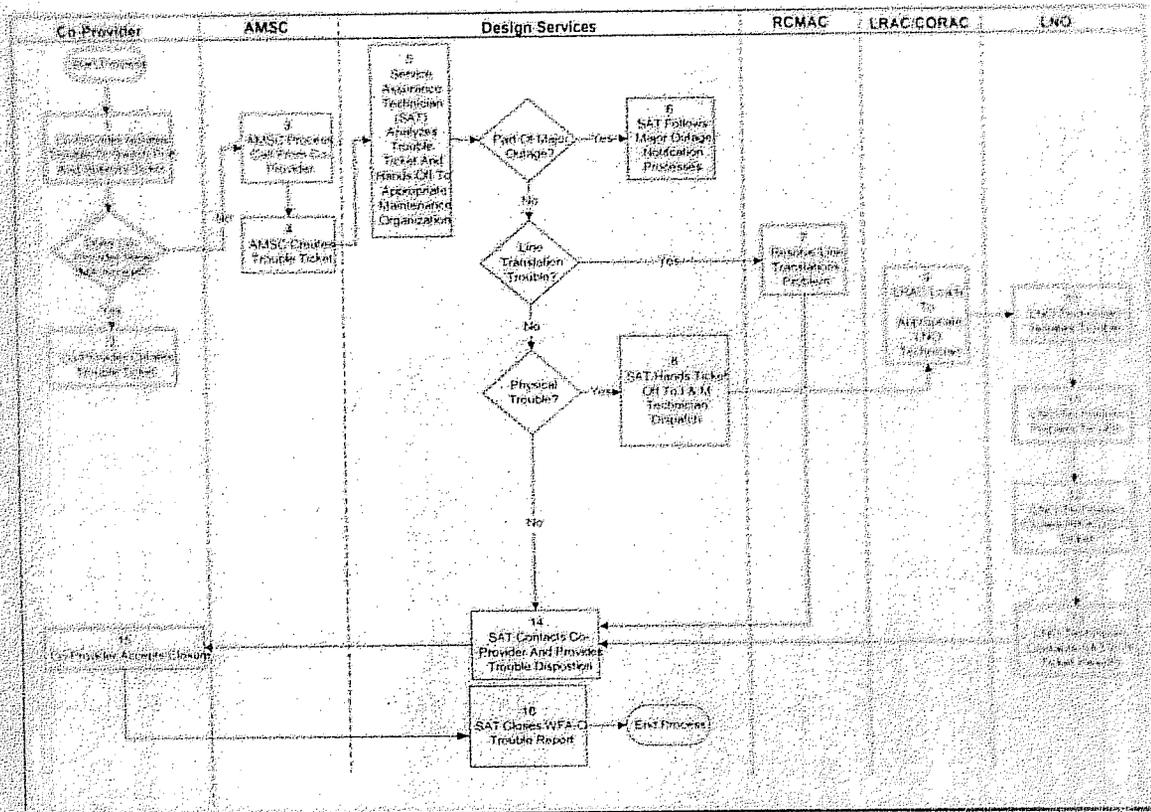
**Shared
Transp**

7.0 REPAIR/MAINTENANCE

7.01 UNBUNDLED SWITCHING

U S West's process and procedures for the maintenance and repair of Unbundled Switching contains sixteen (16) process tasks. Each task was tested. The provisioning flow is described in the following table.

UNBUNDLED SWITCH MAINTENANCE FLOW



7.01.1 Task 1: Co-Provider isolates trouble to Switch Port and submits ticket.

The maintenance test involved reporting a trouble condition on one of the installed unbundled switch line ports from the provisioning section of the bench test.

The "simulated" Co-Provider submitted trouble tickets via:

- Interconnect Mediated Access (IMA) mechanized entry
- Manual telephone call to the Account Maintenance Service Center (AMSC)

The process identifies certain tasks based on whether the Co-Provider will send their trouble reports either via IMA or a direct call into the AMSC.

7.01.2 Task 2: Co-Provider creates trouble ticket.

The IMA mechanized process involved two scenarios where the "simulated" Co-Provider reported the unbundled line port as both a base telephone number format (602-956-9255) and as a complete designed services circuit identification format (19 SNNJ 602-956-9255). The process differed slightly depending on the reporting format.

When the " simulated" Co-Provider reported the complete circuit identification and clicked on the "Design Ticket" button, IMA returned a designed services trouble ticket format and after completing the entries, IMA successfully sent the ticket automatically to WFA-C.

When the " simulated" Co-Provider reported an incomplete circuit identification with just the telephone number, IMA assumed it was a POTS trouble and automatically entered a non-design trouble ticket in LMOS. A flag was received in the AMSC and the trouble ticket dropped out to be manually screened. In the AMSC, it was found that the circuit was not POTS and did not reside in LMOS but as a Designed Service residing in WFA-C. The screener cancelled the LMOS ticket and manually entered a trouble ticket into WFA-C. The screener called the "simulated" Co-Provider with the new WFA-C trouble ticket number.

7.01.3 Task 3: AMSC process call from Co-Provider.

This task is required when the Co-Provider directly calls the AMSC to report trouble.

The call was successfully answered, within 1 to 3 rings each time, by a U S West Repair Service Attendant (RSA).

7.01.4 Task 4: AMSC creates trouble ticket.

The RSA took the trouble information from the "simulated" Co-Provider. This information included:

- Circuit Identification (CKT ID)
- Reported trouble condition
- Co-Provider name and call-back number
- Access hours
- Any special requirements (ie; test only between certain hours, etc)

The RSA successfully found the CKT ID in Work Flow Administration/ Control (WFA-C) and generated a trouble ticket with the "simulated" Co-Provider on the line.

The RSA provided the trouble ticket number to the Co-Provider.

7.01.5 Task 5: Service Assurance Technician (SAT) analyzes trouble ticket and hand-off to appropriate maintenance organization.

The trouble ticket appeared on the appropriate WFA-C work lists and was "picked up" by the Des Moines Designed Service Center and was handed off to the appropriate Central Office work lists in Work Flow Administration/Dispatch In (WFA-DI).

7.01.6 Task 6: SAT follows major outage notification processes.

Our test trouble reports did not involve any major outage.

7.01.7 Task 7: Resolve Line Translation problem.

Based upon the analysis of the trouble condition, the test simulated a hand-off to the Central Office work groups via their WFA-DI work lists. The step was successfully completed but the actual technician dispatch was not generated.

7.01.8 Task 8: SAT hands ticket off to I&M technician dispatch.

No outside dispatch is required for unbundled switching port trouble resolution.

7.01.9 Task 9: CORAC loads appropriate LNO technician.

Based upon the analysis of the trouble condition, the test simulated a hand-off to the Central Office work groups via their WFA/DI work lists. The step was successfully completed but the actual technician dispatch was not generated.

7.01.10 Task 10: LNO technician isolates trouble.

Based upon the analysis of the trouble condition, the test simulated a "pick-up" of the ticket by the Central Office work groups. The step was successfully completed but the actual technician dispatch was not generated.

7.01.11 Task 11: LNO technician repairs trouble.

Based upon the analysis of the trouble condition, the test simulated a trouble resolution by the Central Office work groups. The step was successfully completed but the actual technician dispatch was not generated.

7.01.12 Task 12: LNO technician closes their ticket.

Based upon the analysis of the trouble condition, the test simulated a ticket closure by the Central Office work groups. The step was successfully completed but the actual technician dispatch was not generated.

7.01.13 Task 13: LNO technician contacts SAT with ticket results.

Based upon the analysis of the trouble condition, the test simulated a call back to the SAT. The step was successfully completed but the actual technician dispatch was not generated.

7.01.14 Task 14: SAT contacts Co-Provider and provides trouble disposition.

The SAT contacted the "simulated" Co-Provider with successful trouble resolution.

7.01.15 Task 15: Co-Provider accepts closure.

Co-Provider accepted ticket resolution.

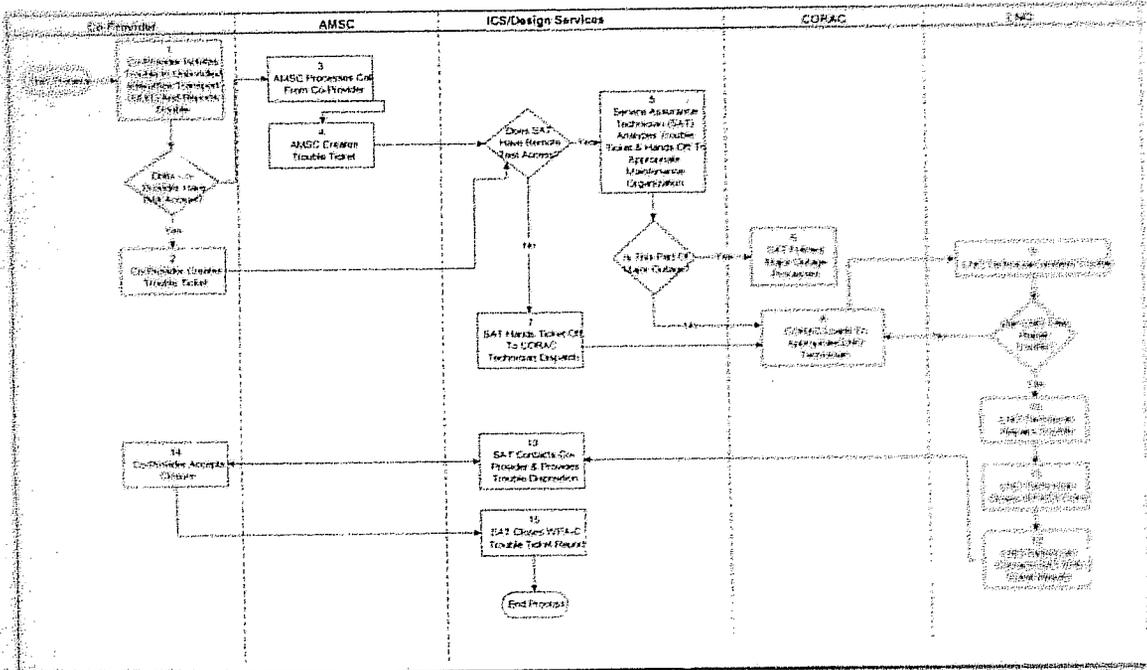
7.01.16 Task 16: SAT closes WFA-C trouble process.

SAT closed the trouble ticket in WFA-C upon Co-Provider acceptance.

7.02 UNBUNDLED TRANSPORT

U S West's process and procedures for the maintenance and repair of Unbundled Transport contains fifteen (15) process tasks. Each task was tested. The provisioning flow is described in the following table.

UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT) MAINTENANCE FLOW



7.02.1 Task 1: Co-Provider isolates trouble in unbundled interoffice transport (UDIT) and reports trouble.

The maintenance test involved reporting a trouble condition on one of the installed UDITs from the provisioning section of the bench test.

The "simulated" Co-Provider submitted trouble tickets via:

- IMA mechanized entry
- Manual telephone call to the Account Maintenance Service Center (AMSC)

The process indicates tasks based on whether the Co-Provider will send their trouble reports via IMA or a direct call into the AMSC.

7.02.2 Task 2: Co-Provider creates trouble ticket.

The IMA mechanized process involved the "simulated" Co-Provider reporting the UDIT as a complete designed services circuit identification format (14 HCFU 979430 MS).

When the Co-Provider reported the complete circuit identification and clicked on the "Design Ticket" button, IMA returned a design services trouble ticket format and after all entries were completed, IMA successfully sent the ticket automatically to WFA-C.

7.02.3 Task 3: AMSC process call from Co-Provider.

This task is required when the Co-Provider uses a manual telephone call to report trouble.

The call was successfully answered, within 1 to 3 rings each time, by a U S West Repair Service Attendant (RSA).

7.02.4 Task 4: AMSC creates trouble ticket.

The RSA took the trouble information from the "simulated" Co-Provider. This information included:

- Circuit Identification (CKT ID)
- Reported trouble condition
- Co-Provider name and call-back number
- Access hours
- Any special requirements (ie; test only between certain hours, etc)

The RSA successfully found the CKT ID in Work Flow Administration/ Control (WFA-C) and generated a trouble ticket with the "simulated" Co-Provider on the line.

The RSA provided the trouble ticket number to the Co-Provider.

7.02.5 Task 5: Service Assurance Technician (SAT) analyzes trouble ticket and hand-off to appropriate maintenance organization.

The trouble ticket appeared on the appropriate WFA-C work lists and was "picked up" by the Des Moines Designed Service Center and was handed off to the appropriate Central Office work lists in Work Flow Administration/ Dispatch In (WFA-DI).

7.02.6 Task 6: SAT follows major outage notification processes.

Our test trouble reports did not involve any major outage.

7.02.7 Task 7: SAT hands ticket off to CORAC technician dispatch.

Based upon the analysis of the trouble condition, the test simulated a hand-off to the CORAC work group via the WFA-DI work lists. The step was successfully completed but the actual technician dispatch was not generated.

7.02.8 Task 8: CORAC loads appropriate LNO technician.

Based upon the analysis of the trouble condition, the test simulated a hand-off to the Central Office work groups via their WFA-DI work lists. The step was successfully completed but the actual technician dispatch was not generated.

7.02.9 Task 9: LNO technician isolates trouble.

Based upon the analysis of the trouble condition, the test simulated a "pick-up" of the ticket by the Central Office work groups via their WFA/DI work lists. The step was successfully completed but the actual technician dispatch was not generated.

7.02.10 Task 10: LNO technician repairs trouble.

Based upon the analysis of the trouble condition, the test simulated a trouble resolution by the Central Office work groups. The step was successfully completed but the actual technician dispatch was not generated.

7.02.11 Task 11: LNO technician closes WFA/Dispatch In (WFA/DI) ticket.

Based upon the analysis of the trouble condition, the test simulated a ticket closure by the Central Office work groups. The step was successfully completed but the actual technician dispatch was not generated.

7.02.12 Task 12: LNO technician contacts SAT with ticket results.

Based upon the analysis of the trouble condition, the test simulated a call back to the SAT. The step was successfully completed but the actual technician dispatch was not generated.

7.02.13 Task 13: SAT contacts Co-Provider and provides trouble disposition.

The SAT contacted the "simulated" Co-Provider with successful trouble resolution.

7.02.14 Task 14: Co-Provider accepts closure.

Co-Provider accepted ticket resolution.

7.02.15 Task 15: SAT closes Work Flow Administration-Control (WFA-C) trouble ticket.

SAT closed the trouble ticket in WFA-C upon Co-Provider acceptance.

8.0 SUMMARY:

- 8.01 The ground rule of the Bench Test plan was to follow the current documented processes (see chapter 5 Summary of BIT test results) that support Unbundled Elements and Custom Routing. Within the process, whenever any functions were required of the Co-Provider, it was handled by the team's designated "simulated" Co-Provider.
- 8.02 The bench test format consisted of provisioning a series of Beta orders. The team identified any issues and made the necessary process and/or system changes. Then re-tested the process through an additional series of orders. This re-testing proved the validity of any process and/or system changes.

The issues encountered on the Beta orders were of the type to be anticipated and not unusual due to the fact this was the first time these particular unbundled products were processed in Arizona and Nebraska. All issues were resolved and subsequent re-testing was processed successfully.

- 8.03 All input/outputs documents identified in the UDIT, Unbundled Trunk Ports and Trunk group/members processes were issued. The orders were processed through U S West's Designed Services flow.
- 8.04 The ACTL code, an 11 character Common Language Location Identification (CLLI), will be required for ICDF Collocation for design flow-through to occur. This is similar to the current ACTL procedure for Physical, Virtual and Cageless Collocation. The Methods & Procedures were updated to include this requirement and orders re-tested to verify completion.
- 8.05 UCCRE was successfully tested to include terminating multiple UDIT orders on a DACS and using "Flex-Com" to provide remote reconfigurations, testing both Attendant (USW control access) and Dial-Up (Co-Provider control access) options.
- 8.06 Orders were wired and tested per the Combination Point of Interconnection (POI) process instructions, which assumes the Co-Provider is responsible to perform the cross-connect functions. In the test, USW technicians "simulated" Co-Provider activity in combining unbundled elements.

If USW technicians are legally or contractually required to perform the cross-connect function for the Co-Provider, the current Connecting Facility Assignment (CFA) process, in place today, must be used to provide the technicians the related cross-connect information.

- 8.07 The test call plan, involving "live" calls, was conducted on 5-5-99 and also on 6-7-99. Using a standard USW test call type expectation grid, actual calls were placed and the results documented (see chapter 6).
- 8.08 In the area of Co-Provider OS/DA branding the following was found:
- ❖ Front end mechanized Co-Provider branding was received on all calls to Operator Services and Directory Assistance.
 - ❖ At the actual Operator terminal positions, OS/DA translation-driven table entries were required to display the ANI of our analog line port telephone number and the specific Co-Provider brand. Table updates were performed and the ANI and brand were displayed on subsequent calls.

- ❖ There were equipment limitations in the TOPS switch which prevented multiple Co-Provider branding for Direct Assistance. This will be resolved with the current on-going ISN NAV switch retrofit.
- ❖ On test calls resulting in charges (ie; Credit Card) the operator completed the call process and manually gave a back end branding of "Thank you for using XYZ". Operator procedures specified any received calls that do not have a brand displayed on the terminal, indicate a USW customer and receive "Thank you for using USW". Any calls displaying a brand on the terminal (ie; Co-Providers, Independent Company) indicate a Co-Provider customer and receive the specific brand.

8.09 Repair/Maintenance tests were conducted and trouble tickets successfully submitted through both mechanized IMA or direct calls into the Account Maintenance Service Center (AMSC). The trouble tickets were successfully processed through the various trouble resolution hand-offs and were completed.

Unbundled transport trouble tickets were successfully submitted through IMA even though the UDIT circuits were provisioned through EXACT.

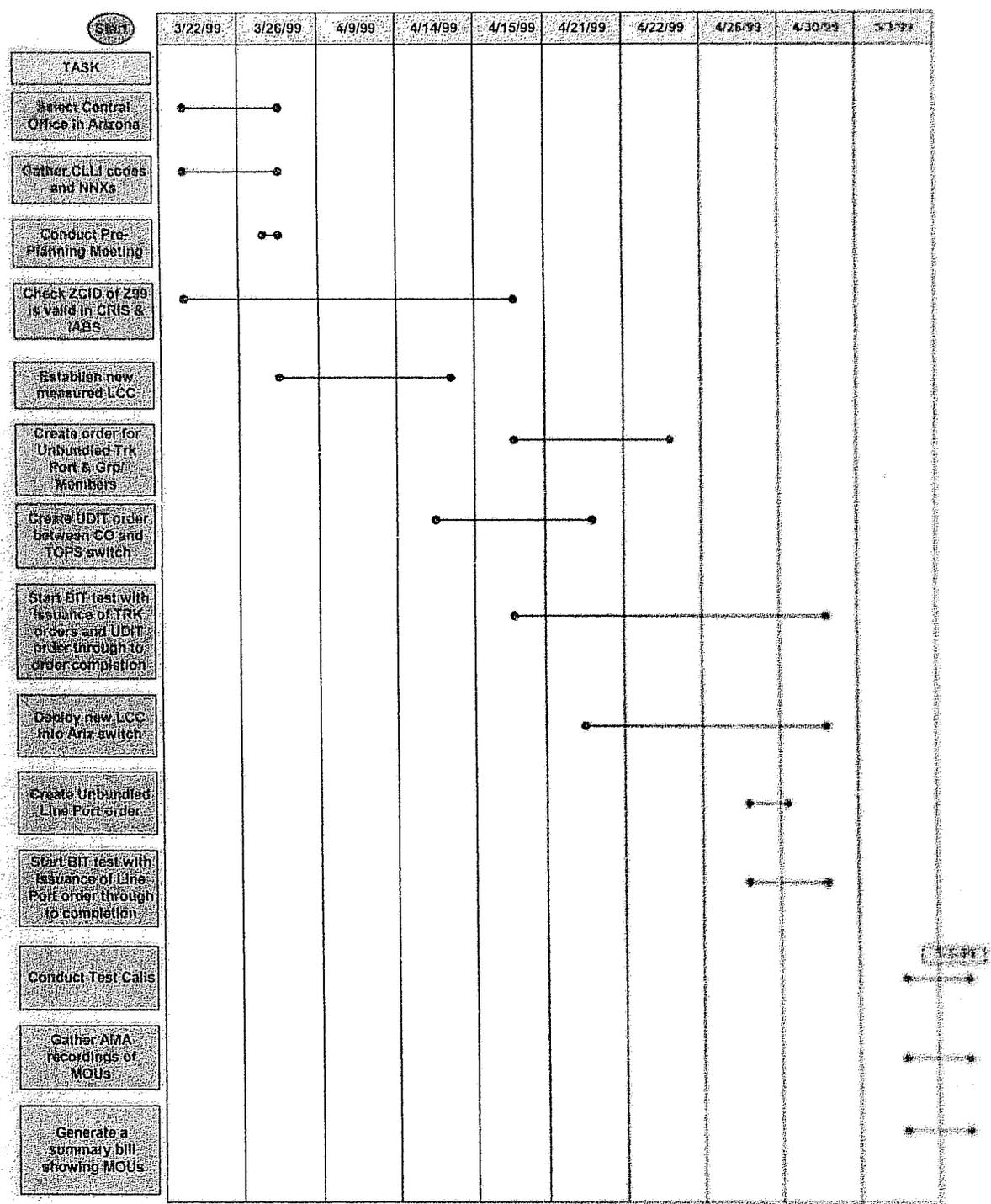
8.10 In summary, the 1999 Bench Test proved the validity of U S West's processes and systems and supported the advocacy on unbundled elements. It provides the validation required for Section 271 Checklist items #5 (unbundled transport) & #6 (unbundled switching).

The test also re-enforced the results from the 1998 Lab-controlled Bench Test by validating the tests in U S West's OSS Production environment in both Central and Eastern regions.

The additional Custom Routing test provided the opportunity to process complex translations within a TOPS switch to successfully route a Co-Provider dedicated OS/DA call completion and provide Co-Provider branding.

APPENDIX A

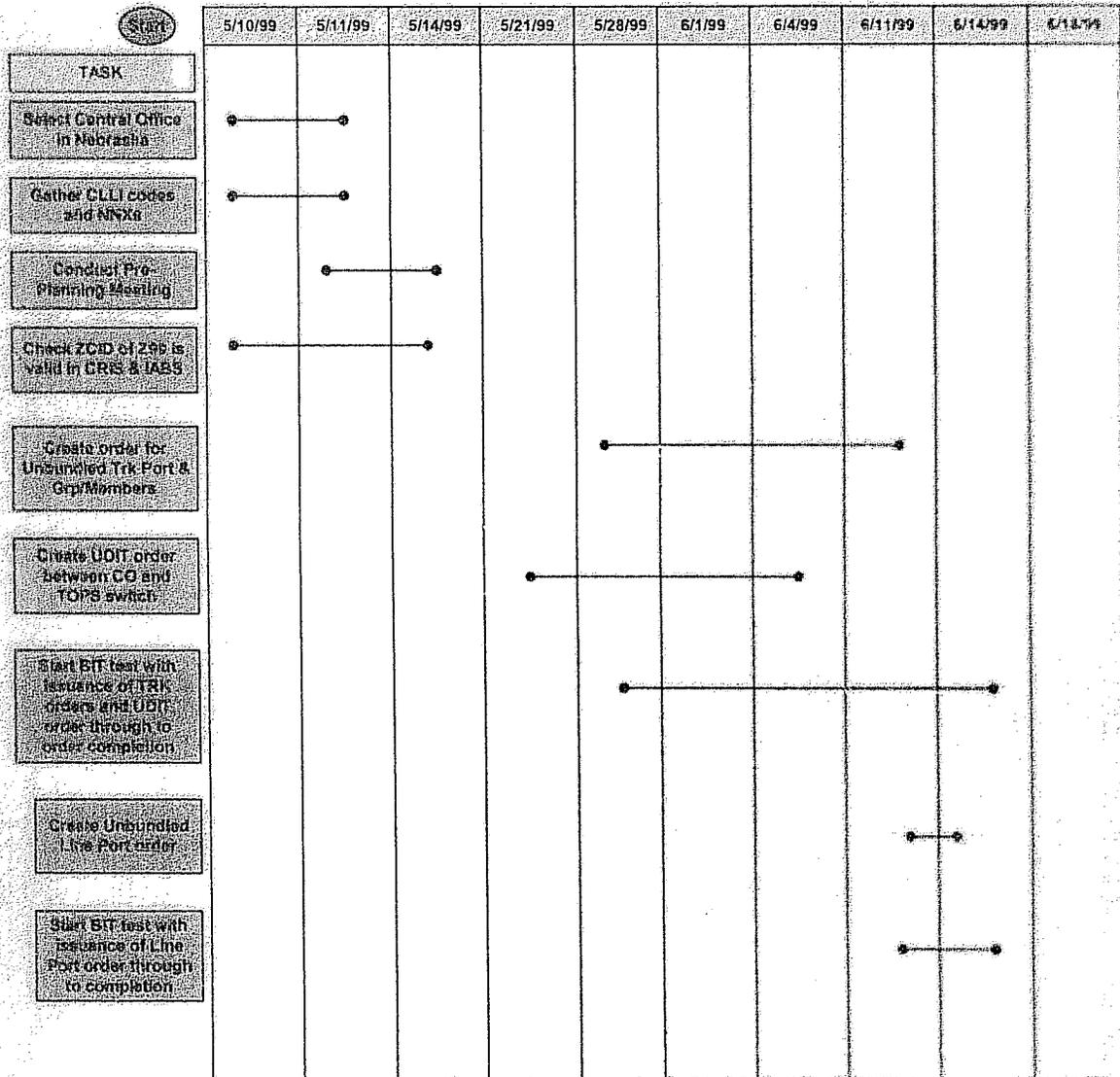
1999 Bench Test Timeline (ie: Arizona)



Completed

APPENDIX A (CONTINUED)

1999 Bench Test Timeline (ie: Nebraska)



Completed

APPENDIX A (CONTINUED)

| Issue/ Activity | Process Flow Reference | Status |
|---|--|---|
| Select Central Office in Arizona and Nebraska | Pre-Planning meeting with "simulated" Co-Provider and USW Account Team | Completed Phoenix NorthEast and Omaha, Nebraska central offices selected |
| Gather CLLI codes for switches, frames and NNXs involved | Pre-Planning meeting with "simulated" Co-Provider and USW Account Team | Completed CLLI were gathered and a 11 character ACTL created in CLONES to represent Co-Provider (PHNXAZNEHJ8) |
| Check ZCID of Z99 is valid in CRIS and TABS billing tables | Various Billing Account Number (BAN) tasks within Unbundled Switch & Transport | Completed This ZCID is for test purposes. Each Co-Provider has an unique ZCID |
| Conduct Pre-Order Mtg to fill out Customer Questionnaire and Custom Routing forms -Unbundled Line Port -OPS/DA switch port -Unbundled Trunk Port | Pre-Planning meeting with "simulated" Co-Provider and USW Account Team | Completed All M&Ps reflect the use of these questionnaires for on-going order activity |
| Establish new CLEC measured LCC based on Custom Routing forms | Custom Routing tasks | Completed Code=XYZ (test purposes) |
| Create Unbundled Switch DS1 Trunk Port Order and Trunk group/members orders | Unbundled Switch Trunk Port Tasks 3 & 4 | Completed Orders submitted to BIT team for testing After test, all M&Ps updated to reflect test results. See Appendix A for detailed order sample |
| Create UDIT | Unbundled UDIT tasks | Completed |

| | | |
|--|---|--|
| order between Wire Ct and GPS/OA switch | 1-5 | Order submitted to BIT team for testing After test, all M&Ps updated to reflect test results. See Appendix A for detailed order sample |
| Deploy new GLEC LCC into CO | Custom Routing tasks | Completed Deployed 4-29-99 |
| Start Bit Test of Issuance of DS1 trunk Port, Trk group/ members & UDIT orders | Unbundled Switch Trunk Port tasks 4-12 Unbundled UDIT tasks 6-13 | Completed Orders were wired and completed per the Design Documents. |
| Create Unbundled analog line port order | Unbundled Switch Line Port Tasks 1-7 | Completed Order submitted to BIT After test, all M&Ps updated to reflect test results. See Appendix A for detailed order sample |
| Start Bit Test of Issuance of unbundled line port order | Unbundled Switch Line Port Tasks 8-16 | Completed Orders were wired and completed per the Design Documents. |
| Conduct Test Calls using Test Plan | | Completed Test conducted on 5-5- 99 and the results can be found in Test Plan section |
| Gather AMA records of Minutes of Use for Local calls | | Completed Sample AMA record trace completed |
| Create a bill which shows MOUs & access charges suppressed | Unbundled Elements various billing tasks | Completed Sample CRIS and IABS billing records generated |

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S
AFFIDAVIT
OF
MARGARET S. BUMGARNER
CHECKLIST ITEM 7(I) – 911 AND E911 ACCESS

October 24, 2001

TABLE OF CONTENTS

| | <u>Page</u> |
|----|--|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | I. EXECUTIVE SUMMARY.....1 |
| 6 | II. QWEST PROVIDES ACCESS TO 911 AND E911 SERVICES IN |
| 7 | ACCORDANCE WITH THE 1996 ACT AND THE FCC'S RULES.5 |
| 8 | A. Background7 |
| 9 | B. Qwest Provides Competitors With Access to 911 or E911 |
| 10 | Services At Parity With the Access it Provides to Itself.....9 |
| 11 | C. 911 and E911 Trunks Are Monitored To Maintain Service |
| 12 | Quality.19 |
| 13 | D. Qwest Protects 911 and E911 Trunks.20 |
| 14 | E. Charges For CLEC Access to 911 and E911 Services.....21 |
| 15 | III. RESOLUTION OF ISSUES IN THE MULTI-STATE WORKSHOPS21 |
| 16 | IV. SUMMARY AND CONCLUSION.....23 |
| 17 | |

AFFIDAVIT

OF

MARGARET S. BUMGARNER

Checklist Item 7(I) – 911 and E911 Access

Margaret S. Bumgarner states as follows:

My name is Margaret S. Bumgarner. I am a Director in the Policy and Law organization for Qwest Corporation ("Qwest"). My business address is 1600 Seventh Avenue, Seattle, Washington, 98191. I submit this affidavit in support of Qwest's application for authority to provide interLATA services originating in South Dakota. In this affidavit, I show that Qwest complies with Checklist Item 7(I) of Section 271 of the Telecommunications Act of 1996 ("1996 Act" or "Act") concerning access to 911 and E911 emergency services.¹

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records kept by Qwest in the regular course of business.²

I. EXECUTIVE SUMMARY

Qwest satisfies the requirements of Section 271(c)(2)(B)(vii) of the Telecommunications Act of 1996 ("1996 Act" or "Act")³ and the FCC's rules as they

¹ 47 U.S.C. § 271(c)(2)(B)(vii)(I).

² Professional experience, education and other biographical information are set forth in Exhibit MSB-911-1.

³ 47 U.S.C. § 271(c)(2)(B)(vii)(I).

1 relate to the provision of access to 911 and Enhanced 911 ("E911") services. Qwest
2 provides competitors with nondiscriminatory access to 911 and E911 services,
3 databases, and interconnection.

4 Qwest has concrete and specific legal obligations to provide access to 911 and
5 E911 services pursuant to its Statement of Generally Available Terms and Conditions
6 ("SGAT") and its Commission-approved interconnection agreements. Qwest's SGAT
7 ensures that Qwest provides 911 and E911 functions to competitive local exchange
8 carriers ("CLECs") at parity and with the same level of accuracy, reliability, and
9 functionality as that available to Qwest. From an end user perspective, the 911 and
10 E911 services that CLECs provide, through access to Qwest's 911/E911 services,
11 functions, and facilities, are indistinguishable from the 911/E911 services that Qwest
12 provides to its own end user customers.

13 Qwest provides CLECs with documentation regarding Qwest's methods and
14 procedures for providing access to 911/E911 services, databases, and interconnection.
15 Qwest also provides CLECs with extensive assistance in establishing 911/E911
16 services.

17 Qwest uses a third party, Intrado Inc. (formerly SCC Communications Corp.), to
18 manage the E911 database for Qwest. Qwest's SGAT and Qwest's contract with
19 Intrado both provide that Intrado administer and manage database entries for CLECs
20 with the same accuracy and reliability as that provided for Qwest. Qwest provides
21 database updates for reseller CLECs and CLECs using unbundled local switching in the
22 same manner and using the same process that Qwest uses to provide updates for its

1 own retail end users. Facilities-based CLECs with their own switches make direct
2 arrangements with Intrado for providing database updates. Qwest's SGAT establishes
3 that Qwest, through Intrado, will provide CLECs with nondiscriminatory error correction
4 for database records.

5 Qwest's SGAT also establishes that Qwest provides facilities-based CLECs with
6 nondiscriminatory access to 911/E911 interconnection. For those few areas with Basic
7 911 service, Qwest provides facilities-based CLECs with dedicated trunks from the
8 CLEC's switch to the appropriate Public Service Answering Point ("PSAP"), or a CLEC
9 can self-provision its 911 trunks. For E911 service, Qwest will provide facilities-based
10 CLECs with dedicated trunks from the CLEC's switch, or the CLEC can self-provision its
11 E911 trunks, to Qwest's control office (selective router). Qwest also provides trunk
12 terminations at the selective router and provides switching and transmission of calls
13 through the selective router to the appropriate PSAP that are the same as those used
14 by Qwest to provide E911 services for its own retail customers, reseller CLECs, and
15 CLECs using Qwest's unbundled local switching. The routing of a 911/E911 call from a
16 CLEC-owned switch is the same as the routing of such calls from a Qwest end office.
17 In short, therefore, CLECs have access to 911/E911 interconnection at parity with
18 Qwest.

19 Qwest has several performance measures for 911/E911 services that measure
20 various aspects of 911/E911 trunk installation and repair, as well as a measure for the
21 average time required to update the E911 database. Qwest's performance measures,
22 the Performance Indicator Definitions ("PIDs"), were developed in the Regional

1 Oversight Committee ("ROC") collaborative Section 271 performance measures
2 workshops. Those workshops, involving both Qwest and CLECs, were conducted
3 under the auspices of the ROC which is composed of 13 state commissions in the
4 Qwest region. For 911 and E911 services, the performance data show that Qwest
5 provides 911/E911 services and interconnection to competitors on a nondiscriminatory
6 basis. There were some short delays reported on E911 trunk orders for a CLEC in
7 South Dakota in January 2001, for non-facility reasons. These were Qwest project
8 orders that did not impact service for the CLEC or its customers. These orders were for
9 trunk rearrangements associated with a project deploying a new E911 tandem in Rapid
10 City, and the delays experienced were for the installation of the new switch. There have
11 been no 911/E911 installation delays for CLEC initiated orders, and there have been no
12 trouble reports on CLEC 911/E911 trunks in South Dakota in the past twelve months.
13 The performance results for 911/E911 service provided to CLECs in South Dakota show
14 that Qwest provides access to 911/E911 service at parity or better than the service
15 Qwest experiences on its own 911/E911 facilities. Liberty Consulting Group has also
16 recently released its audit of Qwest's performance results and confirmed that Qwest is
17 accurately measuring its performance in providing access to 911 and E911.

18 Qwest participated in Section 271 collaborative workshops addressing Checklist
19 Item 7(l) in Arizona, Colorado, Oregon, Washington and in the Multi-State proceeding
20 involving state commissions from Idaho, Iowa, Montana, New Mexico, North Dakota,
21 Utah, and Wyoming. During these workshops, Qwest agreed to several modifications to
22 its SGAT to accommodate CLECs' competitive concerns. All of these modifications

1 have been included in the South Dakota SGAT. In the Multi-State Paper Workshop
2 Final Report the workshop Facilitator states that: ". . . Qwest has supported a finding
3 that this checklist requirement has been met, subject to the completion and commission
4 consideration of the results of any OSS testing that may relate to the item."⁴

5 For these reasons, Qwest satisfies the requirement of Checklist Item 7(l) that it
6 provide nondiscriminatory access to 911 and E911 services.

7 **II. QWEST PROVIDES ACCESS TO 911 AND E911 SERVICES IN**
8 **ACCORDANCE WITH THE 1996 ACT AND THE FCC'S RULES.**

9 Section 271(c)(2)(B)(vii) of the 1996 Act requires Bell Operating Companies
10 ("BOCs") to provide "nondiscriminatory access to - (l) 911 and E911 services."⁵ The
11 FCC has concluded that "section 271 requires a BOC to provide competitors access to
12 its 911 and E911 services in the same manner that a BOC obtains such access, i.e., at
13 parity."⁶

4 Paper Workshop Final Report at 5 (Multi-State Workshop Mar. 19, 2001).

5 47 U.S.C. § 271(c)(2)(B)(vii)(l).

6 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 Texas, Memorandum Opinion and Order, CC Docket No. 00-65, FCC 00-238, 15 FCC Rcd 18354, ¶ 343 (rel. June 30, 2000) ("SBC Texas Order"), citing Application of Ameritech Michigan Pursuant to Section 271 of the Communications Act of 1934, As Amended, To Provide In-Region, InterLATA Services In Michigan, Memorandum Opinion and Order, CC Docket No. 97-187, FCC 97-298, 12 FCC Rcd 20543, ¶ 256 (rel. Aug. 19, 1997) ("Ameritech Michigan Order"); see also Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service In the State of New York, Memorandum Opinion and Order, CC Docket

1 Qwest provides access to 911 and E911 services, databases, and
2 interconnection pursuant to its SGAT and its Commission-approved interconnection
3 agreements. Section 10.3 of Qwest's SGAT establishes that Qwest has concrete and
4 specific legal obligations to provide CLECs with nondiscriminatory access to 911 and
5 E911 services, databases, and interconnection. Qwest's SGAT was updated as a result
6 of consensus reached in collaborative workshop processes, conducted on an open
7 basis with full, active, and equal participation by competitors and state commission
8 staffs. Specifically, Qwest's SGAT was updated with the input of competitors and
9 commission staffs through collaborative Section 271 workshops in Arizona, Colorado,
10 Oregon, Washington, and the Multi-State Section 271 workshops involving Idaho, Iowa,
11 Montana, New Mexico, North Dakota, Utah and Wyoming. During these workshops,
12 Qwest agreed to several modifications to its SGAT to accommodate CLECs'
13 competitive concerns. All of these modifications have been included in the South
14 Dakota SGAT.

15 Enhanced 911 service is available in most of South Dakota. However, three
16 exchanges are still served by Basic 911 services. As of August 31, 2001, Qwest had
17 provided thirteen facilities-based CLECs in South Dakota with access to E911 service
18 with 24,992 customer line records in the E911 database. Qwest also was providing
19 access to 911/E911 service for eight reseller CLECs and five CLECs using Qwest's
20 unbundled switching in South Dakota.

1 **A. Background**

2 The 911/E911 services provide carriers with the ability to aggregate, switch, and
3 transport end user emergency calls to a Public Service Answering Point ("PSAP"),
4 which is operated by the government agency legally responsible for public safety in the
5 state. This government agency determines the type of emergency service (i.e., Basic
6 911 or Enhanced 911), service specifications and configurations, trunking
7 arrangements, and funding that will be implemented. End users originate emergency
8 calls that reach the PSAP by dialing the three-digit emergency telephone number, 9-1-1.

9 Basic 911 service routes all emergency calls made through a given central office
10 ("CO") to a single PSAP. Enhanced 911 service incorporates the Automatic Number
11 Identification ("ANI") feature to forward the end user's telephone number to the PSAP.
12 The E911 service uses the ANI information to retrieve the end user's name and street
13 address from the Automatic Location Identification ("ALI") database and then forwards it
14 to the PSAP. The ALI database is managed for Qwest by a third party,⁷ Intrado Inc.
15 (formerly SCC Communications Corp.). Intrado provides E911 database management
16 services for Qwest and other local exchange carriers.

17 Qwest provides E911 service using the following components:⁸

- 18 • E911 Trunking: E911 trunks interconnect an end office
19 switch – whether owned by Qwest or a CLEC – to the
20 PSAP. E911 trunks extend from an end office switch to a
21 selective router, with separate E911 trunks extending
22 from the selective router to the appropriate PSAP.

7 See SGAT § 10.3.2.14.

8 Exhibit MSB-911-2 is a diagram of the E911 serving arrangement.

- 1
2 • E911 Selective Router: The E911 selective router acts
3 as a tandem switch in the E911 network. It is connected
4 by E911 trunks to each of the end office switches in the
5 geographical area served by the router. The selective
6 router is also connected by E911 trunks to each of the
7 PSAPs served by the router. On a given E911 call, the
8 selective router connects an incoming E911 trunk from
9 an end office to an outgoing E911 trunk connecting to the
10 appropriate PSAP.
- 11
12 • E911 Database: The E911 database is also known as
13 the Automatic Location Identification/Database
14 Management System ("ALI/DMS" or "ALI" database).
15 The E911 database provides the PSAP with the name
16 and street address of the calling party. As noted above,
17 where Qwest provides E911 services, the E911 database
18 is managed by Intrado.

19
20 Qwest provides and maintains equipment at the control office (selective router)
21 as necessary to perform E911 services for CLECs. These services include switching
22 E911 calls through the selective router to the appropriate PSAP and transmitting the
23 ANI associated with a customer, as sent by the CLEC to Qwest's selective router, to the
24 PSAP. Qwest provides and maintains sufficient dedicated E911 circuits between the
25 control office (selective router) and the PSAP based on the requirements of the PSAP.
26 Qwest provides CLECs with a description of the geographic area and the PSAPs served
27 by Qwest's selective routers.

28 When a CLEC routes its emergency traffic from its end office switch over E911
29 trunks to the Qwest selective router, the CLEC must forward the ANI of the calling party.
30 When the emergency call arrives at the selective router, a routing table will identify the
31 PSAP associated with the end user's ANI. The selective router then forwards the E911
32 call along with the calling party's ANI to the designated PSAP over the E911 trunks

1 between the Qwest selective router and the PSAP. The PSAP uses the ANI to query
2 the ALI database which responds with the end user name and address.

3 **B. Qwest Provides Competitors With Access to 911 or E911 Services At**
4 **Parity With the Access it Provides to Itself.**

5 Qwest's SGAT and Commission-approved interconnection agreements ensure
6 that Qwest provides 911 and E911 services and functions to CLECs at parity and with
7 the same level of accuracy and reliability available to Qwest.⁹ From an end user
8 perspective, the 911 and E911 services that CLECs provide, through access to Qwest's
9 911/E911 services, database, and facilities, are indistinguishable from the 911 and
10 E911 services that Qwest provides to its own end user customers.

11 **Qwest Provides CLECs with Documented Methods and Procedures for**
12 **Access to 911/E911 Services.** Qwest's methods and procedures for providing CLECs
13 with access to 911/E911 services are based on the industry guidelines and standards
14 developed by the National Emergency Number Association ("NENA"). These processes
15 are documented for CLECs in Qwest's wholesale Product Catalog ("PCAT").¹⁰ Qwest
16 updates its PCAT periodically to incorporate new legal requirements, enhancements,
17 and changes to NENA guidelines and standards.

18 **CLEC E911 Database Entries Are Maintained With The Same Accuracy And**
19 **Reliability As Qwest's Database Entries.** The FCC has concluded that to satisfy
20 Checklist Item 7(I) of Section 271, a BOC "must maintain the 911 database entries for

⁹ See SGAT § 10.3.2.1.

¹⁰ The wholesale CLEC Product Catalog is available on the Qwest website at:
www.qwest.com/wholesale/pcat/.

1 competing [local exchange carriers] with the same accuracy and reliability that it
2 maintains the database entries for its own customers."¹¹ Qwest's SGAT requires Qwest
3 to provide database entries for CLECs with the same accuracy and reliability that Qwest
4 provides for its own customers.¹² To fulfill this obligation, Qwest has included in its
5 contract with Intrado requirements that Intrado provide ALI database management
6 services to all CLECs and independent companies operating in the Qwest region in a
7 manner that is competitively neutral to, and at parity with, that provided to Qwest.¹³

8 Qwest's SGAT ensures that Qwest will provide ALI database updates for reseller
9 CLECs with the same level of accuracy and reliability as Qwest provides for its own end
10 users.¹⁴ Qwest also provides ALI database updates for CLECs using unbundled local
11 switching in the same manner as Qwest provides ALI database updates for reseller
12 CLECs and Qwest end users.

13 Qwest's performance measures, the Performance Indicator Definitions ("PIDs"),
14 were developed in the Regional Oversight Committee ("ROC") collaborative Section 271
15 performance measures workshops.¹⁵ Those workshops, involving both Qwest and
16 CLECs, were conducted under the auspices of the ROC which is composed of 13 state
17 commissions in the Qwest region, including South Dakota. On September 25, 2001,

¹¹ SBC Texas Order, ¶ 343; Bell Atlantic New York Order, ¶ 343.

¹² See SGAT § 10.3.4.1.

¹³ Exhibit MSB-911-3 is a copy of the portion of Qwest's agreement with Intrado providing for treatment of CLECs at parity with that provided to Qwest.

¹⁴ See SGAT § 10.3.5.1.

1 Liberty Consulting Group, an independent third party retained as part of the ROC OSS
2 Test, completed its audit of Qwest's performance measures (PIDs) and concluded that
3 "the audited performance measures accurately and reliably report actual Qwest
4 performance."¹⁶ Qwest has offered to have Liberty verify its audit by conducting data
5 reconciliation with any CLEC that believes Qwest's performance data is inaccurate. No
6 party has questioned the authenticity or accuracy of the performance data related to
7 Checklist Item 7(I).

8 The PID, DB-1A, "Time to Update Databases," measures the average time
9 required to update the E911 database. In June, July and August 2001, Qwest updated
10 the E911 database for itself, resellers, and CLECs using unbundled switching with an
11 aggregate result that averaged of 6:04, 2:18, 1:44 hours and minutes, respectively.
12 Because the ROC has determined that Qwest provides access that is considered "parity
13 by design," DB-1A does not have a benchmark objective. The length of time to update
14 the E911 database is a function of the number of service orders completed (i.e., number
15 of end user database records that need to be updated). The CLEC and Qwest E911
16 database updates (i.e., completed service orders) are commingled and sent together in
17 a batch data transmission at the end of each business day. Facilities-based CLECs
18 with their own switch, like Qwest, send updates directly to intrado through independent

¹⁵ Exhibit MSB-911-4 are the PIDs for 911/E911.

¹⁶ The Liberty Consulting Group Final Report on the Audit of Qwest's Performance Measures at 2-3. The Final Audit report can be found at: <http://www.nri.ohio-state.edu/oss/master/pid/sept/pmafinalreport.pdf>. A copy of the Audit Report is also attached to Mr. Williams' affidavit as Exhibit MGW-PERF-2.

1 arrangements with Intrado. Thus, the updates are performed in a non-discriminatory
2 manner (i.e., "parity by design").

3 Section 10.3.6.4 of the SGAT provides for nondiscriminatory error correction for
4 both reseller and facilities-based CLEC records entered into the ALI database. For
5 resellers, if Intrado detects an error, it will attempt to correct it. If Intrado is unable to
6 correct the error, Intrado contacts Qwest for error resolution. If Qwest is unable to
7 resolve the error, Qwest will contact the reseller CLEC or CLEC using unbundled
8 switching for resolution. For facilities-based CLECs, Intrado interfaces directly with the
9 CLEC to resolve errors.¹⁷ The database update and error correction processes for
10 reseller and facilities-based CLECs are discussed in further detail below.

11 **Customer Records in the E911 ALI Database Are Not Removed When an**
12 **End User Changes to a New Service Provider.** When an end user changes to a new
13 service provider, records are not removed from the ALI database. For reseller CLECs
14 and CLECs using Qwest unbundled local switching, the end user's existing database
15 record will remain unchanged, unless the end user is changing its telephone number,
16 name, or address. In that case, Qwest will send an update to Intrado.

17 For facilities-based CLECs with their own switching facilities, Intrado has
18 instituted an industry-developed procedure for ensuring that customer records are not
19 removed from the ALI database. Rather than removing the customer record when
20 Qwest sends a disconnect ("migrate") order indicating that an end user has changed
21 service providers, Intrado "unlocks" the record in the ALI database. The "unlocked"

¹⁷ See SGAT § 10.3.6.4.

1 record" remains unchanged in the database. The CLEC then sends a corresponding
2 connect ("migrate") order to Intrado, which "locks" the record and makes the CLEC
3 responsible for the record. These Intrado procedures ensure that an end user's
4 information will not be removed from the E911 database for any period of time when the
5 end user changes service providers. In addition, these procedures ensure that future
6 updates to the end user's record can only be generated by the CLEC.

7 **Qwest's Provision of 911 and E911 Services to Reseller CLECs and CLECs**
8 **Using Unbundled Local Switching.** Qwest provides reseller CLECs and CLECs that
9 purchase unbundled switching with exactly the same 911 and E911 service that Qwest
10 provides to its own customers, using the same shared transport for 911/E911 call
11 delivery, the same service arrangements, and the same standards that Qwest uses.¹⁸
12 These arrangements use trunking already in place: (1) between the switch and the
13 PSAP for Basic 911 service, or (2) for E911 service, between the switch, Qwest's
14 selective router, and the PSAP. A reseller CLEC or a CLEC purchasing unbundled
15 local switching, therefore, need not purchase or employ any special equipment in order
16 for its end user customers to make emergency calls through the 911 or E911 services
17 provided by Qwest.

18 As indicated above, for E911 service, Qwest provides Intrado, the third party
19 database administrator, with updates of customer records for resellers and CLECs
20 using unbundled local switching using the same procedure and at the same time that it
21 provides updates for its own retail customer records. Specifically, record updates for

¹⁸ See SGAT § 10.3.7.5.

1 Qwest, resellers, and CLECs using unbundled local switching are commingled together
2 in the same batch files of completed service orders that Qwest sends to Intrado each
3 evening. The service order entry system makes no distinction between Qwest end
4 users and CLEC end users when processing the updates.

5 If the ALI database detects an error in a service order record, Intrado will attempt
6 to correct it by accessing the information in Qwest's customer records databases. If
7 Intrado is unable to correct the error, Intrado will contact the Qwest service center for
8 assistance. If that is unsuccessful, Qwest will contact the CLEC for resolution.¹⁹
9 Database errors are resolved quickly, as the established practice between Qwest and
10 Intrado is to begin resolution of such errors within 24 hours of Intrado's receipt of the
11 record. Although errors affect the accuracy of the 911 database, they do not affect the
12 ability of a CLEC customer to make emergency calls to the E911 system.

13 **Qwest's Provision of 911 and E911 Services to Facilities-Based CLECs That**
14 **Use Their Own Switching Facilities.** For facilities-based carriers, the FCC found that
15 to comply with Section 271, the BOC must provide not only access to its 911 and E911
16 services in the same manner that a BOC obtains such access, but also "unbundled
17 access to [its] 911 database and 911 interconnection, including the provision of
18 dedicated trunks from the requesting carrier's switching facilities to the 911 control office
19 at parity with what [the BOC] provides to itself."²⁰ Qwest provides facilities-based

¹⁹ See SGAT § 10.3.6.4.

²⁰ SBC Texas Order, ¶ 343, citing Ameritech Michigan Order, ¶ 256; Bell Atlantic New York Order, ¶ 349.

1 CLECs with access to its 911 and E911 services, E911 database, and E911
2 interconnection at parity with that of Qwest in its provision of 911/E911 services to its
3 own retail customers.

4 CLECs that own their own switches provide Basic 911 service by establishing
5 911 trunks, self-provisioned or purchased from Qwest, from their switching facilities
6 directly to the PSAP. Each 911 call received by the CLEC is forwarded from the
7 CLEC's switch over these trunks to the PSAP, which answers the emergency call.
8 Generally, Qwest is not involved in this arrangement except to the extent it has
9 provisioned the trunks between the CLEC's switch and the PSAP.

10 To provide E911 service, CLECs with their own switching facilities establish E911
11 trunks, either self-provisioned or provided by Qwest, from their switches to Qwest's
12 selective router in the same manner that Qwest connects its end office switches to its
13 selective router. Qwest provides CLECs with E911 trunk terminations at the selective
14 router. Qwest's SGAT provides for the provision of interconnection, including the
15 provision of dedicated trunks from a CLEC end office switch to the 911 control office, at
16 parity with what Qwest provides to itself.²¹ Facilities-based CLECs may make direct
17 connections to Qwest frames for E911 trunks through either a direct connection from
18 the CLEC's switch or a direct connection from the CLEC's collocated equipment, in
19 accordance with the FCC's rules. Qwest does not require an intermediate frame for
20 CLEC interconnection.²² CLEC and Qwest emergency calls then use the same

²¹ See SGAT § 10.3.7.4.

²² See SGAT §§ 8.2.1.24-25.

1 selective router and the same E911 trunking facilities from the selective router to the
2 PSAP.

3 Qwest has three performance measures for various aspects of 911/E911 trunk
4 installation: 1) OP-3, "Installation Commitments Met," measures the percentage of
5 911/E911 trunk orders for which the scheduled due date is met; 2) OP-4, "Installation
6 Interval," measures the average interval (in business days) between the application date
7 and the completion date for 911/E911 trunk service orders accepted and implemented;
8 and, 3) OP-6A and OP-6B, "Delayed Days," measure the average number of business
9 days that installation of 911/E911 trunk service is delayed beyond the original due date
10 for non-facility (OP-6A) and facility (OP-6B) reasons attributed to Qwest. The
11 Performance Indicator Definitions ("PIDs") were developed through the ROC
12 collaborative workshops.²³ In South Dakota, there were non-facility related delays
13 reported for five CLEC 911/E911 orders installed in January 2001. In an effort to
14 improve E911 service in South Dakota, Qwest deployed a new E911 tandem switch in
15 Rapid City on January 5, 2001. These orders were Qwest E911 project orders that did
16 not impact service for the CLEC or its customers. These project orders were for trunk
17 rearrangements associated with the deployment of the new E911 tandem in Rapid City,
18 and the delays experienced were associated with the delay of the installation of the new
19 switch from mid-December to January 5, 2001. There have been no other 911/E911
20 orders delayed this year in South Dakota for CLECs or for Qwest. In addition, Qwest
21 has a measure for the quality of its trunk installations with OP-5, "New Service

²³ Exhibit MSB-911-4 are the PIDs for 911/E911.

1 Installation Quality,” that measures the monthly average percentage of new 911/E911
2 trunk installations that are free of trouble reports for 30 calendar days after initial
3 installation. In South Dakota, there have been no troubles reported on the any new
4 trunks installed in 2001.²⁴

5 Qwest also has five performance measures for various aspects of 911/E911
6 trunk repair and trouble clearing: 1) MR-5, “All Troubles Cleared Within 4 Hours,”
7 measures the percentage of trouble reports that are cleared within four hours of receipt
8 of trouble reports from CLECs or from retail customers; 2) MR-6, “Mean Time to
9 Restore,” measures the average time in hours and minutes actually taken to clear
10 trouble reports on 911/E911 trunks; 3) MR-7, “Repair Repeat Report Rate,” measures
11 the percentage of trouble reports for 911/E911 trunks that are repeated within 30
12 calendar days; 4) MR-8, “Trouble Rate,” measures the percentage of trouble reports by
13 product, including 911/E911 trunks, based on the number of lines in service; and 5) MR-
14 10, “Customer and Non-Qwest Related Trouble Reports,” measures the extent that
15 trouble reports were customer related.²⁵ In South Dakota, there have been no troubles
16 reported for CLEC 911/E911 services in the past twelve months.²⁶

17 With respect to the ALI database, facilities-based CLECs that use their own
18 switching facilities, like Qwest, are responsible for providing Intrado with their customer
19 names and addresses. Such facilities-based CLECs also must provide Intrado with

²⁴ Exhibit MSB-911-5 are the performance results for 911/E911 in South Dakota.

²⁵ See Exhibit MSB-911-4.

²⁶ See Exhibit MSB-911-5.

1 updates to their customer records so that Intrado can properly maintain the ALI
2 database. As indicated above, the customer record update process is negotiated
3 between the CLEC and Intrado without the involvement of Qwest.²⁷ Qwest cannot
4 participate in this process because it does not possess the relevant customer
5 information for such CLECs' customers.

6 For error detection and correction in the ALI database, facilities-based CLECs
7 that use their own switching facilities, like Qwest, interface directly with Intrado. Intrado
8 analysts are available to CLECs during normal business hours of operation to reconcile
9 all record errors. The CLEC and Intrado may negotiate a variety of arrangements to
10 address record updates and error detection and correction based on the individual
11 needs of each company.²⁸

12 **Qwest Assists New Facilities-Based CLECs in Establishing Their 911/E911**
13 **Services.** When a new facilities-based CLEC requests service, a Qwest account
14 manager will facilitate the CLEC's 911/E911 service implementation. Qwest will provide
15 all of the necessary information for the CLEC to establish 911/E911 service. The
16 information provided to CLECs includes information about PSAP contacts, PSAP
17 locations and jurisdictions, Emergency Services Numbers, and tandem locations
18 (selective routers).²⁹ Also, Intrado will provide the new CLEC with a copy of the Master

²⁷ See SGAT § 10.3.4 *et seq.*

²⁸ See SGAT § 10.3.6.4.

²⁹ See SGAT §§ 10.3.2.6 - 10.3.2.7.

1 Street Address Guide ("MSAG") with updates of the MSAG provided on a quarterly
2 basis to CLECs and Qwest.³⁰

3 If the CLEC needs further assistance, the Qwest Account Manager will arrange a
4 meeting for the CLEC with the PSAP representatives, Qwest 911 managers, and state
5 regulatory representatives, as needed, to clarify specific state requirements,
6 jurisdictional boundaries, and 911/E911 network requirements. The Qwest Account
7 Manager also can arrange meetings for the CLEC with Qwest technical and marketing
8 personnel to discuss the network serving arrangement and process the appropriate
9 911/E911 trunk request forms.

10 Like Qwest, facilities-based CLECs with their own switching facilities must
11 establish their own service arrangement with Qwest's database provider, Intrado, for
12 loading and maintaining their subscriber information. The Qwest Account Manager will
13 arrange for a meeting between the CLEC and Intrado if desired. Such facilities-based
14 CLECs must also seek approval from the appropriate agencies, including PSAPs and
15 other public agencies for their 911/E911 serving arrangements.

16 **C. 911 and E911 Trunks Are Monitored To Maintain Service Quality.**

17 Like all interconnection trunks, to ensure an appropriate grade of service for 911
18 and E911 service provided to end users, Qwest and facilities-based CLECs must each
19 monitor the 911/E911 trunks from their switch, and install additional trunks as required.
20 In the event a 911 or E911 call is blocked, such blockage must be detected at the
21 originating end office switch. That is because the blocked call does not go beyond the

³⁰ See SGAT § 10.3.3.2.

1 originating end office switch. Both Qwest and facilities-based CLECs, therefore, must
2 each perform studies on their 911 and E911 trunks to determine if sufficient trunks are
3 in place to handle the emergency call volume. This blockage data is shared and
4 discussed with the PSAP operator to ensure mutual agreement on the 911 and E911
5 trunk group sizing requirements between the end office switches and the PSAP or the
6 selective routers.

7 If a facilities-based CLEC determines, with approval by the PSAP operator, that
8 its 911 or E911 trunk quantities are insufficient to handle its emergency call volume, the
9 CLEC may place an order with Qwest for additional 911 or E911 trunks. Trunk
10 additions are made for CLECs on the same terms that Qwest adds trunks for itself. The
11 SGAT requires Qwest to provide trunking to CLECs, including taking corrective action to
12 alleviate 911 and E911 trunk blockages, on a nondiscriminatory basis.³¹

13 **D. Qwest Protects 911 and E911 Trunks.**

14 Qwest provides CLECs with the same circuit identification and protection for
15 911/E911 trunk circuits that it provides for its own 911 and E911 circuits.³² Specifically,
16 Qwest attaches red tags or labels to both Qwest and facilities-based CLEC 911/E911
17 circuits in Qwest central offices to guard against accidental intrusive access. Qwest
18 also has procedures in place to ensure that both Qwest trunks and facilities-based
19 CLEC trunks are not deactivated without adequate notice. Before any 911/E911 trunk
20 can be deactivated by a Qwest employee, the Qwest 911 Center must verify that a valid

³¹ See SGAT §§ 10.3.7.1 - 10.3.7.2.

³² See SGAT § 10.3.7.1.

1 service order request has been submitted. These deactivation procedures apply
2 uniformly to both Qwest and CLEC 911 and E911 trunks.

3 **E. Charges For CLEC Access to 911 and E911 Services.**

4 Qwest does not impose a charge on CLECs in connection with updating the
5 E911 database. Intrado, however, may assess charges on both Qwest and facilities-
6 based CLECs for updates to the ALI database and for other services. Qwest recovers
7 the cost of providing 911/E911 service through the government agency responsible for
8 the emergency service. Qwest bills its end user customers a surcharge which is set by,
9 and remitted by Qwest to, the government agency. Qwest then bills the agency for
10 Qwest's costs of providing the 911/E911 service. Qwest assumes CLECs do the
11 same.³¹

12 **III. RESOLUTION OF ISSUES IN THE MULTI-STATE WORKSHOPS**

13 Qwest has participated in Section 271 collaborative workshops addressing
14 Checklist Item 7(l) in Arizona, Colorado, Oregon, Washington and in the Multi-State
15 proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North
16 Dakota, Utah, and Wyoming. The Multi-State 271 workshop for this Checklist Item was
17 conducted as a "paper" workshop. CLECs, other interested parties, and commission
18 staffs participated in the paper workshop. The interested parties and Qwest filed
19 testimony regarding Qwest's compliance with Checklist Item 7(l). In the Multi-State
20 Paper Workshop Final Report the workshop Facilitator states that: ". . . Qwest has

³¹ See SGAT §§ 10.3.2.10, 10.3.2.13.

1 supported a finding that this checklist requirement has been met, subject to the
2 completion and commission consideration of the results of any OSS testing that may
3 relate to the item.³⁴ In addition, other states have reached a similar conclusion that
4 Qwest satisfies the requirements for Checklist Item 7(l).³⁵ Thus far, every state
5 commission to consider Qwest's compliance with Checklist Item 7(l) has found that
6 Qwest complies with this Checklist Item subject to satisfactory performance in the ROC
7 OSS test.

8 On September 25, 2001, Liberty Consulting Group, an independent third party
9 retained as part of the ROC OSS Test, completed its audit of Qwest's performance
10 measures (PIDs) and concluded that "the audited performance measures accurately
11 and reliably report actual Qwest performance."³⁶ Qwest has offered to have Liberty

³⁴ Paper Workshop Final Report at 5, 32-35 (Multi-State Workshop Mar. 19, 2001).

³⁵ E.g., Investigation Into U S WEST Communications, Inc.'s Compliance With Section 271 of the Telecommunications Act of 1996, Docket No. UT-003022/UT-003040, Commission Order Addressing Workshop One Issues: Checklist Items No. 3, 7, 8, 9, 10, 12, and 13, at 15 (WUTC June 11, 2001); Investigation into the Entry of Qwest Corporation, formerly known as U S WEST Communications, Inc., into In-Region InterLATA Services under Section 271 of the Telecommunications Act of 1996, Docket UM 823, Workshop 1 Findings and Recommendation Report of the Commission, at 11 (Ore. PUC April 16, 2001); In the Matter of U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996, Docket No. T-00000A-97-0238, Decision No. 62344, Findings of Fact (A.C.C. March 6, 2000), In the Matter of U S WEST Communications, Inc., Denver, Colorado, Filing of its Notice of Intention to File Section 271(c) Application with the FCC and Request for Commission to Verify U S WEST Compliance with Section 271(c), Application No. C-1830, Factual Findings and Partial Verification, at 31-35 (NE PSC Apr. 9, 1999).

³⁶ The Liberty Consulting Group Final Report on the Audit of Qwest's Performance Measures at 2-3. The Final Audit report can be found at: <http://www.nrri.ohio->

1 verify its audit by conducting data reconciliation with any CLEC that believes Qwest's
2 performance data is inaccurate. No party has questioned the authenticity or accuracy of
3 the performance data related to Checklist Item 7(l).

4 Also, Qwest's SGAT has been updated as the result of consensus reached in
5 the collaborative workshop processes, conducted on an open basis with full, active, and
6 equal participation by competitors and state commission staffs. Qwest has made the
7 modifications to its SGAT filed in South Dakota consistent with these consensus
8 agreements.

9 IV. SUMMARY AND CONCLUSION

10 As demonstrated herein, Qwest provides CLECs with nondiscriminatory access
11 to 911 and E911 services, databases, and interconnection in compliance with Checklist
12 Item 7(l) of Section 271. Qwest has specific legal commitments in the SGAT and
13 Commission-approved interconnection agreements to make nondiscriminatory access
14 to 911/E911 available to CLECs. Qwest is providing access to 911/E911 services in
15 South Dakota at parity and with the same level of accuracy, reliability, and functionality
16 as that available to Qwest. Liberty Consulting Group has also audited Qwest's
17 performance measures and found that Qwest properly reports its results for the

state.edu/oss/master/pid/sept/pmafinalreport.pdf. A copy of the Audit Report is
also attached to Mr. Williams' affidavit as Exhibit MGW-PERF-2.

1 ~~measures~~ relevant to Checklist Item 7(I). Therefore, the South Dakota Commission
2 ~~should find that Qwest satisfies~~ Checklist Item 7(I) for access to 911 and E911 service.

Being first duly sworn upon oath, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on this 15th day of October, 2001.

Margaret S. Bumgarner
Margaret S. Bumgarner

STATE OF WASHINGTON

COUNTY OF KING

Subscribed and sworn to before me this 15th day of October, 2001.

Elizabeth M. Wilson
Notary Public

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S
EXHIBITS to the AFFIDAVIT
OF
MARGARET S. BUMGARNER
CHECKLIST ITEM 7(I) -- 911 AND E911 ACCESS

October 24, 2001

INDEX TO EXHIBITS

| | <u>DESCRIPTION</u> | <u>EXHIBIT</u> |
|----|---|----------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | Witness Qualifications | MSB-011-1 |
| 8 | E911 Diagram..... | MSB-011-2 |
| 9 | Intrado Inc. (formerly SCC Corporation) contract amendment..... | MSB-011-3 |
| 10 | Performance Indicator Definitions ("PIDs") for 911/E911 | MSB-011-4 |
| 11 | Performance Results for 911/E911 for South Dakota | MSB-011-5 |

1 **QUALIFICATIONS OF MARGARET S. BUMGARNER**

2
3 My name is Margaret S. Bumgarner. My business address is 1600 Seventh
4 Avenue, Seattle, Washington, 98191. I am a Director in the Policy and Law
5 organization at Qwest Corporation ("Qwest").

6 I received a Bachelor of Science Degree in Education/Biology from Washington
7 State University. In 1973, I started working for Pacific Northwest Bell as a supervisor in
8 the network organization. I held several management positions in the network
9 organization, including installation, assignment, installation and repair service centers,
10 network budget analysis, switching operations and network administration staff. In
11 1982, I began working in the Planning and Engineering department doing network
12 planning for divestiture under the Modified Final Judgment, preparing the network equal
13 access compliance plan filed with the Department of Justice, and supervising the staff
14 for switch engineering and network design. In 1986, I became U S WEST's
15 representative to the national industry forums addressing technical network compatibility
16 issues and numbering issues and also managed the network planning groups
17 responsible for numbering and common channel signaling. In recent years, I was
18 responsible for a wide range of federal public policy issues, including numbering,
19 access reform, and interconnection.

20 I am currently a Director in the Policy and Law organization responsible for
21 several Section 271 checklist items and Qwest's filing with the Federal Communications
22 Commission ("FCC"). I base this affidavit on professional experience, personal
23 knowledge, and information available to me in the normal course of my duties, including

1 records kept by Qwest in the regular course of business. Specifically, my experience
2 has allowed me to develop an expertise in several Section 271 checklist areas such that
3 I have testified in the Section 271 workshops in Arizona, Colorado, Oregon,
4 Washington, and the joint seven-state ("Multi-State") workshops involving Idaho, Iowa,
5 Montana, New Mexico, North Dakota, Utah, and Wyoming. I also participated in the
6 Section 271 proceedings in Nebraska.

7 Through my testimony in the Section 271 workshops, I have directly participated
8 in the development and evolution of the terms and conditions of Qwest's Statement of
9 Generally Available Terms and Conditions ("SGAT"). These workshops and
10 proceedings were part of a collaborative process, conducted on an open basis with the
11 full, active, and equal participation by CLECs and state commission staffs. A significant
12 part of this process has involved responding to issues and concerns raised by
13 competitive local exchange carriers ("CLECs") and revising the SGAT when possible to
14 address their needs. I have also been responsible for ensuring that the resolution of
15 issues raised by CLECs have been integrated into the documentation of Qwest's
16 processes, methods and procedures provided to CLECs, that apply in each state of
17 Qwest's 14-state region.

CONTINUATION

[5]

**AMENDMENT #14
TO THE AGREEMENT FOR SERVICES BETWEEN
SCC COMMUNICATIONS CORP. AND
U S WEST COMMUNICATIONS, INC.
(PARITY)**

This Amendment #14 dated November 1, 1999, is executed by and between SCC Communications Corp., ("SCC") and U S WEST Communications, Inc. ("USWC"), collectively referred to herein as "the parties" and modifies the agreement (number 9500050239) between the parties executed on December 28, 1995 (the "Agreement") in the manner provided herein.

Whereas it is the parties' desire to modify the Agreement by expressing their commitment to provide 911 database management services described in the Agreement to all competitive local exchange carriers (CLECs) and independent companies (ICOs) that operate as CLECs in the USWC region (collectively referred to herein as "CLECs"), in a manner that is competitively neutral to, and in parity with, USWC; and

Whereas the parties wish to supercede Amendment 13 which relates to these matters, along with that certain letter agreement dated August 27, 1999 and that certain letter agreement dated September 30, 1999; and

Whereas the parties have set forth herein the manner in which they wish to accomplish these commitments, purposes and goals.

Therefore, in consideration of the foregoing, the parties agree to modify the Agreement as follows:

- I. Services Defined.** As used herein, "Services" means the following basic E911 database management services relating to a particular CLEC's records:
- Service order input (SOI) receipt (electronic and facsimile)
 - Transaction Services System (TSS) SOI processing including Master Street Address Guide (MSAG) validation
 - TSS audit history of the records of a CLEC under a Separate Agreement as requested by that CLEC
 - TSS database updates of the records of a CLEC under a Separate Agreement as requested by that CLEC
 - USWC ALI database updates of the records of a CLEC under a Separate Agreement as requested by that CLEC
 - USWC ALI audit history of the records of a CLEC under a Separate Agreement as requested by that CLEC
 - USWC Selective Router updates of the records of a CLEC under a Separate Agreement as requested by that CLEC

- Confirmation of electronically transmitted SOI file processing and return of errors
- LNP processing
- NPA splits
- Switch Re-homes
- Customer support during normal business hours
- MSAG updates

2. Parity Defined. As used herein, "Parity" means the circumstance, described herein, under which SCC will provide access to the Services to any CLEC that operates within the USWC serving area and that requests such Services. Parity will include the provision of Services in a manner that is equal to or more favorable (to CLECs) than the access, terms and conditions under which SCC provides Services to USWC.

The parties recognize that USWC is required to have access to certain information from the TSS and ALI databases for non-USWC E911 subscriber records pursuant to certain regulatory and contractual obligations. SCC's obligation to provide such access to USWC is described in the Agreement, and nothing herein shall obligate SCC to provide USWC with any more or less access to such information than that which is set forth in the Agreement. Except with respect to SCC's obligation to maintain the confidentiality of a CLEC's E911 subscriber records pursuant to the terms and conditions of a Separate Agreement, and except as may be prohibited by the terms and conditions of the Agreement, nothing herein shall affect USWC's ability to obtain such information for these regulatory and contractual purposes. Nothing herein shall obligate SCC to provide CLECs access to such information for E911 subscriber records of end users other than their own.

3. SCC's Obligation To Provide Services Under Parity Conditions. SCC will provide the Services under Parity conditions, subject to the following conditions:

(a) USWC currently provides, and will continue to provide, E911 subscriber records of certain CLEC's end users among the E911 subscriber records of USWC's end users that USWC provides to SCC. SCC agrees to treat all E911 subscribers records provided by USWC at Parity, regardless of whether the E911 subscriber records are for CLEC end users or USWC end users. Certain CLECs currently receive services directly from SCC, and in the future other CLECs may find it necessary or preferable to receive services directly from SCC. SCC agrees to provide Services to such CLECs at Parity, as defined in this Amendment. To the extent that USWC knows that a CLEC finds it necessary or preferable to receive services directly from SCC, USWC will give SCC reasonable, written notice. SCC shall be permitted to negotiate and enter into agreements directly with such CLECs independent of any control or influence by USWC ("Separate Agreements").

(b) The parties acknowledge that a reasonable time will be required for SCC to provide Services requested by each CLEC via a Separate Agreement. SCC shall be given a reasonable period of time to enter into Separate Agreements and to implement the Services requested

("Parity Readiness"). SCC warrants that it will use its reasonable efforts, and will act in good faith, to facilitate the execution of Separate Agreements and achieve Parity Readiness. The parties hereto acknowledge that, to a significant degree, such CLECs must cooperate with SCC and USWC in this regard in order for these purposes to be accomplished.

(c) It is not the intent of this Amendment to change or modify the business relationships between CLECs and SCC under Separate Agreements or the relationships between USWC and those CLEC whose E911 subscriber records are included along with the E911 subscriber records of USWC. It is not the intent of this Amendment to change or modify the business relationships between PSAPs and USWC, CLECs or SCC. It is not the intent of this Amendment to change the business relationship between USWC and SCC. It is not the intent of this Amendment to modify or change the ownership interests of any party regarding subscriber records. It is not the intent of this Amendment to modify or change the Agreement regarding ownership interests of any party regarding subscriber records. The intent of this Amendment is limited to SCC's agreement to treat all E911 subscriber records provided by USWC at Parity, regardless of whether the E911 subscriber records are for CLEC end users or USWC end users and SCC's agreement to provide Services at Parity for those CLECs with Separate Agreements.

(d) It being understood by the parties that SCC is not a regulated entity as USWC is, notwithstanding any provision herein to the contrary, SCC's obligations hereunder shall be determined by the Agreement as amended, and under no circumstances shall Parity be deemed to impose a contractual or other requirement on SCC that it provide a level of service that exceeds that which is governed by this Agreement or applicable law or regulation, and except as otherwise provided herein, SCC shall not be restricted in establishing such levels of service and associated pricing.

4. Pricing Schedule. SCC shall establish a base-line pricing schedule for the Services which schedule will be offered in connection with Separate Agreements ("Pricing Schedule"), and except as otherwise provided herein, SCC shall have sole discretion and control over same.

5. SCC Discretion To Determine Methods For Achieving Parity.

(a) SCC will have sole discretion as to the technological and operational means by which the Services are made available to CLECs under conditions of Parity. USWC agrees that it will not be a party to or third party beneficiary of any Separate Agreements.

(b) The manner in which SCC will perform under this Amendment shall not constitute a breach of the terms and conditions of the Agreement. The parties agree that, except as is otherwise expressly modified by the provisions hereof, the parties' respective obligations following the execution of this Amendment will be governed by the Agreement.

6. Indemnification. USWC will indemnify SCC as against all claims or suits by CLECs or other third parties alleging that the provision of Parity by SCC violates any law, regulation, contract or any other binding authority.

7. Neutral Third Party. Upon achieving Parity Readiness, SCC will act as a neutral party on behalf of and as between USWC, CLECs and other relevant parties. If, pursuant to law, regulation or order of a government agency having competent jurisdiction, USWC is compelled to demonstrate the elements that underlie Parity, SCC will provide its reasonable cooperation in connection with such demonstration, which cooperation shall include making SCC's relevant records and procedures available for reasonable audit inspections by such authorities.

8. General. The parties agree that Amendment 13, along with that certain letter agreement dated August 27, 1999 and that certain letter agreement dated September 30, 1999, are hereby superceded in their entirety. Except as may otherwise be expressly provided herein, nothing herein shall increase or diminish either Party's obligations as set forth in the Agreement, including USWC's obligations to comply with regulatory or contractual requirements, if any, relating to system integration or basic emergency service provider functions. This Amendment shall become part of the Agreement effective as of the date fully executed by both Parties. All terms and conditions of the Agreement that are not inconsistent herewith and not modified by this Amendment #14 shall remain unaffected and in full force and effect.

WITNESSETH, the parties have indicated their acceptance and agreement to the terms and conditions of this Addendum as indicated by the signatures of the authorized individuals below.

U S WEST COMMUNICATIONS, INC.

SCC COMMUNICATIONS CORP.

Signature

Signature

[Kathryn G. Duncan – Director 11/1/99] _____

[Carol Nelson – CFO 11/1/99] _____

Printed Name and Title

Printed Name and Title

Date

Date

OP-3 -- Installation Commitments Met

Purpose:
 Evaluates the extent to which Qwest installs services for Customers by the scheduled due date.

Description:
 Measures the percentage of orders for which the scheduled due date is met.

- All inward orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period are measured, subject to exclusions specified below. Change order types included in this measurement consist of all C orders representing inward activity (with "T" and "T" action coded line USOCs). ^{NOTE 1} Also included are orders with customer-requested due dates longer than the standard interval.
- Completion date on or before the Applicable Due Date recorded by Qwest is counted as a met due date. The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any.

Reporting Period: One month **Unit of Measure:** Percent

| | |
|---|---|
| Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results | <p>Disaggregation Reporting: Statewide level.</p> <ul style="list-style-type: none"> Results for product/services listed in Product Reporting under "MSA-Type Disaggregation" will be reported according to orders involving: OP-3A Dispatches within MSAs; OP-3B Dispatches outside MSAs; and OP-3C No dispatches. Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to installations: OP-3D In Interval Zone 1 areas; and OP-3E In Interval Zone 2 areas. |
|---|---|

Formula:

$$\left[\frac{\text{Total Orders completed in the reporting period on or before the Applicable Due Date}}{\text{Total Orders Completed in the Reporting Period}} \right] \times 100$$

Explanation: The percent commitments met is obtained by dividing the total number of service orders completed on or before the Applicable Due Date (as defined in the description above) by the total number of service orders completed during the measurement period.

Exclusions:

- Disconnect, From (another form of disconnect) and Record order types.
- Due dates missed for standard categories of customer and non-Qwest reasons. Standard categories of customer reasons are: previous service at the location did not have a customer-requested disconnect order issued, no access to customer premises, and customer hold for payment. Standard categories of non-Qwest reasons are: Weather, Disaster, and Work Stoppage.
- Records involving official company services.
- Records with invalid due dates or application dates.
- Records with invalid completion dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

| Product Reporting: | Standards: |
|----------------------------------|----------------------------|
| MSA-Type Disaggregation - | |
| • Resale | |
| Residential single line service | Parity with retail service |
| Business single line service | Parity with retail service |
| Centrex | Parity with retail service |
| Centrex 21 | Parity with retail service |
| DS0 (non-designed provisioning) | Parity with retail service |

| | |
|---|--|
| PBX Trunks (non-designed provisioning) | Parity with retail service |
| Primary ISDN (non-designed provisioning) | Parity with retail service |
| Basic ISDN (non-designed provisioning) | Parity with retail service |
| Qwest DSL (non-designed provisioning) | Parity with retail service |
| • Unbundled Network Element – Platform (UNE-P) (POTS) | Parity with like retail service |
| • Unbundled Loops: | |
| Analog Loop (non-designed provisioning) | 90% |
| • Shared Loop/Line Sharing | Diagnostic |
| • Sub-Loop Unbundling | Diagnostic |
| Zone-Type Disaggregation - | |
| • Resale | |
| Primary ISDN (designed provisioning) | Parity with retail service |
| Basic ISDN (designed provisioning) | Parity with retail service |
| DS0 (designed provisioning) | Parity with retail service |
| DS1 | Parity with retail service |
| PBX Trunks (designed provisioning) | Parity with retail service |
| Qwest DSL (designed provisioning) | Parity with retail service |
| DS3 and higher bit-rate services (aggregate) | Parity with retail service |
| Frame Relay | Parity with retail service |
| • LIS Trunks | Parity with Feature Group D (aggregate) |
| • Unbundled Dedicated Interoffice Transport (UDIT) | |
| UDIT – DS1 level | Parity with retail DS1 Private Line |
| UDIT – Above DS1 level | Parity with retail Private Lines above DS1 level |
| Dark Fiber – IOF | Diagnostic |
| • Unbundled Loops: | |
| Analog Loop (designed provisioning) | 90% |
| Non-loaded Loop (2-wire) | 90% |
| Non-loaded Loop (4-wire) | Parity with retail DS1 Private Line |
| DS1-capable Loop | Parity with retail DS1 Private Line |
| ISDN-capable Loop | Parity with retail ISDN BRI |
| ADSL-qualified Loop | 90% |
| Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate Private Line services (aggregate) |
| Dark Fiber – Loop | Diagnostic |
| Loops with Conditioning | 90% |
| • E911/911 Trunks | Parity with retail E911/911 Trunks |
| • Enhanced Extended Links (EELs) | Diagnostic |
| Availability: Available | Notes: 1. Prior to Aug 01 results the specified Change order types (i.e., with "I" & "T" action codes) included some orders that do not strictly represent additional lines (in both wholesale and retail results). Specifically these include changes to existing lines, such as conversions, number changes, PIC changes, and class of service changes. Beginning with Aug 01 results Qwest developed the capability to exclude "Change" service orders that do not involve installation of lines. |

OP-4 – Installation Interval

Purpose:
 Evaluates the timeliness of Qwest's installation of services for customers, focusing on the average time to install service.

Description:
 Measures the average interval (in business days)^{NOTE 1} between the application date and the completion date for service orders accepted and implemented.

- Includes all inward orders (Change, New, and Transfer order types) assigned a due date by Qwest and which are completed/closed during the reporting period, subject to exclusions specified below. Change order types for additional lines consist of all C orders representing inward activity (with "I" and "T" action coded line USOCs).^{NOTE 2}
- Intervals for each measured event are counted in whole days: the application date is day zero (0); the day following the application date is day one (1).
- The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any.^{NOTE 3}
- Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date, as applied in the formula below, are calculated by subtracting the latest Qwest-initiated due date, if any, following the Applicable Due Date, from the subsequent customer-initiated due date, if any.^{NOTE 4}

| | |
|------------------------------------|---|
| Reporting Period: One month | Unit of Measure: Average Business Days |
|------------------------------------|---|

| | |
|---|---|
| Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results | Disaggregation Reporting: Statewide level. <ul style="list-style-type: none"> • Results for product/services listed in Product Reporting under "MSA-Type Disaggregation" will be reported according to orders involving: <ul style="list-style-type: none"> OP-4A Dispatches within MSAs; OP-4B Dispatches outside MSAs; and OP-4C No dispatches. Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to installations: <ul style="list-style-type: none"> OP-4D In Interval Zone 1 areas; and OP-4E In Interval Zone 2 areas. |
|---|---|

Formula:

$$\frac{\sum[(\text{Order Completion Date}) - (\text{Order Application Date}) - (\text{Time interval between the Original Due Date and the Applicable Date}) - (\text{Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date})]}{\text{Total Number of Orders Completed in the reporting period}}$$

Explanation: The average installation interval is derived by dividing the sum of installation intervals for all orders (in business days)^{NOTE 1} by total number of service orders completed in the reporting period.

Exclusions:

- Orders with customer requested original due dates greater than the current standard interval. (This exclusion does not apply to LIS trunks, E911 and products involving dispatches reported under "MSA-Type Disaggregation," for which orders for all requested intervals are included. These exceptions to this exclusion will be removed as Qwest develops the corresponding measurement capability, at which time this definition will be updated.)
- Disconnect, From (another form of disconnect) and Record order types.
- Records involving official company services.
- Records with invalid due dates or application dates.
- Records with invalid completion dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

| | |
|--|-------------------|
| Product Reporting: MSA-Type Disaggregation - | Standards: |
|--|-------------------|

| | |
|---|---|
| * Resale | |
| Residential single line service | Parity with retail service |
| Business single line service | Parity with retail service |
| Centrex | Parity with retail service |
| Centrex 21 | Parity with retail service |
| DS0 (non-designed provisioning) | Parity with retail service |
| PBX Trunks (non-designed provisioning) | Parity with retail service |
| Primary ISDN (non-designed provisioning) | Parity with retail service |
| Basic ISDN (non-designed provisioning) | Parity with retail service |
| Qwest DSL (non-designed provisioning) | Parity with retail service |
| * Unbundled Network Element – Platform (UNE-P) (POTS) | Parity with like retail service |
| * Unbundled Loops: | |
| Analog Loop (non-designed provisioning) | 6 days |
| * Shared Loop/Line Sharing | Diagnostic |
| * Sub-Loop Unbundling | Diagnostic |
| Zone-Type Disaggregation - | |
| * Resale | |
| Primary ISDN (designed provisioning) | Parity with retail service |
| Basic ISDN(designed provisioning) | Parity with retail service |
| DS0 (designed provisioning) | Parity with retail service |
| DS1 | Parity with retail service |
| PBX Trunks (designed provisioning) | Parity with retail service |
| Qwest DSL (designed provisioning) | Parity with retail service |
| DS3 and higher bit-rate services (aggregate) | Parity with retail service |
| Frame Relay | Parity with retail service |
| * LIS Trunks | Parity with Feature Group D (aggregate) |
| * Unbundled Dedicated Interoffice Transport (UDIT) | |
| UDIT – DS1 level | Parity with DS1 Private Line Service |
| UDIT – Above DS1 level | Parity with Private Lines above DS1 level |
| Dark Fiber – IOF | Diagnostic |
| * Unbundled Loops: | |
| Analog Loop (designed provisioning) | 6 days |
| Non-loaded Loop (2-wire) | 6 days |
| Non-loaded Loop (4-wire) | Parity with retail DS1 Private Line |
| DS1-capable Loop | Parity with retail DS1 Private Line |
| ISDN-capable Loop | Parity with retail ISDN BRI |
| ADSL-qualified Loop | 6 days |
| Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate services (aggregate) |
| Dark Fiber – Loop | Diagnostic |
| Loops with Conditioning | 16.5 days |
| * E911/911 Trunks | Parity with retail E911/911 Trunks |
| * Enhanced Extended Links (EELs) | Diagnostic |
| Availability: Available: | Notes: 1. Saturday is counted as a business day when the service order is completed on Saturday. 2. Prior to Aug 01 results the specified Change order types (i.e., with "T" & "T" action codes) included some orders that do not strictly represent additional lines (in both wholesale and retail results). Specifically these include |

changes to existing lines, such as conversions, number changes, PIC changes, and class of service changes. Beginning with Aug 01 results Qwest developed the capability to exclude "Change" service orders that do not involve installation of lines.

3. According to this definition, the Applicable Due Date can change, per successive customer-initiated due date changes or delays, up to the point when a Qwest-initiated due date change occurs. At that point, the Applicable Due Date becomes fixed (i.e., with no further changes) as the date on which it was set prior to the first Qwest-initiated due date change, if any. Following the first Qwest-initiated due date change, any further customer-initiated due date changes or delays are measured as time intervals that are subtracted as indicated in the formula. These delay time intervals are calculated as stated in the description. (Though infrequent in cases where multiple Qwest-initiated due date changes occur, the stated method for calculating delay intervals is applied to each pair of Qwest-initiated due date change and subsequent customer-initiated due date change or delay. The intervals thus calculated from each pairing of Qwest and customer-initiated due dates are summed and then subtracted as indicated in the formula.) The result of this approach is that Qwest-initiated impacts on intervals are counted in the reported interval, and customer-initiated impacts on intervals are not counted in the reported interval.

OP-6 – Delayed Days

Purpose:

Evaluates the extent Qwest is late in installing services for customers, focusing on the average number of days that late orders are completed beyond the committed due date.

Description:

OP-6A – Measures the average number of business days ^{NOTE 1} that service is delayed beyond the Applicable Due Date for non-facility reasons attributed to Qwest.

- Includes all inward orders (Change, New, and Transfer order types) that are completed/delivered during the reporting period, later, due to non-facility reasons, than the Applicable Due Date recorded by Qwest, , subject to exclusions specified below.

OP-6B – Measures the average number of business days ^{NOTE 1} that service is delayed beyond the Applicable Due Date for facility reasons attributed to Qwest.

- Includes all inward orders (Change, New, and Transfer order types) that are completed/delivered during the reporting period later due to facility reasons than the original due date recorded by Qwest, subject to exclusions specified below.

For both OP-6A and OP-6B:

- Change order types for additional lines consist of "C" orders with "I" and "T" action coded line USOCs. ^{NOTE 2}
- The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any. ^{NOTE 1}
- Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date, as applied in the formula below, are calculated by subtracting the latest Qwest-initiated due date, if any, following the Applicable Due Date, from the subsequent customer-initiated due date, if any. ^{NOTE 2}

Reporting Period: One month

Unit of Measure: Average Business Days

Reporting

Comparisons:
 CLEC aggregate,
 individual CLEC
 and Qwest Retail
 results

Disaggregation Reporting: Statewide level.

- Results for products/services listed under Product Reporting under "MSA-type Disaggregation" will be reported for OP-6A and OP-6B according to orders meeting:

1. Dispatches within MSAs;
2. Dispatches outside MSAs; and
3. No dispatches.

Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to installations:

4. In Interval Zone 1 areas; and
5. In Interval Zone 2 areas.

Formula:

OP-6A = $\frac{\sum[(\text{Actual Completion Date of late order for non-facility reasons}) - (\text{Applicable Due Date of late order}) - (\text{Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date})]}{(\text{Total Number of Late Orders for non-facility reasons completed in the reporting period})}$

OP-6B = $\frac{\sum[(\text{Actual Completion Date of late order for facility reasons}) - (\text{Applicable Due Date of late order}) - (\text{Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date})]}{(\text{Total Number of Late Orders for facility reasons completed in the reporting period})}$

Exclusions:

- Disconnect, From (another form of disconnect) and Record order types.
- Records involving official company services.
- Records with invalid due dates or application dates.

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|---|--------------------------------------|----------------------------|------------------------------------|----------------------------|-----------------------------|----------------------------|------------|----------------------------|------------------------------------|----------------------------|--|----------------------------|--|----------------------------|--|----------------------------|--|---|------------------|---|---|--|--------------------------|------------|-------------------------------------|---|--------------------------|-----------------------------|--------------------------|-------------------------------------|------------------|-------------------------------------|-------------------|-----------------------------|---------------------|---|--|--|-------------------|------------|--------------------------------|------------------------------------|--|------------|
| <ul style="list-style-type: none"> Records with invalid completion dates. Records with invalid product codes. Records missing data essential to the calculation of the measurement per the PID. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Product Reporting: | Standards: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MSA-Type Disaggregation - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Resale - <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Residential single line service</td> <td style="width: 50%;">Parity with retail service</td> </tr> <tr> <td>Business single line service</td> <td>Parity with retail service</td> </tr> <tr> <td>Centrex</td> <td>Parity with retail service</td> </tr> <tr> <td>Centrex 21</td> <td>Parity with retail service</td> </tr> <tr> <td>DS0 (non-designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>PBX Trunks (non-designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>Primary ISDN (non-designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>Basic ISDN (non-designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>Qwest DSL (non-designed provisioning)</td> <td>Parity with retail service</td> </tr> </table> Unbundled Network Element - Platform (UNE-P) (POTS) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Unbundled Loops:</td> <td style="width: 50%;"></td> </tr> <tr> <td>Analog Loop (non-designed provisioning)</td> <td>Parity with retail Res and Bus POTS with dispatch</td> </tr> <tr> <td>Shared Loop/Line Sharing</td> <td>Diagnostic</td> </tr> <tr> <td>Sub-Loop Unbundling</td> <td>Diagnostic</td> </tr> </table> | | Residential single line service | Parity with retail service | Business single line service | Parity with retail service | Centrex | Parity with retail service | Centrex 21 | Parity with retail service | DS0 (non-designed provisioning) | Parity with retail service | PBX Trunks (non-designed provisioning) | Parity with retail service | Primary ISDN (non-designed provisioning) | Parity with retail service | Basic ISDN (non-designed provisioning) | Parity with retail service | Qwest DSL (non-designed provisioning) | Parity with retail service | Unbundled Loops: | | Analog Loop (non-designed provisioning) | Parity with retail Res and Bus POTS with dispatch | Shared Loop/Line Sharing | Diagnostic | Sub-Loop Unbundling | Diagnostic | | | | | | | | | | | | | | | | | | |
| Residential single line service | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Business single line service | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Centrex | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Centrex 21 | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DS0 (non-designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PBX Trunks (non-designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Primary ISDN (non-designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basic ISDN (non-designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Qwest DSL (non-designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unbundled Loops: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analog Loop (non-designed provisioning) | Parity with retail Res and Bus POTS with dispatch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shared Loop/Line Sharing | Diagnostic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sub-Loop Unbundling | Diagnostic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Zone-type Disaggregation - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Resale <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Primary ISDN (designed provisioning)</td> <td style="width: 50%;">Parity with retail service</td> </tr> <tr> <td>Basic ISDN (designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>DS0 (designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>DS1</td> <td>Parity with retail service</td> </tr> <tr> <td>PBX Trunks (designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>Qwest DSL (designed provisioning)</td> <td>Parity with retail service</td> </tr> <tr> <td>DS3 and higher bit-rate services (aggregate)</td> <td>Parity with retail service</td> </tr> <tr> <td>Frame Relay</td> <td>Parity with retail service</td> </tr> </table> LIS Trunks <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Unbundled Dedicated Interoffice Transport (UDIT)</td> <td style="width: 50%;">Parity with Feature Group D (aggregate)</td> </tr> <tr> <td>UDIT - DS1 level</td> <td>Parity with retail DS1 Private Line Service</td> </tr> <tr> <td>UDIT - Above DS1 level</td> <td>Parity with retail Private Line Services above DS1 level</td> </tr> <tr> <td>Dark fiber - IOF</td> <td>Diagnostic</td> </tr> </table> Unbundled Loops: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Analog Loop (designed provisioning)</td> <td style="width: 50%;">Parity with retail Res and Bus POTS with dispatch</td> </tr> <tr> <td>Non-loaded Loop (2-wire)</td> <td>Parity with retail ISDN BRI</td> </tr> <tr> <td>Non-loaded Loop (4-wire)</td> <td>Parity with retail DS1 Private Line</td> </tr> <tr> <td>DS1-capable Loop</td> <td>Parity with retail DS1 Private Line</td> </tr> <tr> <td>ISDN-capable Loop</td> <td>Parity with retail ISDN BRI</td> </tr> <tr> <td>ADSL-qualified Loop</td> <td>Parity with retail Qwest DSL, with dispatch</td> </tr> <tr> <td>Loop types of DS3 and higher bit-rates (aggregate)</td> <td>Parity with retail DS3 and higher bit-rate Private Line services (aggregate)</td> </tr> <tr> <td>Dark Fiber - Loop</td> <td>Diagnostic</td> </tr> </table> E911/911 Trunks <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Enhanced Extended Links (EELs)</td> <td style="width: 50%;">Parity with retail E911/911 Trunks</td> </tr> </table> Enhanced Extended Links (EELs) <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;">Diagnostic</td> </tr> </table> | | Primary ISDN (designed provisioning) | Parity with retail service | Basic ISDN (designed provisioning) | Parity with retail service | DS0 (designed provisioning) | Parity with retail service | DS1 | Parity with retail service | PBX Trunks (designed provisioning) | Parity with retail service | Qwest DSL (designed provisioning) | Parity with retail service | DS3 and higher bit-rate services (aggregate) | Parity with retail service | Frame Relay | Parity with retail service | Unbundled Dedicated Interoffice Transport (UDIT) | Parity with Feature Group D (aggregate) | UDIT - DS1 level | Parity with retail DS1 Private Line Service | UDIT - Above DS1 level | Parity with retail Private Line Services above DS1 level | Dark fiber - IOF | Diagnostic | Analog Loop (designed provisioning) | Parity with retail Res and Bus POTS with dispatch | Non-loaded Loop (2-wire) | Parity with retail ISDN BRI | Non-loaded Loop (4-wire) | Parity with retail DS1 Private Line | DS1-capable Loop | Parity with retail DS1 Private Line | ISDN-capable Loop | Parity with retail ISDN BRI | ADSL-qualified Loop | Parity with retail Qwest DSL, with dispatch | Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate Private Line services (aggregate) | Dark Fiber - Loop | Diagnostic | Enhanced Extended Links (EELs) | Parity with retail E911/911 Trunks | | Diagnostic |
| Primary ISDN (designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Basic ISDN (designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DS0 (designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DS1 | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PBX Trunks (designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Qwest DSL (designed provisioning) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DS3 and higher bit-rate services (aggregate) | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frame Relay | Parity with retail service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unbundled Dedicated Interoffice Transport (UDIT) | Parity with Feature Group D (aggregate) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UDIT - DS1 level | Parity with retail DS1 Private Line Service | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UDIT - Above DS1 level | Parity with retail Private Line Services above DS1 level | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dark fiber - IOF | Diagnostic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analog Loop (designed provisioning) | Parity with retail Res and Bus POTS with dispatch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Non-loaded Loop (2-wire) | Parity with retail ISDN BRI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Non-loaded Loop (4-wire) | Parity with retail DS1 Private Line | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DS1-capable Loop | Parity with retail DS1 Private Line | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ISDN-capable Loop | Parity with retail ISDN BRI | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADSL-qualified Loop | Parity with retail Qwest DSL, with dispatch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate Private Line services (aggregate) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dark Fiber - Loop | Diagnostic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Enhanced Extended Links (EELs) | Parity with retail E911/911 Trunks | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Diagnostic | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Availability: | Notes: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Available | <ol style="list-style-type: none"> Saturday is counted as a business day when the service order is completed on Saturday. Prior to Aug 01 results the specified Change order types (i.e., with 'T' & 'F') | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

action codes) included some orders that do not strictly represent additional lines (in both wholesale and retail results). Specifically these include changes to existing lines, such as conversions, number changes, PIC changes, and class of service changes. Beginning with Aug 01 results Qwest developed the capability to exclude "Change" service orders that do not involve installation of lines.

3. According to this definition, the Applicable Due Date can change, per successive customer-initiated due date changes or delays, up to the point when a Qwest-initiated due date change occurs. At that point, the Applicable Due Date becomes fixed (i.e., with no further changes) as the date on which it was set prior to the first Qwest-initiated due date change, if any. Following the first Qwest-initiated due date change, any further customer-initiated due date changes or delays are measured as time intervals that are subtracted as indicated in the formula. These delay time intervals are calculated as stated in the description. (Though infrequent, in cases where multiple Qwest-initiated due date changes occur, the stated method for calculating delay intervals is applied to each pair of Qwest-initiated due date change and subsequent customer-initiated due date change or delay. The intervals thus calculated from each pairing of Qwest and customer-initiated due dates are summed and then subtracted as indicated in the formula.) The result of this approach is that Qwest-initiated impacts on intervals are counted in the reported interval, and customer-initiated impacts on intervals are not counted in the reported interval.

OP-15 – Interval for Pending Orders Delayed Past Due Date

Purpose:

Evaluates the extent to which Qwest's pending orders are late, focusing on the average number of days the pending orders are delayed past the Applicable Due Date, as of the end of the reporting period.

Description:

OP-15A – Measures the average number of business days that pending orders are delayed beyond the Applicable Due Date for reasons attributed to Qwest.

- Includes all pending inward orders (Change, New, and Transfer order types) for which the Applicable Due Date recorded by Qwest has been missed, subject to exclusions specified below. Change order types included in this measurement consist of all "C" orders representing inward activity (with "I" and "T" action coded line USOCs).^{NOTE 2}
- The Applicable Due Date is the original due date or, if changed or delayed by the customer, the most recently revised due date, subject to the following: If Qwest changes a due date for Qwest reasons, the Applicable Due Date is the customer-initiated due date, if any, that is (a) subsequent to the original due date and (b) prior to a Qwest-initiated, changed due date, if any.^{NOTE 3}
- Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date, as applied in the formula below, are calculated by subtracting the latest Qwest-initiated due date, if any, following the Applicable Due Date, from the subsequent customer-initiated due date, if any.^{NOTE 3}

OP-15B – Reports the number of pending orders measured in the numerator of OP-15A that were delayed for Qwest facility reasons.

Reporting Period: One month

Unit of Measure:

OP-15A – Average Business Days
 OP-15B – Number of orders pending facilities

Reporting Comparisons:

CLEC aggregate, individual CLEC, Qwest retail

Disaggregation Reporting:

Statewide level

Formula:

OP-15A = $\frac{\sum[(\text{Last Day of Reporting Period}) - (\text{Applicable Due Date of Late Pending Order}) - (\text{Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date})]}{(\text{Total Number of Pending Orders Delayed for Qwest reasons as of the last day of Reporting Period})}$

OP-15B = (Count of pending orders measured in numerator of OP-15A that were delayed for Qwest facility reasons)

Exclusions:

- Disconnect, From (another form of disconnect) and Record order types.
- Records involving official company services.
- Records with invalid due dates or application dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

Product Reporting:

Standards: OP-15B = diagnostic only
 For OP-15A:

| | |
|--|--|
| • Resale | |
| Residential single line service | Diagnostic (Expectation: Parity with retail service) |
| Business single line service | Diagnostic (Expectation: Parity with retail service) |
| Centrex | Diagnostic (Expectation: Parity with retail service) |
| Centrex 21 | Diagnostic (Expectation: Parity with retail service) |
| PBX Trunk | Diagnostic (Expectation: Parity with retail service) |
| Basic ISDN | Diagnostic (Expectation: Parity with retail service) |
| Qwest DSL | Diagnostic (Expectation: Parity with retail service) |
| Primary ISDN | Diagnostic (Expectation: Parity with retail service) |
| DS0 | Diagnostic (Expectation: Parity with retail service) |
| DS1 | Diagnostic (Expectation: Parity with retail service) |
| DS3 and higher bit-rate services (aggregate) | Diagnostic (Expectation: Parity with retail service) |

| | |
|---|--|
| Frame Relay | Diagnostic (Expectation: Parity with retail service) |
| • Unbundled Network Element – Platform (UNE-P) (POTS) | Diagnostic (Expectation: Parity with retail service) |
| • Shared Loop/Line Sharing | Diagnostic |
| • Sub-Loop Unbundling | Diagnostic |
| • LIS Trunks | Diagnostic (Expectation: Parity with Feature Group D (aggregate)) (separately reported) |
| • Unbundled Dedicated Interoffice Transport (UDIT) | |
| UDIT – DS1 level | Diagnostic (Expectation: Parity with DS1 Private Line Service) |
| UDIT – Above DS1 level | Diagnostic (Expectation: Parity with Private Line Services above DS1 level) |
| Dark Fiber – IOF | Diagnostic |
| • Unbundled Loops: | |
| Analog Loop | Diagnostic (Expectation: Parity with retail Res and Bus POTS with dispatch) |
| Non-loaded Loop (2-wire) | Diagnostic (Expectation: Parity with retail ISDN BRI) |
| Non-loaded Loop (4-wire) | Diagnostic (Expectation: Parity with retail DS1) |
| DS1-capable Loop | Diagnostic (Expectation: Parity with retail DS1) |
| ISDN-capable Loop | Diagnostic (Expectation: Parity with ISDN BRI) |
| ADSL-qualified Loop | Diagnostic (Expectation: Parity with retail Qwest DSL with dispatch) |
| Loop types of DS3 or higher bit rate (aggregate) | Diagnostic (Expectation: Parity with retail DS3 and higher bit-rate services (aggregate)) |
| Dark Fiber – Loop | Diagnostic |
| • E911/911 Trunks | Diagnostic (Expectation: Parity with retail E911/911 Trunks) |
| • Enhanced Extended Links (EELs) | Diagnostic |
| Availability: Available | <p>Notes:</p> <ol style="list-style-type: none"> Through Jan 01 results reported include products that flow through the design process only. Beginning with Feb 01, results reported include both design flow and non-design flow for products. Prior to Aug 01 results the specified Change order types (i.e., with "I" & "F" action codes) included some orders that do not strictly represent additional lines (in both wholesale and retail results). Specifically these include changes to existing lines, such as conversions, number changes, PIC changes, and class of service changes. Beginning with Aug 01 results Qwest developed the capability to exclude "Change" service orders that do not involve installation of lines. According to this definition, the Applicable Due Date can change, per successive customer-initiated due date changes or delays, up to the point when a Qwest-initiated due date change occurs. At that point, the Applicable Due Date becomes fixed (i.e., with no further changes) as the date on which it was set prior to the first Qwest-initiated due date change, if any. Following the first Qwest-initiated due date change, any further customer-initiated due date changes or delays are measured as time intervals that are subtracted as indicated in the formula. These delay time intervals are calculated as stated in the description. (Though infrequent, in cases where multiple Qwest-initiated due date changes occur, the stated method for calculating delay intervals is applied to each pair of Qwest-initiated due date change and subsequent customer-initiated due date change or delay. The intervals thus calculated from each pairing of Qwest and customer-initiated due dates are summed and then subtracted as indicated in the formula.) The result of this approach is that Qwest-initiated impacts on intervals are counted in the reported interval, and customer-initiated impacts on intervals are not counted in the reported interval. |

MR-5 - All Troubles Cleared within 4 hours

Purpose:

Evaluates timeliness of repair for specified services, focusing on all trouble reports of all types (including out of service and service affecting troubles) and on the number of such trouble reports cleared within the standard estimate for specified services (i.e., 4 hours).

Description:

Measures the percentage of trouble reports for specified services that are cleared within 4 hours of receipt of trouble reports from CLECs or from retail customers.

- Includes all trouble reports, closed during the reporting period, which involve a specified service, subject to exclusions specified below.
- Time measured is from date and time of receipt to date and time trouble is cleared.

Reporting Period: One month

Unit of Measure: Percent

Reporting Comparisons:

CLEC aggregate, individual
 CLEC and Qwest Retail results

Disaggregation Reporting: Statewide level.

Results for listed products will be disaggregated according to trouble reports:
 MR-5A In Interval Zone 1 areas; and
 MR-5B In Interval Zone 2 areas.

Formula:

$$\frac{\text{Number of Trouble Reports closed in the reporting period that are cleared within 4 hours}}{\text{Total Trouble Reports closed in the reporting period}} \times 100$$

Exclusions:

- Trouble reports coded as follows:
 - For products measured using WFA (Workforce Administration) data (products listed for Zone-type disaggregation) trouble reports coded to trouble codes for Carrier Action (IEC) and Customer Provided Equipment (CPE).
- Subsequent trouble reports of any trouble before the original trouble report is closed.
- Information tickets generated for internal Qwest system/network monitoring purposes.
- Time delays due to "no access" are excluded from repair time.
- Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete.
- Records involving official company services.
- Records with invalid trouble receipt dates.
- Records with invalid cleared or closed dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

Product Reporting:

Standards:

Zone-Type Disaggregation -

• **Resale:**

Primary ISDN

Parity with retail service

DS0

Parity with retail service

DS1

Parity with retail service

DS3 and higher bit-rate services

Parity with retail service

(aggregate)

Frame Relay

Parity with retail service

• **LIS Trunks**

Parity with Feature Group D (aggregate)

• **Unbundled Dedicated Interoffice Transport (UDIT)**

UDIT - DS1 level

Parity with DS1 Private Line Service

UDIT - Above DS1 level

Parity with Private Line- Services above DS1 level

• **Unbundled Loops:**

Non-loaded Loop (4-wire)

Parity with retail DS1

DS1-capable Loop

Parity with retail DS1

| | |
|--|---|
| Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate services (aggregate) |
| <ul style="list-style-type: none">• E911/911 Trunks• Enhanced Extended Links (EELs) | Parity with retail E911/911 Trunks |
| Availability: Available | Diagnostic |
| | Notes: |

MR-6 – Mean Time to Restore

| | |
|---|---|
| Purpose: Evaluates timeliness of repair, focusing how long it takes to restore services to proper operation. | |
| Description: Measures the time actually taken to clear trouble reports. <ul style="list-style-type: none"> • Includes all trouble reports closed during the reporting period, subject to exclusions specified below. • Includes customer direct reports, customer-relayed reports, and test assist reports that result in a trouble report. • Time measured is from date and time of receipt to date and time trouble is cleared. | |
| Reporting Period: One month | Unit of Measure: Hours and Minutes |
| Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results | Disaggregation Reporting: Statewide level. <ul style="list-style-type: none"> • Results for product/services listed in Product Reporting under "MSA-Type Disaggregation" will be reported according to trouble reports involving: MR-6A Dispatches within MSAs; MR-6B Dispatches outside MSAs; and MR-6C No dispatches. • Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to trouble reports involving: MR-6D In Interval Zone 1 areas; and MR-6E In Interval Zone 2 areas. |
| Formula: $\frac{\sum[(\text{Date \& Time Trouble Report Cleared}) - (\text{Date \& Time Trouble Report Opened})]}{(\text{Total number of Trouble Reports closed in the reporting period})}$ | |
| Exclusions: <ul style="list-style-type: none"> • Trouble reports coded as follows: <ul style="list-style-type: none"> • For products measured from MTAS data (products listed for MSA-type disaggregation), trouble reports coded to disposition codes for: Customer Action (6); Non-Telco Plant (11); Trouble Beyond the Network Interface (12); and Miscellaneous – Non-Dispatch, non-Qwest (Includes CPE, Customer Instruction, Carrier, Alternate Provider (13); • For products measured from WFA (Workforce Administration) data (products listed for Zone-type disaggregation) trouble reports coded to trouble codes for Carrier Action (IEC) and Customer Provided Equipment (CPE). • Subsequent trouble reports of any trouble before the original trouble report is closed. • Information tickets generated for internal Qwest system/network monitoring purposes. • Time delays due to "no access" are excluded from repair time for products/services listed in Product Reporting under "Zone-type Disaggregation". • For products measured from MTAS data (products listed for MSA-type disaggregation), trouble reports involving a "no access" delay. • Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete. • Records involving official company services. • Records with invalid trouble receipt dates. • Records with invalid cleared or closed dates. • Records with invalid product codes. • Records missing data essential to the calculation of the measurement per the PID. | |
| Product Reporting: | Standards: |
| MSA-Type Disaggregation - | |
| • Resale | |
| Residential single line service | Parity with retail service |
| Business single line service | Parity with retail service |
| Centrex | Parity with retail service |
| Centrex 21 | Parity with retail service |
| PBX Trunks | Parity with retail service |

| | |
|---|--|
| Basic ISDN | Parity with retail service |
| • Unbundled Network Element – Platform (UNE-P) (POTS) | Parity with like retail service |
| • Shared Loop/Line Sharing | Parity with RES and BUS POTS |
| • Sub-Loop Unbundling | Diagnostic |
| Zone-Type Disaggregation - | |
| • Resale | |
| Qwest DSL | Parity with retail service |
| Primary ISDN | Parity with retail service |
| DS0 | Parity with retail service |
| DS1 | Parity with retail service |
| DS3 and higher bit-rate services (aggregate) | Parity with retail service |
| Frame Relay | Parity with retail service |
| • LIS Trunks | Parity with Feature Group D (aggregate) |
| • Unbundled Dedicated Interoffice Transport (UDIT) | |
| UDIT – DS1 level | Parity with retail DS1 Private Line |
| UDIT – Above DS1 level | Parity with retail Private Lines above DS1 level |
| Dark Fiber – IOF | Diagnostic |
| • Unbundled Loops: | |
| Analog Loop | Parity with retail Res and Bus POTS |
| Non-loaded Loop (2-wire) | Parity with retail ISDN BRI |
| Non-loaded Loop (4-wire) | Parity with retail DS1 Private Line |
| DS1-capable Loop | Parity with retail DS1 Private Line |
| ISDN-capable Loop | Parity with retail ISDN BRI |
| ADSL-qualified Loop | Parity with retail Qwest DSL |
| Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate Private Line services (aggregate) |
| Dark Fiber – Loop | Diagnostic |
| • E911/911 Trunks | Parity with retail E911/911 Trunks |
| • Enhanced Extended Links (EELs) | Diagnostic |
| Availability: Available (except as noted below) Under Development: Retail comparable for Shared Loop/Line Sharing - TBD | Notes: Saturday is counted as a business day when the repair is completed on Saturday. |

MR-7 - Repair Repeat Report Rate

Purpose:
 Evaluates the accuracy of repair actions, focusing on the number of repeated trouble reports received for the same trouble within a specified period (30 calendar days).

Description:
 Measures the percentage of trouble reports that are repeated within 30 days on end user lines and circuits.

- Includes all trouble reports closed during the reporting period that are received within thirty (30) days of the previous trouble report for the same service (regardless of whether the report is about the same type of trouble for that service), subject to exclusions specified below.
- In determining same service Qwest will compare the end user telephone number or circuit number of the trouble reports with reports received in the prior 30 days.
- Includes reports due to Qwest network or system causes, customer-direct and customer-relayed reports.

The 30-day period applied in the numerator of the formula below is from the date and time that the immediately preceding trouble report is closed to the date and time that the next, or "repeat" trouble report is received (i.e., opened).

Reporting Period: One month **Unit of Measure:** Percent

| | |
|--|---|
| <p>Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results</p> | <p>Disaggregation Reporting: Statewide level.</p> <ul style="list-style-type: none"> • Results for product/services listed in Product Reporting under "MSA-Type Disaggregation" will be reported according to trouble reports involving: MR-7A Dispatches within MSAs; MR-7B Dispatches outside MSAs; and MR-7C No dispatches. <p>Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to trouble reports involving: MR-7D In Interval Zone 1 areas; and MR-7E In Interval Zone 2 areas.</p> |
|--|---|

Formula:

$$\left(\frac{\text{Total repeated trouble reports closed within the reporting period that were received within 30 calendar days of when the preceding initial trouble report closed}}{\text{Total number of Trouble Reports Closed in the reporting period}} \right) \times 100$$

Exclusions:

- Trouble reports coded as follows:
 - For products measured from MTAS data (products listed for MSA-type disaggregation), trouble reports coded to disposition codes for: Customer Action (6); Non-Telco Plant (11); Trouble Beyond the Network Interface (12); and Miscellaneous – Non-Dispatch, non-Qwest (includes CPE, Customer Instruction, Carrier, Alternate Provider (13);
 - For products measured from WFA (Workforce Administration) data (products listed for Zone-type disaggregation) trouble reports coded to trouble codes for Carrier Action (IEC) and Customer Provided Equipment (CPE).
- Subsequent trouble reports of any trouble before the original trouble report is closed
- Information tickets generated for internal Qwest system/network monitoring purposes.
- Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete.
- Records involving official company services.
- Records with invalid trouble receipt dates.
- Records with invalid cleared or closed dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

| Product Reporting: | Standards: |
|----------------------------------|----------------------------|
| MSA-Type Disaggregation - | |
| • Resale | |
| Residential single line service | Parity with retail service |
| Business single line service | Parity with retail service |

| | |
|---|--|
| Centrex | Parity with retail service |
| Centrex 21 | Parity with retail service |
| PBX Trunks | Parity with retail service |
| Basic ISDN | Parity with retail service |
| • Unbundled Network Element – Platform (UNE-P) (POTS) | Parity with like retail service |
| • Shared Loop/Line Sharing | Diagnostic |
| • Sub-Loop Unbundling | Diagnostic |
| Zone-Type Disaggregation - | |
| • Resale | |
| Qwest DSL | Parity with retail service |
| Primary ISDN | Parity with retail service |
| DS0 | Parity with retail service |
| DS1 | Parity with retail service |
| DS3 and higher bit-rate services (aggregate) | Parity with retail service |
| Frame Relay | Parity with retail service |
| • LIS Trunks | Parity with Feature Group D (aggregate) |
| • Unbundled Dedicated Interoffice Transport (UDIT) | |
| UDIT – DS1 level | Parity with retail DS1 Private Line |
| UDIT – Above DS1 level | Parity with retail Private Lines above DS1 level |
| Dark Fiber – IOF | Diagnostic |
| • Unbundled Loops: | |
| Analog Loop | Parity with retail Res and Bus POTS |
| Non-loaded Loop (2-wire) | Parity with retail ISDN BRI |
| Non-loaded Loop (4-wire) | Parity with retail DS1 Private Line |
| DS1-capable Loop | Parity with retail DS1 Private Line |
| ISDN-capable Loop | Parity with retail ISDN BRI |
| ADSL-qualified Loop | Parity with retail Qwest DSL |
| Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate Private Line services (aggregate) |
| Dark Fiber – Loop | Diagnostic |
| • E911/911 Trunks | Parity with retail E911/911 Trunks |
| • Enhanced Extended Links (EELs) | Diagnostic |
| Availability: | Notes: |
| Available | |

MR-8 – Trouble Rate

| | |
|---|---|
| Purpose: Evaluates the overall rate of trouble reports as a percentage of the total installed base of the service or element. | |
| Description: Measures trouble reports by product and compares them to the number of lines in service. <ul style="list-style-type: none"> • Includes all trouble reports closed during the reporting period, subject to exclusions specified below. • Includes all applicable trouble reports, including those that are out of service and those that are only service-affecting. | |
| Reporting Period: One month | Unit of Measure: Percent |
| Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results | Disaggregation Reporting: Statewide level. |
| Formula: $\left[\frac{\text{Total number of trouble reports closed in the reporting period involving the specified service grouping}}{\text{Total number of the specified services that are in service in the reporting period}} \right] \times 100$ | |
| Exclusions: <ul style="list-style-type: none"> • Trouble reports coded as follows: <ul style="list-style-type: none"> • For products measured from MTAS data, trouble reports coded to disposition codes for: Customer Action (6); Non-Telco Plant (11); Trouble Beyond the Network Interface (12); and Miscellaneous – Non-Dispatch, non-Qwest (includes CPE, Customer Instruction, Carrier, Alternate Provider (13); • For products measured from WFA data trouble reports coded to trouble codes for Carrier Action (IEC) and Customer Provided Equipment (CPE). • Subsequent trouble reports of any trouble before the original trouble report is closed. • Information tickets generated for internal Qwest system/network monitoring purposes. • Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete. • Records involving official company services. • Records with invalid trouble receipt dates. • Records with invalid cleared or closed dates. • Records with invalid product codes. • Records missing data essential to the calculation of the measurement per the PID. | |
| Product Reporting: | Standards: |
| • Resale | |
| Residential single line service | Parity with retail service |
| Business single line service | Parity with retail service |
| Centrex ^{NOTE 1} | Parity with retail service |
| Centrex 21 ^{NOTE 1} | Parity with retail service |
| PBX Trunks | Parity with retail service |
| Basic ISDN ^{NOTE 2} | Parity with retail service |
| Qwest DSL | Parity with Qwest DSL service |
| Primary ISDN ^{NOTE 2} | Parity with retail service |
| DS0 | Parity with retail service |
| DS1 | Parity with retail service |
| DS3 and higher bit-rate services (aggregate) | Parity with retail service |
| Frame Relay | Parity with retail service |
| • Unbundled Network Element – Platform (UNE-P) (POTS) | Parity with like retail service |
| • Shared Loop/Line Sharing | Parity with RES and BUS POTS |

| | |
|--|--|
| • Sub-Loop Unbundling | Diagnostic |
| • LIS Trunks | Parity with Feature Group D (aggregate) |
| • Unbundled Dedicated Interoffice Transport (UDIT) | |
| UDIT – DS1 level | Parity with retail DS1 Private Line Service |
| UDIT – Above DS1 level | Parity with retail Private Lines above DS1 level |
| Dark Fiber – IOF | Diagnostic |
| • Unbundled Loops: | |
| Analog Loop | Parity with retail Res and Bus POTS |
| Non-loaded Loop (2-wire) | Parity with retail ISDN BRI |
| Non-loaded Loop (4-wire) | Parity with retail DS1 Private Line |
| DS1-capable Loop | Parity with retail DS1 Private Line |
| ISDN-capable Loop | Parity with retail ISDN BRI |
| ADSL-qualified Loop | Parity with retail Qwest DSL |
| Loop types of DS3 and higher bit-rates (aggregate) | Parity with retail DS3 and higher bit-rate services (aggregate) |
| Dark Fiber – Loop | Diagnostic |
| • E911/911 Trunks | Parity with retail E911/911 Trunks |
| • Enhanced Extended Links (EELs) | Diagnostic |
| Availability: | Notes: |
| • Available (except as noted below) | 1. Prior to Mar 01 data Centrex and Centrex 21 results were reported combined under the Centrex heading. |
| • Under Development: | 2. Prior to Mar 01 data Resale Basic and Primary ISDN results were reported combined under the Resale ISDN POTS heading. |
| • Retail comparable for Shared Loop/Line Sharing - TBD | |

MR-10 – Customer and Non-Qwest Related Trouble Reports

Purpose:

Evaluates the extent that trouble reports were customer related, and provides diagnostic information to help address potential issues that might be raised by the core maintenance and repair performance indicators.

Description:

Measures the percentage of all trouble reports that are attributed to the customer as a percentage of all trouble reports resolved during the reporting period, subject to exclusions specified below.

Includes trouble reports closed during the reporting period coded as follows:

- For products measured from MTAS data, trouble reports coded to disposition codes for: Customer Action (6); Non-Telco Plant (11), Trouble Beyond the Network Interface (12); and Miscellaneous – Non-Dispatch, non-Qwest (includes CPE, Customer Instruction, Carrier, Alternate Provider (13); and trouble reports involving a "no access" delay for MSA type disaggregated products.
- For products measured from WFA (Workforce Administration) data trouble reports coded to trouble codes for Carrier Action (IEC) and Customer Provided Equipment (CPE).

Reporting Period: One month

Unit of Measure: Percent

Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results

Disaggregation Reporting: Statewide level.

Formula:

(Number of Trouble Reports coded to disposition codes specified above) / (Total Number of Trouble Reports Closed in the Reporting Period)

Exclusions:

- Subsequent trouble reports of any trouble before the original trouble report is closed
- Information tickets generated for internal Qwest system/network monitoring purposes
- Records involving official company services.
- Records with invalid trouble receipt dates.
- Records with invalid cleared or closed dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.
- Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete.

Product Reporting:

Standards:

| | |
|---|------------|
| • Resale | |
| Residential single line service | Diagnostic |
| Business single line service | Diagnostic |
| Centrex | Diagnostic |
| Centrex 21 | Diagnostic |
| PBX Trunks | Diagnostic |
| Basic ISDN | Diagnostic |
| Qwest DSL | Diagnostic |
| • Unbundled Network Element – Platform (UNE-P) (POTS) | Diagnostic |
| • Resale | |
| Primary ISDN | Diagnostic |
| DS0 | Diagnostic |
| DS1 | Diagnostic |
| DS3 and higher bit-rate services (aggregate) | Diagnostic |
| Frame Relay | Diagnostic |
| • LIS Trunks | Diagnostic |
| • Unbundled Dedicated Interoffice Transport | |

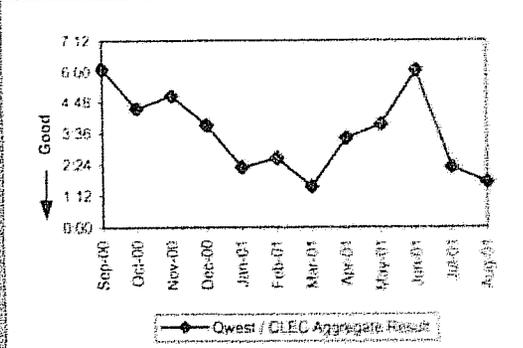
| | |
|---|---------------|
| (UDIT) | |
| UDIT - DS1 level | Diagnostic |
| UDIT - Above DS1 level | Diagnostic |
| • Unbundled Loops: | |
| Analog Loop | Diagnostic |
| Non-loaded Loop (2-wire) | Diagnostic |
| Non-loaded Loop (4-wire) | Diagnostic |
| DS1-capable Loop | Diagnostic |
| ISDN-capable Loop | Diagnostic |
| ADSL-qualified Loop | Diagnostic |
| Loop types of DS3 and higher bit-rates (aggregate) | Diagnostic |
| • E911/911 Trunks | Diagnostic |
| Availability: | Notes: |
| Available | |

DB-1 – Time to Update Databases

| | |
|---|---|
| <p>Purpose: Evaluates the time required for updates to the databases of E911, LIDB, and Listing Services System (LSS).</p> | |
| <p>Description:</p> <ul style="list-style-type: none"> • Measures the average time required to update the databases of E911, LIDB, and LSS. • Includes all database updates as specified under Disaggregation Reporting completed during the reporting period. • For DB-1A the time to update the E911 database is provided by the third party vendor that performs the update. The elapsed time is captured automatically by the database system. There are no "individual E911 database update records" provided with which to measure the database update process. • The numerator of DB-1A is calculated by multiplying the vendor-calculated results (Average Minutes in Process Time) by the denominator (Count of records Processed). This method produces a result from the vendor data that is the same as that which would be produced by totalling the update times from individual E911 database update records. | |
| <p>Reporting Period: One month</p> | <p>Unit of Measure: E911 – Hrs: Mins. LIDB & Directory Listings – Seconds</p> |
| <p>Reporting Comparisons: DB-1A-E911 – Combined results for Qwest Retail and Reseller CLEC Aggregate; DB-1B – LIDB – Combined results for all Qwest Retail, Reseller CLEC and Facilities Based CLEC updates; DB-1C-1 Listings – Combined results for all Provider types including Qwest Retail, Reseller CLEC, and Facilities Based CLEC, ILEC and Unknown Provider, Electronically Submitted, Electronically Processed updates;^{NOTE 1} DB-1C-2 Listings – Combined results for all Provider types including Qwest Retail, Reseller CLEC, CLEC Aggregate for Facilities-based, ILEC, and Unknown Provider Manually Processed updates.^{NOTE 1}</p> | <p>Disaggregation Reporting: DB-1A – E911 for Qwest Retail and Reseller CLEC- State level; DB-1B – LIDB for Qwest Retail, Reseller CLEC and Facilities Based CLEC – Multi state region-wide level DB-1C-1 – Listings for all Provider types including Qwest Retail, Reseller CLEC, and Facilities Based CLEC, ILEC and Unknown Provider, Electronically Submitted, Electronically Processed- Sub-region applicable to state DB-1C-2 – Listings for all Provider types including Qwest Retail, Reseller CLEC, Facilities-Based CLEC, ILEC and Unknown Provider – Manually Processed – region-wide level</p> |
| <p>Formula: $\frac{[(\text{Date and Time of database update for each database update as specified under Disaggregation Reporting in the reporting period}) - (\text{Date and Time of submissions of data for entry into the database for each database update as specified under Disaggregation Reporting in the reporting period}) / \text{Total database updates as specified under Disaggregation Reporting completed in the reporting period}]$</p> | |
| <p>Exclusions: Invalid start/stop dates/times.</p> | |
| <p>Product Reporting: Not applicable (Reported by database type)</p> | <p>Standard: DB-1A-E911 – Parity by design DB-1B-LIDB – Parity by design DB-1C-1– Listings – Parity by design DB-1C-2 – Listings – Parity with DB-1C-1 results for all Provider types combined Qwest Retail, Reseller CLEC, Facilities Based, ILEC, and Unknown Provider, Electronically Submitted, Electronically Processed, updates</p> |
| <p>Availability: Available</p> | <p>Notes: 1. Because they cannot be separated, results for Qwest Retail, Reseller CLEC, Facilities-based CLECs, ILEC and Unknown Provider updates are reported combined within these disaggregations.</p> |

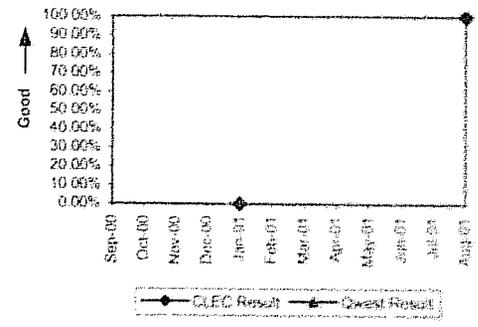
Checklist #7 - E911

| Time to Update Databases (Hours:Minutes) (DB-1 A) | |
|---|-------------------------------|
| Date | Qwest / CLEC Aggregate Result |
| Sep-00 | 6:07 |
| Oct-00 | 4:33 |
| Nov-00 | 5:03 |
| Dec-00 | 3:54 |
| Jan-01 | 2:17 |
| Feb-01 | 2:38 |
| Mar-01 | 1:33 |
| Apr-01 | 3:25 |
| May-01 | 3:56 |
| Jun-01 | 6:04 |
| Jul-01 | 2:18 |
| Aug-01 | 1:44 |

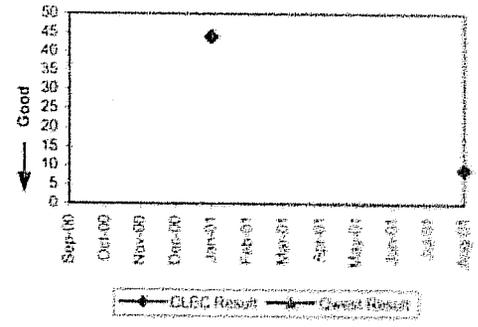


Checklist #7 - E911/911 Trunk Installation

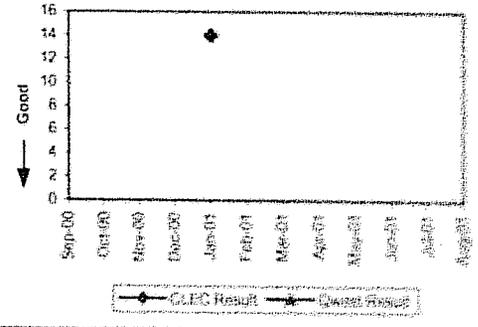
| Installation Commitments Met (Percent) (OP-3) - Interval Zone Two | | | | | | | | | |
|---|----------|-----------|-----------|---------|-----------|------------|------------|-----------|------------|
| Date | CLEC Num | CLEC Dend | CLEC Resu | Std Dev | Qwest Num | Qwest Dend | Qwest Resu | Mod Z Scr | Partly Scr |
| Sep-00 | | | | | | | | | |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | | | | | |
| Dec-00 | | | | | | | | | |
| Jan-01 | 0 | 5 | 0.00% | 0.00% | | | | | |
| Feb-01 | | | | | | | | | |
| Mar-01 | | | | | | | | | |
| Apr-01 | | | | | | | | | |
| May-01 | | | | | | | | | |
| Jun-01 | | | | | | | | | |
| Jul-01 | | | | | | | | | |
| Aug-01 | 1 | 1 | 100.00% | 0.00% | | | | | |



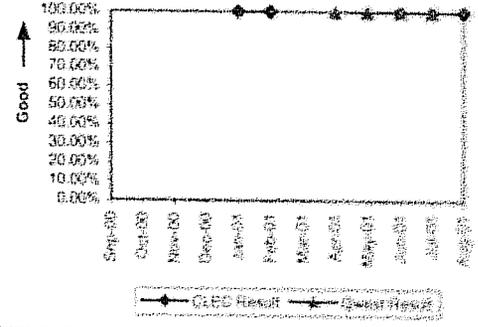
| Installation Interval (Average Days) (OP-4) - Interval Zone Two | | | | | | | | | |
|---|----------|-----------|-----------|---------|-----------|------------|------------|-----------|------------|
| Date | CLEC Num | CLEC Dend | CLEC Resu | Std Dev | Qwest Num | Qwest Dend | Qwest Resu | Mod Z Scr | Partly Scr |
| Sep-00 | | | | | | | | | |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | | | | | |
| Dec-00 | | | | | | | | | |
| Jan-01 | 220 | 5 | 44.00 | 2.24 | | | | | |
| Feb-01 | | | | | | | | | |
| Mar-01 | | | | | | | | | |
| Apr-01 | | | | | | | | | |
| May-01 | | | | | | | | | |
| Jun-01 | | | | | | | | | |
| Jul-01 | | | | | | | | | |
| Aug-01 | 9 | 1 | 9.00 | | | | | | |



| Delayed Days for Non-Facility Reasons (Average Days) (OP-6A) - Interval Zone Two | | | | | | | | | |
|--|----------|-----------|-----------|---------|-----------|------------|------------|-----------|------------|
| Date | CLEC Num | CLEC Dend | CLEC Resu | Std Dev | Qwest Num | Qwest Dend | Qwest Resu | Mod Z Scr | Partly Scr |
| Sep-00 | | | | | | | | | |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | | | | | |
| Dec-00 | | | | | | | | | |
| Jan-01 | 70 | 5 | 14.00 | 2.24 | | | | | |
| Feb-01 | | | | | | | | | |
| Mar-01 | | | | | | | | | |
| Apr-01 | | | | | | | | | |
| May-01 | | | | | | | | | |
| Jun-01 | | | | | | | | | |
| Jul-01 | | | | | | | | | |
| Aug-01 | | | | | | | | | |



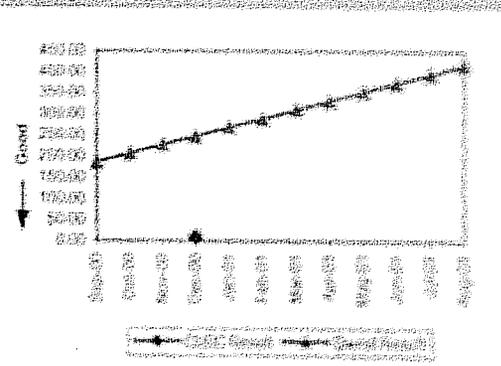
| New Service Installation Quality (Percent) (OP-5) - Interval Zone One and Two | | | | | | | | | |
|---|----------|-----------|-----------|---------|-----------|------------|------------|-----------|------------|
| Date | CLEC Num | CLEC Dend | CLEC Resu | Std Dev | Qwest Num | Qwest Dend | Qwest Resu | Mod Z Scr | Partly Scr |
| Sep-00 | | | | | | | | | |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | | | | | |
| Dec-00 | | | | | | | | | |
| Jan-01 | 3 | 3 | 100.00% | 0.00% | | | | | |
| Feb-01 | 3 | 3 | 100.00% | 0.00% | | | | | |
| Mar-01 | | | | | | | | | |
| Apr-01 | | | | | 1 | 1 | 100.00% | | |
| May-01 | | | | | 1 | 1 | 100.00% | | |
| Jun-01 | 1 | 1 | 100.00% | 0.00% | 1 | 1 | 100.00% | N/A | N/A |
| Jul-01 | 1 | 1 | 100.00% | 0.00% | 1 | 1 | 100.00% | N/A | N/A |
| Aug-01 | 2 | 2 | 100.00% | 0.00% | | | | | |



Checklist #7 - E911/911 Trunk Installation

Interval for Pending Orders Delayed Past Due Date (Average Days) (OP-15A)

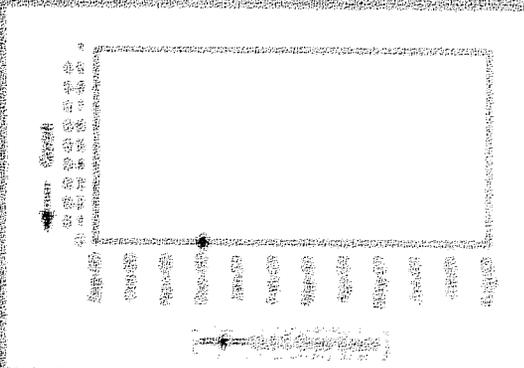
| Date | Owest Num | OLEC Demand | OLEC Res | Std Dev | Owest Num | Owest Demand | Owest Res | Mod Z Score | Penalty Score |
|--------|-----------|-------------|----------|---------|-----------|--------------|-----------|-------------|---------------|
| Sep-00 | | | | | 740 | 4 | 185.00 | | |
| Oct-00 | | | | | 824 | 4 | 206.00 | | |
| Nov-00 | | | | | 908 | 4 | 227.00 | | |
| Dec-00 | 45 | 5 | 9.00 | 0.00 | 988 | 4 | 247.00 | -154.33 | -119.14 |
| Jan-01 | | | | | 885 | 3 | 268.33 | | |
| Feb-01 | | | | | 865 | 3 | 288.33 | | |
| Mar-01 | | | | | 931 | 3 | 310.33 | | |
| Apr-01 | | | | | 994 | 3 | 331.33 | | |
| May-01 | | | | | 1060 | 3 | 353.33 | | |
| Jun-01 | | | | | 1123 | 3 | 374.33 | | |
| Jul-01 | | | | | 1166 | 3 | 395.33 | | |
| Aug-01 | | | | | 1235 | 3 | 418.33 | | |



Checklist #7 - E911/911 Trunk Installation

Count of Pending Orders Delayed for Facilities Reasons E911 (OP-15P)

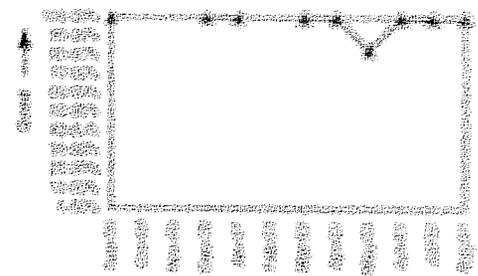
| Date | CLEC Order Count |
|--------|------------------|
| Sep-00 | |
| Oct-00 | |
| Nov-00 | |
| Dec-00 | |
| Jan-01 | |
| Feb-01 | |
| Mar-01 | |
| Apr-01 | |
| May-01 | |
| Jun-01 | |
| Jul-01 | |
| Aug-01 | |



Checklist #7 - EUT/OTI Truck Repair

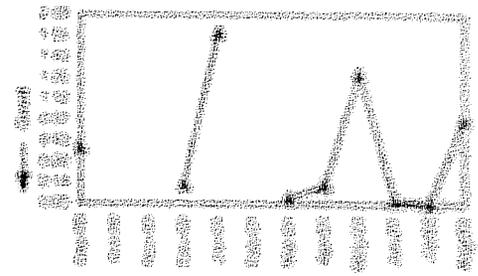
All Troubles Cleared within 4 hours (Percent) (M-R-6) - Interval: 30 days

| Date | CLEC Num | CLEC Desc | CLEC Res | Sit Day | Qwest Num | Qwest Desc | Qwest Res | Sit Day | Qwest Num |
|--------|----------|-----------|----------|---------|-----------|------------|-----------|---------|-----------|
| Sep-00 | | | | | 1 | | | 100.00% | |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | | | | | |
| Dec-00 | | | | | 2 | | | 100.00% | |
| Jan-01 | | | | | 1 | | | 100.00% | |
| Feb-01 | | | | | 0 | | | 100.00% | |
| Mar-01 | | | | | 0 | | | 100.00% | |
| Apr-01 | | | | | 0 | | | 100.00% | |
| May-01 | | | | | 0 | | | 100.00% | |
| Jun-01 | | | | | 1 | | | 100.00% | |
| Jul-01 | | | | | 2 | | | 100.00% | |
| Aug-01 | | | | | 2 | | | 100.00% | |



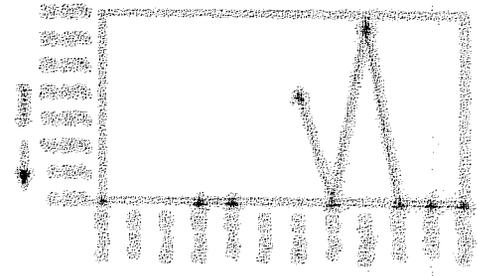
Mean Time to Restore (Hours) (M-R-6) - Interval: 30 days

| Date | CLEC Num | CLEC Desc | CLEC Res | Sit Day | Qwest Num | Qwest Desc | Qwest Res | Sit Day | Qwest Num |
|--------|----------|-----------|----------|---------|-----------|------------|-----------|---------|-----------|
| Sep-00 | | | | | 0.00 | | | 0.00 | |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | 0.25 | | | 0.25 | |
| Dec-00 | | | | | 1.00 | | | 1.00 | |
| Jan-01 | | | | | 0.25 | | | 0.25 | |
| Feb-01 | | | | | 0.25 | | | 0.25 | |
| Mar-01 | | | | | 1.00 | | | 1.00 | |
| Apr-01 | | | | | 0.00 | | | 0.00 | |
| May-01 | | | | | 0.25 | | | 0.25 | |
| Jun-01 | | | | | 0.25 | | | 0.25 | |
| Jul-01 | | | | | 0.25 | | | 0.25 | |
| Aug-01 | | | | | 1.00 | | | 1.00 | |



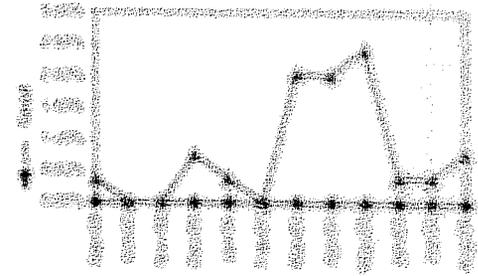
Repair Report Report Rate (Percent) (M-R-7) - Interval: 30 days

| Date | CLEC Num | CLEC Desc | CLEC Res | Sit Day | Qwest Num | Qwest Desc | Qwest Res | Sit Day | Qwest Num |
|--------|----------|-----------|----------|---------|-----------|------------|-----------|---------|-----------|
| Sep-00 | | | | | 0 | | | 0.00% | |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | 0 | | | 0.00% | |
| Dec-00 | | | | | 0 | | | 0.00% | |
| Jan-01 | | | | | 0 | | | 0.00% | |
| Feb-01 | | | | | 0 | | | 0.00% | |
| Mar-01 | | | | | 0 | | | 0.00% | |
| Apr-01 | | | | | 0 | | | 0.00% | |
| May-01 | | | | | 0 | | | 0.00% | |
| Jun-01 | | | | | 0 | | | 0.00% | |
| Jul-01 | | | | | 0 | | | 0.00% | |
| Aug-01 | | | | | 0 | | | 0.00% | |



Trouble Date (Percent) (M-R-8) - Interval: 30 days

| Date | CLEC Num | CLEC Desc | CLEC Res | Sit Day | Qwest Num | Qwest Desc | Qwest Res | Sit Day | Qwest Num |
|--------|----------|-----------|----------|---------|-----------|------------|-----------|---------|-----------|
| Sep-00 | 0 | 16 | 0.00% | 0.00% | 0 | 16 | 0.00% | 0.00% | 0.00 |
| Oct-00 | 0 | 16 | 0.00% | 0.00% | 0 | 16 | 0.00% | 0.00% | 0.00 |
| Nov-00 | 0 | 16 | 0.00% | 0.00% | 0 | 16 | 0.00% | 0.00% | 0.00 |
| Dec-00 | 0 | 16 | 0.00% | 0.00% | 0 | 16 | 0.00% | 0.00% | 0.00 |
| Jan-01 | 0 | 16 | 0.00% | 0.00% | 0 | 16 | 0.00% | 0.00% | 0.00 |
| Feb-01 | 0 | 16 | 0.00% | 0.00% | 0 | 16 | 0.00% | 0.00% | 0.00 |
| Mar-01 | 0 | 16 | 0.00% | 0.00% | 0 | 16 | 0.00% | 0.00% | 0.00 |
| Apr-01 | 0 | 18 | 0.00% | 0.00% | 0 | 18 | 0.00% | 0.00% | 0.00 |
| May-01 | 0 | 18 | 0.00% | 0.00% | 0 | 18 | 0.00% | 0.00% | 0.00 |
| Jun-01 | 0 | 20 | 0.00% | 0.00% | 0 | 20 | 0.00% | 0.00% | 0.00 |
| Jul-01 | 0 | 20 | 0.00% | 0.00% | 0 | 20 | 0.00% | 0.00% | 0.00 |
| Aug-01 | 0 | 28 | 0.00% | 0.00% | 0 | 28 | 0.00% | 0.00% | 0.00 |



Checklist #7 - Effort/Task Report

| Customer and Non-Dweller Related Trouble Reports (Open) (MIS-01) - Average Score (Lowest to High) | | | | | | | | | |
|---|----------|-----------|----------|----------|-----------|------------|-----------|--------------|-------------|
| Date | CLEC Num | CLEC Desc | CLEC Res | SMT Desc | Qwest Num | Qwest Desc | Qwest Res | Qwest S Desc | Qwest Score |
| Sep-00 | | | | | | | | | 100% |
| Oct-00 | | | | | | | | | |
| Nov-00 | | | | | | | | | |
| Dec-00 | | | | | | | | | |
| Jan-01 | | | | | | | | | 100% |
| Feb-01 | | | | | | | | | 100% |
| Mar-01 | | | | | | | | | 75% |
| Apr-01 | | | | | | | | | 100% |
| May-01 | | | | | | | | | 100% |
| Jun-01 | | | | | | | | | 75% |
| Jul-01 | | | | | | | | | 100% |
| Aug-01 | | | | | | | | | 100% |

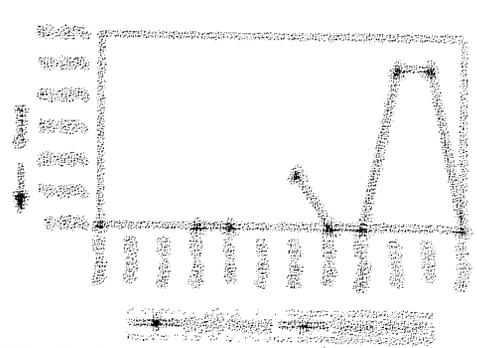


TABLE OF CONTENTS

1

2

3 I. EXECUTIVE SUMMARY 1

4 II. QWEST PROVIDES ACCESS TO OPERATOR AND DIRECTORY

5 ASSISTANCE SERVICES, AND DIRECTORY ASSISTANCE

6 DATABASES, IN COMPLIANCE WITH THE 1996 ACT AND THE

7 FCC'S RULES. 4

8 A. Options for Providing Operator Services and Directory

9 Assistance services, and Access Configurations for Different

10 Types of CLECs. 7

11 B. CLEC Access to Qwest's Directory Assistance Services and

12 Operator Services. 11

13 C. Qwest's Provision of Operator and Directory Assistance

14 Services is Nondiscriminatory By Design. 14

15 D. Qwest Provides Branding For CLECs that Purchase Access to

16 Qwest's Operator Services or Directory Assistance services. 17

17 E. Options for Accessing Qwest's Directory Assistance Database. 20

18 F. Pricing of Operator Services and Directory Assistance services. 24

19 G. Billing for Operator Services and Directory Assistance services. 25

20 III. RESOLUTION OF ISSUES IN MULTISTATE AND OTHER STATE

21 WORKSHOPS. 25

22 IV. CONCLUSION 27

23

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

AFFIDAVIT

OF

LORI A. SIMPSON

Checklist Item 7-- Operator Services and Directory Assistance services

Lori A. Simpson states as follows:

My name is Lori A. Simpson. My business address is 301 West 65th Street, Minneapolis, Minnesota. I am Director – Legal Issues for Qwest Corporation ("Qwest"). I submit this affidavit in support of Qwest's application for authority to provide interLATA services originating in South Dakota. In this affidavit, I show that Qwest complies with Checklist Item 7 of Section 271 of the Telecommunications Act of 1996 ("1996 Act" or "Act") as it relates to operator services and directory assistance services.¹

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records regularly kept in the course of business by Qwest.²

I. EXECUTIVE SUMMARY

Qwest provides competitive local exchange carriers ("CLECs") with nondiscriminatory access to Qwest's operator and directory assistance services in compliance with the requirements of both Section 271(c)(2)(B)(vii) (Checklist Item 7)

¹ See 47 U.S.C. § 271(c)(2)(B)(vii)(II),(III).

² A description of my professional experience and education is included as Exhibit LAS-DA/OS-1 to this Affidavit.

1 and Section 251(b)(3) of the 1996 Act regarding operator services and directory
2 assistance.³ Qwest provides CLECs with access to Qwest's operator services and
3 directory assistance services, as well as to Qwest's directory assistance databases,
4 pursuant to Qwest's Statement of Generally Available Terms and Conditions ("SGAT")
5 and Qwest's commission-approved interconnection agreements.

6 Qwest offers CLECs access to the same operator services and directory
7 assistance services that Qwest provides to its retail end user customers. All callers,
8 regardless of the caller's or called party's local service provider, can access Qwest's
9 directory assistance by dialing "411," "1+411," or "1+NPA+555-1212," for example, and
10 can access operator services by dialing "0" or "0" plus a telephone number. The design
11 of Qwest's processes for providing operator services and directory assistance services
12 ensures that all calls are handled in the same manner regardless of whether they are
13 originated by CLEC end users or by Qwest end users. Qwest handles all operator and
14 directory assistance calls on a first-come, first-served basis. Qwest also provides
15 branding for CLECs that purchase these services from Qwest. Qwest makes Qwest
16 personnel available to CLECs to assist them in accessing Qwest's operator and
17 directory assistance services.

18 As of August 31, 2001, Qwest had provided directory assistance and operator
19 services to eight reseller CLECs in South Dakota. As of the same date, Qwest
20 provides 67 operator service trunks to two facilities-based CLECs in South Dakota.

³ See 47 U.S.C. §§ 271(c)(2)(B)(vii)(II), (III); 251(b)(3).

1 Qwest measures its performance in providing directory assistance and operator
2 services to CLECs and Qwest retail end users. Qwest's performance indicator
3 definitions ("PIDs") were developed in the Regional Oversight Committee ("ROC")
4 collaborative Section 271 performance measures workshops. Those workshops,
5 involving both Qwest and CLECs, were conducted under the auspices of the ROC
6 performance measures committee, which is composed of 13 state commissions in the
7 Qwest region.

8 Qwest's performance indicators for operator services and directory assistance,
9 DA-1 and OS-1, "Speed of Answer," measure the average time required for Qwest's
10 operator and directory assistance personnel to answer calls. In August 31, 2001,
11 Qwest's operator services answered calls in an average of 9.03 seconds and Qwest's
12 directory assistance services answered calls in an average of 7.65 seconds.

13 Qwest also provides CLECs that elect to provide directory assistance or operator
14 services themselves or through a third party nondiscriminatory access to Qwest's
15 directory assistance database on a real-time, "read only" or "per dip" basis. A CLEC
16 also can purchase access in bulk to Qwest's directory assistance database to create its
17 own directory assistance database.

18 For these reasons, Qwest satisfies the requirements of Checklist Item 7 as it
19 relates to access to operator services and directory assistance services.

1 **II. QWEST PROVIDES ACCESS TO OPERATOR AND DIRECTORY**
2 **ASSISTANCE SERVICES, AND DIRECTORY ASSISTANCE DATABASES, IN**
3 **COMPLIANCE WITH THE 1996 ACT AND THE FCC'S RULES.**

4 Sections 271(c)(2)(B)(vii)(II) and (III), respectively, require local exchange
5 carriers to provide: (1) nondiscriminatory access to "directory assistance services to
6 allow the other carrier's customers to obtain telephone numbers" and (2)
7 nondiscriminatory access to "operator call completion services."⁴ Section 251(b)(3) of
8 the Act imposes on local exchange carriers ("LECs") "the duty to permit all [competing
9 providers of telephone exchange service and telephone toll service] to have
10 nondiscriminatory access to . . . operator services, directory assistance, and directory
11 listing, with no unreasonable dialing delays."⁵ The FCC has concluded that a Bell
12 Operating Company ("BOC") must be in compliance with Section 251(b)(3) to satisfy the
13 requirements of Sections 271(c)(2)(B)(vii)(II) and (III).⁶

4 See 47 U.S.C. §§ 271(c)(2)(B)(vii)(II), (III).

4 See 47 U.S.C. § 251(b)(3).

4 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
Texas, Memorandum Opinion and Order, CC Docket No. 00-65, FCC 00-238, 15
FCC Red 18354, ¶ 346 (rel. June 30, 2000) ("SBC Texas Order"); Application by
Bell Atlantic New York for Authorization Under Section 271 of the
Communications Act to Provide In-Region, InterLATA Service In the State of
New York, Memorandum Opinion and Order, CC Docket 99-295, FCC 99-404,
15 FCC Red 3953, ¶ 352 (rel. Dec. 22, 1999) ("Bell Atlantic New York Order").
Both Sections 251(b)(3) and 271(c)(2)(B)(vii)(II) refer to nondiscriminatory access
to "directory assistance." Section 251(b)(3), however, refers to nondiscriminatory
access to "operator services," while Section 271(c)(2)(B)(vii)(III) refers to
nondiscriminatory access to "operator call completion services." 47 U.S.C.
§§ 251(b)(3); 271(c)(2)(B)(vii)(III). The FCC has concluded that for checklist

1 Directory assistance is a service through which callers can obtain the published
2 telephone numbers and addresses of subscribers to telephone service. Generally, end
3 user customers dial "411," "1-411," or "555-1212" to have their calls routed to Qwest's
4 directory assistance platform. The end user then provides Qwest's directory assistance
5 system or operator with a request for a telephone number and/or address. In response,
6 the Qwest operator performs a "dip" into Qwest's directory assistance database to
7 obtain the requested information. The requested information is subsequently relayed to
8 the end user. Where available, the end user will have the option of having his or her
9 local or intraLATA call completed to the requested telephone number for an additional
10 charge.

11 The FCC has concluded that "nondiscriminatory access to directory assistance
12 and directory listings" means that "customers of all telecommunications service
13 providers should be able to access each local exchange carrier's (LEC's) directory

compliance purposes, "operator call completion services" is a subset of or equivalent to "operator service." SBC Texas Order, ¶ 346, n.968, citing Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc. for Provision of In-Region, InterLATA Services in Louisiana, Memorandum Opinion and Order, CC Docket No. 98-121, FCC 98-271, 13 FCC Red 20599, ¶ 240 n.763 (rel. Oct. 13, 1998) ("BellSouth Louisiana II Order"). In the UNE Remand Order, the FCC concluded that operator services and directory assistance services are not network elements that incumbent local exchange carriers ("ILECs") are required to unbundle under Section 251(c)(3) of the Act. Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98, FCC 99-238, 15 FCC Red 3696, ¶¶ 446-64 (rel. Nov. 5, 1999) ("UNE Remand Order"). However, ILECs are still obligated to provide directory assistance and operator services on a nondiscriminatory basis and without unreasonable dialing delay under Section 251(b)(3).

1 assistance services and obtain a directory listing on a nondiscriminatory basis,
2 notwithstanding: (1) the identity of a requesting customer's local telephone service
3 provider, or (2) the identity of the telephone service provider for a customer whose
4 directory listing is requested." The FCC has concluded that nondiscriminatory access
5 to the dialing patterns "4-1-1" and "5-5-5-1-2-1-2" to access directory assistance is
6 technically feasible and will continue."

7 Operator services are those services that end users associate with dialing "0" or
8 "0" plus a telephone number to be connected to an operator or mechanized operator
9 services. Operator services include, but are not limited to, the verification and
10 interruption of busy lines, assistance with emergency calls, and assistance with and
11 completion of local and intraLATA long distance calls, such as person-to-person calls,
12 collect calls, and third party calls.

13 The FCC defined "nondiscriminatory access" to operator services as the ability of
14 ... a telephone service customer, regardless of the identity of his or her local

SBC Texas Order, ¶ 346; Bell Atlantic New York Order, ¶ 352, both citing 47
C.F.R. § 51.217(c)(3); Implementation of the Local Competition Provisions of the
Telecommunications Act of 1996; Interconnection Between Local Exchange
Carriers and Commercial Mobile Radio Service Providers; Area Code Relief Plan
for Dallas and Houston, Ordered by the Public Utility Commission of Texas;
Administration of the North American Numbering Plan; Proposed 708 Relief Plan
and 630 Numbering Plan Area Code by Ameritech-Illinois, Second Report and
Order and Memorandum Opinion and Order, CC Docket Nos. 96-98, 95-185, 92-
237, FCC 96-333, 11 FCC Rcd 19392, ¶¶ 130-35 (rel. Aug. 8, 1996) ("Local
Competition Second Report and Order").

id., citing Local Competition Second Report and Order, ¶ 151.

1 telephone service provider, . . . to connect to a local operator by dialing "0," or "0" plus
2 the desired telephone number."⁹

3 Qwest provides competitors with access to operator services and directory
4 assistance services and databases pursuant to Sections 10.5, 10.6, and 10.7 of its
5 South Dakota SGAT and pursuant to its commission-approved interconnection
6 agreements. Qwest's SGAT was updated as a result of consensus reached in
7 collaborative Section 271 workshop processes, conducted on an open basis with full,
8 active, and equal participation by competitors and state commission staffs. Specifically,
9 Qwest's SGAT was updated with the input of competitors and commission staffs
10 through collaborative Section 271 workshops in Arizona, Colorado, Oregon,
11 Washington, and the seven-state joint Section 271 workshops involving Idaho, Iowa,
12 Montana, New Mexico, North Dakota, Utah, and Wyoming. Although South Dakota did
13 not participate in the Section 271 collaborative workshops, Qwest filed a revised SGAT
14 in South Dakota incorporating the consensus language and modifications to the SGAT
15 relating to these checklist items developed through the collaborative workshop
16 processes in other states. Accordingly, South Dakota CLECs also benefit from
17 agreements reached in those workshops.

18 **A. Options for Providing Operator Services and Directory Assistance**
19 **services, and Access Configurations for Different Types of CLECs.**

20 Qwest provides CLECs with nondiscriminatory access to its operator services
21 and directory assistance services in compliance with the 1996 Act and the FCC's

⁹ *Id.*, citing Local Competition Second Report and Order, ¶ 112.

1 rules.¹⁰ Each method Qwest uses to provide operator services or directory assistance
2 services to CLECs is designed to ensure that the quality of the services provided to
3 CLEC end users is the same as that Qwest provides to its own retail customers.

4 As of August 31, 2001, Qwest provides directory assistance and operator
5 services to eight reseller CLECs in South Dakota. As of the same date, Qwest
6 provides 67 operator service trunks to two facilities-based CLECs in South Dakota.

7 A CLEC that provides local exchange telephone service, whether through resale,
8 unbundled network element platform ("UNE-P") combinations, the purchase of stand-
9 alone unbundled switching, or its own switching facilities, may, consistent with FCC
10 requirements, provide access to operator services and directory assistance services to
11 its end user customers using one of three means. The CLEC may (a) purchase and
12 resell Qwest's operator services and/or directory assistance services; (b) provide
13 operator services and/or directory assistance services itself; or (c) provide operator
14 services and/or directory assistance services using a third party's facilities and
15 personnel.¹¹ Access configurations for these different methods of providing access to
16 operator services and directory assistance services differ for reseller CLECs, CLECs
17 that purchase UNE-P combinations or stand-alone unbundled switching, and CLECs
18 that use their own switching facilities.

¹⁰ See 47 U.S.C. §§ 251(b)(3), 271(c)(2)(B)(vii); 47 C.F.R. § 51.217(c)(3).

¹¹ See SBC Texas Order, ¶ 347.

1 Purchasing Access to Operator Services or Directory Assistance services
2 from Qwest.

3 a. **Reseller CLECs, CLECs Using UNE-P, CLECs with Stand-alone**
4 **Unbundled Switching that Purchase Access to Qwest Operator Services and/or**
5 **Directory Assistance Services.** CLECs that purchase access to Qwest's operator
6 services and/or directory assistance services purchase access to the same operator
7 services or directory assistance services that Qwest provides to its retail end users.

8 The end users of reseller CLECs, CLECs that purchase UNE-P combinations,
9 and of CLECs that purchase stand-alone unbundled switching access Qwest's operator
10 services or directory assistance services dial the same numbers that Qwest's end user
11 customers dial -- "411," "1-411," "555-1212" -- to reach directory assistance services,
12 and "0" or "0" plus a telephone number to reach operator services.¹²

13 The operator services or directory assistance calls of end users of reseller
14 CLECs, CLECs that use UNE-P combinations, and CLECs that use stand-alone
15 unbundled switching is automatically routed to Qwest's operator services or directory
16 assistance platform. Such CLECs' end users' calls are commingled with Qwest's retail
17 end users' calls, and the calls are transported over facilities shared with Qwest's retail
18 end users' calls for delivery to Qwest's operator services and directory assistance
19 platforms.

20 b. **CLECs That Use Their Own Switching Facilities.** CLECs that purchase
21 access to Qwest's operator services and/or directory assistance services purchase

¹² See SGAT §§ 10.5.2.8 and 10.7.2.13.

1 access to the same operator services or directory assistance services that Qwest
2 provides to its retail end users.

3 CLECs that use their own switching facilities may purchase access to Qwest's
4 operator services and/or directory assistance services. To do so, these CLECs
5 establish dedicated transport facilities from their switch to Qwest's directory assistance
6 or operator services platforms. The CLEC may self-provision the transport service, may
7 obtain it from a third party, or may purchase the use of unbundled transport from Qwest.
8 CLECs that use their own switching facilities have the option of either allowing their end
9 user customers to dial the same numbers to access Qwest's operator services and
10 directory assistance services that Qwest end users dial, or selecting different numbers
11 by which their end users may access Qwest's operator services and directory
12 assistance services.¹⁵

13 **c. Providing Access to the CLEC's or a Third Party's Operator Services**
14 **or Directory Assistance services.** CLECs can provide access to their own or to a
15 third party's operator service and/or directory assistance services for their end users.

16 Reseller CLECs and facilities-based CLECs that use UNE-P combinations or
17 stand alone unbundled switching may implement these options by using customized
18 routing and dedicated transport to route and carry the CLEC's end users' operator
19 services or directory assistance calls from Qwest's switch to the CLEC's or a third
20 party's operator services or directory assistance platform. To do this, the CLEC
21 purchases customized routing from Qwest. Customized routing programs Qwest's

¹⁵ See SGAT §§ 10.5.2.9 and 10.7.2.13.

switch and the fees of CLEC end users to route operator services or directory assistance calls to the CLEC-selected operator services and directory assistance platforms over the CLEC's dedicated transport facilities. The CLEC may self-provision, or lease from Qwest or from a third party, dedicated transport from Qwest's end office switch to the operator services or directory assistance platforms the CLEC chooses.¹⁴

CLECs that use their own switching facilities can provide operator services and directory assistance services using their own or a third party's platform by routing their end users' operator services and directory assistance traffic directly from their switching facilities to dedicated transport facilities that transport the calls to their own operator services and directory assistance platforms or to the platforms of a third-party provider. This configuration does not involve Qwest except to the extent that the CLEC chooses to purchase the use of unbundled dedicated transport facilities from Qwest.

B. CLEC Access to Qwest's Directory Assistance Services and Operator Services.

Qwest provides the same directory assistance and operator services to CLEC end user customers that Qwest provides to its retail end user customers. Moreover, Qwest employs the same methods, practices, and standards in providing those services to CLEC end users that Qwest uses to provide the services to its retail end users.

CLECs' end users can access Qwest's directory assistance services by dialing the same numbers Qwest's end users dial. CLECs' end users can access Qwest's

¹⁴ Customized routing is available in the South Dakota SGAT in § 9.12. Customized routing is part of Checklist Item 6, Unbundled Network Elements – Switching, and is addressed in my Affidavit filed in this matter concerning that checklist item.

1 operator services by dialing "0" or "0" plus a telephone number, the same numbers
2 Qwest's end users dial. All callers to Qwest's directory assistance services can obtain
3 any telephone number contained in Qwest's directory assistance database, which
4 includes CLEC end user listings.¹⁵

5 The directory assistance services that Qwest provides to CLEC end users are
6 identical to the services Qwest provides to its retail end users, and consists of (a) the
7 provision of local end user names, addresses, and telephone numbers to requesting
8 callers; (b) where available, the provision of access to Qwest's national directory
9 assistance services for non-local listings; and (c) where available, the completion of
10 local or intraLATA calls to requested telephone numbers.

11 The operator services Qwest provides to CLEC end users are identical to the
12 services Qwest provides to its retail end users. The operator services that Qwest
13 provides include the following:

- 14 • **Local Assistance.** This service (a) assists end users seeking help
15 or information in placing or completing local calls, (b) connects end
16 users to home NPA (local), long distance, and national (where
17 technically feasible) directory assistance, and (c) provides other
18 information and guidance, as may be consistent with Qwest's
19 customary practices for providing end user assistance. End users
20 can access this service by dialing "0" for an operator, or by dialing
21 "0" plus a local telephone number for automated call completion
22 without assistance, or with limited assistance of a live operator.

¹⁵

Listings available include the listings for end users of all local service providers in the region that are included in Qwest's listings database – Qwest, CLECs, and independent telephone companies. The process for CLECs to submit, update, and verify listings in Qwest's directory assistance database is discussed in my Affidavit on Checklist Item 8 - White Pages Directory Listings.

- 1 • **IntraLATA Toll Assistance.** This service assists end users
2 requesting help or information in placing or completing intraLATA
3 toll calls. End users can access this service by dialing "0" for an
4 operator, or by dialing "0+" an intraLATA telephone number for
5 automated call completion without assistance, or with limited
6 assistance of a live operator.
- 7 • **Emergency Assistance.** This service assists end users that are
8 attempting to place local or intraLATA toll calls to emergency
9 agencies, including but not limited to, police, sheriff, highway patrol,
10 and fire departments.
- 11 • **Busy Line Verification.** This service permits an end user to
12 request assistance from an operator to determine if a called line is
13 in use.
- 14 • **Busy Line Interrupt.** This service permits an end user to request
15 assistance from an operator to interrupt a telephone call in
16 progress. The operator will interrupt the busy line and inform the
17 called party that a call is waiting.¹⁶

18 To assist CLECs in obtaining access to Qwest's operator services and directory
19 assistance services, Qwest assigns individual account managers from Qwest's
20 Wholesale Markets organization to each CLEC. CLECs fill out questionnaires regarding
21 the Qwest operator services and/or directory assistance services that they wish to
22 access. Account managers are available to answer questions, facilitate a CLEC's
23 interactions with Qwest, and provide updated and new information to CLECs on a
24 regular basis. Qwest help desks and Qwest's Interconnect Service Center also are
25 available to answer questions and provide assistance to CLECs.

¹⁶ See SGAT § 10.7.1.

1 **C. Qwest's Provision of Operator and Directory Assistance Services is**
2 **Nondiscriminatory By Design.**

3 Qwest's SGAT provides that Qwest will provide CLECs with nondiscriminatory
4 access to directory assistance and operator services. Qwest performs directory
5 assistance and operator services for CLEC end users in accordance with the operating
6 methods, practices, and standards applicable to Qwest retail end users.¹⁷ Qwest
7 provides the same priority of handling for CLEC end user calls that it provides for its
8 retail end user calls.¹⁸ Specifically, calls to Qwest's directory assistance and operator
9 services are handled on a first-come, first-served basis, without regard to whether calls
10 are originated by CLEC or Qwest end users.¹⁹

11 The design of Qwest's operator services and directory assistance services
12 systems ensures that all calls are handled in the same manner, regardless of whether
13 they are originated by CLEC end users or by Qwest end users. Qwest's directory
14 assistance and operator services personnel and systems handle calls on a first-come,
15 first-served basis. As calls are delivered to Qwest's operator services or directory
16 assistance platforms, they are placed in a queue based on the order in which the calls
17 reached the platforms.

18 From the queue, calls are distributed to Qwest mechanized systems and
19 operators based on the order in which the calls entered the queue. Operator positions
20 are automatically polled to determine operator availability to receive a call. Calls feed

¹⁷ See SGAT §§ 10.5.2.4 and 10.7.2.7.

¹⁸ *Id.*

1 automatically and mechanically into "open" operator positions. Each call is delivered to
2 an available operator based on the call's place in the queue and the length of time that
3 an operator has been without a call. The operators have no ability to influence the
4 types of calls that feed to them from the queue. Rather, if an operator is without a call,
5 the next call in queue is automatically fed to that operator and he or she simply hears a
6 tone that alerts him/her to the presence of a call. Furthermore, directory assistance
7 operators cannot discriminate based on the service provider of the called party as
8 listings in the directory assistance database are not marked with the identity of the listed
9 party's local service provider. This handling process applies both to calls delivered over
10 shared Qwest trunks and calls delivered over dedicated CLEC trunks.

11 Qwest also has specialized queues for certain types of calls. These specialized
12 queues may include queues for: (a) calls from Spanish-speaking end users (so that
13 such calls may be sent to Spanish-speaking operators); (b) calls for certain services,
14 such as calls for national directory assistance; and (c) calls from coin telephones (for
15 technical reasons involving billing). Within each of these queues, calls are answered in
16 the same manner that calls are answered in the regular queue, that is, on a first-come,
17 first-served basis. In no case does a separate directory assistance or operator services
18 queue exist based on the identity of an end user's local service provider.

19 Qwest measures its performance in providing access to operator services and
20 directory assistance services. Qwest's performance indicators and performance
21 indicator definitions ("PIDs") were developed in the Regional Oversight Committee

1 ("ROC") collaborative Section 271 performance measures workshops. Those

2 workshops, involving both Qwest and CLECs, were conducted under the auspices of

3 the ROC performance measures committee, which is composed of 13 state

4 commissions in the Qwest region. Qwest's performance indicators for operator services

5 and directory assistance services, labeled "OS-1" and "DA-1" - "Speed of Answer,"

6 measure the average time required for Qwest's operator services and directory

7 assistance systems or personnel to answer calls.²⁰ In August 31, 2001, Qwest's

8 operator services answered calls in an average of 9.03 seconds and Qwest's directory

9 assistance services answered calls in an average of 7.65 seconds.²¹

10 On September 25, 2001, the Liberty Consulting Group, an independent third

11 party retained as part of the ROC OSS Test, completed its audit of Qwest's

12 performance measures ("PIDs") and issued its "Final Report on the Audit of Qwest's

13 Performance Measures." Liberty reported that performance indicators OS-1²² and DA-

20
21
22

Qwest's PIDs for operator services and directory assistance services are included as Exhibit MGW-PERF-6 to the Affidavit of Mr. Michael G. Williams filed in this matter.

South Dakota performance results for operator services and directory assistance services are included as Exhibit MGW-PERF-3 to the Affidavit of Michael G. Williams filed in this matter. Regional performance results are attached to Mr. Williams' Affidavit as Exhibit MGW-PERF-4.

Liberty found that OS-1 "reasonably approximates the average speed of answer of operator services." See Final Report on the Audit of Qwest's Performance Measures, dated September 25, 2001, at p 135, available at <http://www.nrl.dhs.gov/state/oss/master/pid/sep/finalreport.pdf>. The audit report is also attached to Mr. Williams' Affidavit as Exhibit MGW-PERF-2.

1 1²³ passed the audit. Liberty concluded that "the audited performance measures
2 accurately and reliably report actual Qwest performance."²³ Qwest has offered to have
3 Liberty verify its audit by conducting data reconciliation with any CLEC that believes
4 Qwest's performance data is inaccurate. No party has questioned the authenticity or
5 accuracy of the performance data set forth in this affidavit.

6 **D. Qwest Provides Branding For CLECs that Purchase Access to Qwest's**
7 **Operator Services or Directory Assistance services.**

8 Customized CLEC call "branding" is the practice of identifying the CLEC as the
9 caller's local service provider on a call to Qwest's operator services and/or directory
10 assistance services. Branded calls include a message such as "thank you for using
11 [CLEC's name]" at the beginning and end of the call. In accordance with 47 C.F.R. §
12 51.217(d),²⁵ Sections 10.5 and 10.7 of Qwest's SGAT state that Qwest provides CLECs
13 that purchase operator services or directory assistance services from Qwest the option
14 of branding their end users' operator services and directory assistance calls with

²³ Liberty found that DA-1 "reasonably approximates the average speed of answer of directory assistance services." See Exhibit MGW-PERF-2, Final Report on the Audit of Qwest's Performance Measures," dated September 25, 2001, at p 133.

²⁴ *Id.* at 2-3.

²⁵ See also SBC Texas Order, ¶ 347 (where a competing carrier elects to remain BOC operator services and directory assistance services, the BOC must provide the carrier with the ability to brand its calls, where technically feasible); Ben Atlantic New York Order, ¶ 353, citing 47 C.F.R. § 51.217(d); Local Competition Second Report and Order, ¶ 148. For example, when customers call the operator or call for directory assistance, they typically hear a message, such as "thank you for using XYZ Telephone Company." Competing carriers may use the BOC's brand, request the BOC to brand the call with the competitive carrier's name or request that the BOC not brand the call at all. 47 C.F.R. § 51.217(d).

1 Qwest's brand, or, where technically feasible, with the CLEC's name or with a generic
2 brand message (e.g., "thank you for using your local service provider").²⁶

3 For reseller CLECs and facilities-based CLECs that purchase UNE-P
4 combinations or unbundled switching, Qwest offers CLEC-specific branding or generic
5 branding of the CLEC's operator services and directory assistance calls using
6 customized routing. Customized routing directs operator services and directory
7 assistance calls from a CLEC's end users onto separate, dedicated trunks that carry the
8 calls from the end office switch to a dedicated interoffice transport facility and then to
9 Qwest's operator services and directory assistance platforms. The use of dedicated
10 trunks and transport allows Qwest's operator services and directory assistance
11 platforms to identify the CLEC associated with the calls and brand those calls
12 accordingly.

13 Qwest is also currently implementing Originating Line Number Screening
14 ("OLNS") technology and additional software enhancements to its switches serving
15 South Dakota end users. These enhancements give Qwest the capability to provide
16 customized CLEC call branding or generic branding without the need for customized
17 routing and dedicated trunks and transport. Qwest expects this capability to be
18 implemented in South Dakota by the end of November, 2001.

19 Although no reseller CLEC or facilities-based CLEC that purchases UNE-P
20 combinations or unbundled switching has requested customized CLEC call branding or
21 generic branding in South Dakota, Qwest conducted a "bench" test of its capability to

²⁶ See SGAT §§ 10.7.2.10, 10.7.2.11, and 10.5.1.1.1.3.

1 provide CLEC-specific branding for directory assistance and operator services calls to
2 ensure that Qwest had effective processes and procedures in place for provisioning
3 customized routing to dedicated trunks and transport for operator services and directory
4 assistance services, and for providing branding messages to CLECs. The test was
5 conducted in May and June of 1999. The test required Qwest to perform all activities
6 and functions required by a CLEC and by Qwest for providing and maintaining
7 customized routing, dedicated trunks, and a CLEC brand on directory assistance and
8 operator services calls. A dedicated operator services-type trunk group and customized
9 routing to the trunk group were established between an end office switch and a directory
10 assistance and operator services switch. A CLEC branding message also was
11 implemented. Test calls were made using the various dialing patterns for accessing
12 directory assistance and operator services. Qwest successfully completed the test and
13 a CLEC brand message was played on each type of call. The successful completion of
14 this test demonstrates Qwest's capability to provide customized routing to dedicated
15 trunks and to provide CLECs with customized branding services.

16 CLECs that use their own switching facilities and that purchase operator services
17 and directory assistance services from Qwest also can arrange to have operator
18 services and directory assistance calls from their end users branded with the CLEC's
19 name, or generically branded. Because these CLECs' end users' calls are delivered to
20 Qwest's operator services and directory assistance platforms on the CLECs' separate
21 identifiable transport facilities, Qwest can identify and brand the calls with customized
22 CLEC or generic call branding if so requested by the CLEC.

1 **E. Options for Accessing Qwest's Directory Assistance Database.**

2 The FCC has stated that a BOC must allow a competing carrier that elects to
3 provide directory assistance services using its own facilities and personnel to access
4 the BOC's directory assistance database on either a "read-only," "per-dip" basis, or by
5 purchasing the BOC's directory assistance database information in bulk to create its
6 own directory assistance database.²⁷

7 For CLECs that wish to provide directory assistance services themselves, Qwest
8 provides two options for accessing its directory assistance database in compliance with
9 the FCC's requirements.²⁸ Specifically, Qwest provides access to its directory
10 assistance database either on a per-dip, read-only basis through its Directory
11 Assistance Database Service, or in bulk through its Directory Assistance List Service.
12 Qwest's Directory Assistance Database Service and Qwest's Directory Assistance List
13 Service provide CLECs with all of the listings included in Qwest's directory assistance
14 database for the 14 states in Qwest's region. Those listings include listed and unlisted
15 numbers, and the listings for the end users of all local service providers in the region

²⁷ See SBC Texas Order, ¶ 347; Bell Atlantic New York Order, ¶ 353, both citing 47 C.F.R. § 51.217(c)(3)(ii); Local Competition Second Report and Order, ¶¶ 141-44.

²⁸ See 47 C.F.R. § 51.217(c)(3). The Commission recently concluded that competing directory assistance providers that provide call completion services are providers of telephone exchange services and, therefore, qualify for nondiscriminatory access to directory assistance databases pursuant to section 251(b)(3). Provision of Directory Listing Information Under the Telecommunications Act of 1934, As Amended, First Report and Order, CC Docket No. 99-273, FCC 01-27, 16 FCC Rcd 2737, ¶¶ 19-20. (rel. Jan. 23, 2001) ("Directory Listing First Report and Order").

1 that are included in Qwest's listings database -- Qwest, CLECs', and independent
2 telephone companies' listings.

3 **Directory Assistance Database Service.** This service provides CLECs with
4 nondiscriminatory access to Qwest's directory assistance database on a real-time, "per-
5 dip" basis.²⁹ Through this service, CLEC operators make dips into Qwest's directory
6 assistance database to retrieve individual listings on a read-only basis. CLECs have
7 the same access to the same listings that is provided to Qwest's operators.

8 To use the Directory Assistance Database Service, a CLEC needs to deploy a
9 system for use by its operators that is technically compatible with and capable of
10 accessing the directory assistance database. CLEC operators experience the same
11 opportunity to access the directory assistance database as experienced by Qwest
12 operators.

13 **Directory Assistance List Service.** This service provides CLECs with the
14 transfer and use of Qwest's directory assistance listings file for Qwest's 14-state
15 operating region, or any divisible portion thereof such as listings for a state or an NPA,
16 and includes unlisted numbers and listings for end users of all local service providers
17 that are included in Qwest's listings database.³⁰ CLECs may use this service to
18 populate their own directory assistance databases and provide their own directory
19 assistance services. Listings are provided in electronic format or in any other format

²⁹ See SGAT §10.5.1.1.3.

³⁰ See SGAT § 10.5.1.1.2.

1 agreed upon by Qwest and the requesting CLEC. Listings updates are also provided
2 with purchase of Directory Assistance List Service.

3 To help CLECs use Qwest's Directory Assistance List Service, Qwest provides
4 CLECs with extensive documentation regarding the formatting of the directory
5 assistance database. This documentation includes a copy of the Telcordia file and user
6 documents that Qwest uses for its own directory assistance database and for providing
7 Directory Assistance List files to CLECs. Qwest also provides documentation on
8 Qwest's use of each field in the Telcordia file. Other formatting-related documents that
9 Qwest provides to CLECs include, among others, documents regarding directory
10 assistance listing descriptions, listing instruction codes, header and trailer record
11 layouts, the Directory Assistance List service application and escalation process, and
12 white pages directory code information.

13 Qwest also provides CLECs with a weekly report that identifies changes made to
14 listings tables as a result of changes in area codes, prefixes, community names, or
15 other similar changes. In addition, Qwest provides listings test tapes to CLECs first
16 subscribing to the Directory Assistance List service so that problems with the
17 provisioning process may be identified and corrected before "live" listings files are
18 provided.

19 Qwest recently modified its policy on use of directory assistance listings to
20 expand the permissible use of such listings by CLECs. Qwest has incorporated revised
21 SGAT language to reflect this CLEC-friendly modification. Specifically, under a recent

1 FCC order³¹ and under the language of the South Dakota SGAT,³² Qwest and CLECs
2 may use published directory assistance listings for any lawful purpose.

3 **Treatment of Nonpublished Listings.** Nonpublished listings are listings that
4 are omitted in their entirety from white pages directories, and are limited to the
5 nonpublished end user's name, address, and area code, but not the telephone number,
6 in Qwest's directory assistance database. Qwest's Directory Assistance Database
7 Service and Directory Assistance List service include the end user's name, address,
8 area code, and a "placeholder" indicating that the telephone number is nonpublished,
9 but the end user's telephone number is not provided. This information allows an
10 operator to identify an end user correctly and advise a caller only that the end user has
11 a nonpublished number. Qwest's operators have access to exactly the same
12 information regarding nonpublished listings that CLECs receive through Qwest's
13 Directory Assistance List service and Directory Assistance Database Service.

14 In urgent or emergency situations, an end user, a Qwest operator, or a CLEC
15 operator can contact Qwest's "nonpublished bureau" and provide the initiating caller's
16 name and call-back number along with the name and address of the end user with the
17 nonpublished number.³³ The bureau will then determine the nonpublished number and
18 will call the end user at the nonpublished number to (a) inform her/him that a caller
19 urgently wishes to reach her/him and (b) provide her/him with the caller's name and call-

³¹ See Directory Listings First Report and Order, ¶ 28.

³² See SGAT at §§ 10.4.2.4, 10.5.2.11, and 10.6.2.1.

³³ See SGAT §10.6.2.10.

1 back number. Upon request, the bureau will provide the original caller with a call-back
2 regarding the status of the contact.

3 **F. Pricing of Operator Services and Directory Assistance services.**

4 Section 271 checklist requirements that do not fall within a BOC's obligations to
5 provide unbundled network elements under section 251(c)(3) are not subject to the
6 requirement that rates be based on forward-looking economic costs.³⁴ However, BOCs
7 must still provide such items in accordance with Sections 201(b) and 202(a) of the
8 Communications Act of 1934, as amended, which require that rates and conditions for
9 service be just and reasonable, and not unreasonably discriminatory.³⁵

10 Accordingly, since the FCC has ruled that directory assistance services and
11 operator services are not unbundled network elements, Qwest provides the services to
12 facilities-based CLECs at market-based rates.

13 Directory assistance and operator services are provided to reseller CLECs at
14 wholesale discount rates that have been set or approved by the Commission.³⁶

³⁴ UNE Remand Order, ¶ 470; see generally 47 U.S.C. §§ 251-52; see also 47 U.S.C. § 252(d)(1)(A)(i) (requiring UNE rates to be based on the cost determined without reference to a rate-of-return or other rate-based proceeding of providing the network element).

³⁵ SBC Texas Order, ¶ 348, citing UNE Remand Order, ¶¶ 470-73; see also 47 U.S.C. §§ 201(b), 202(a).

³⁶ Exhibit A to Qwest's SGAT includes the prices for operator services and directory assistance services for facilities-based CLECs and also contains the wholesale discount rate for directory assistance services and operator services.

1 **G. Billing for Operator Services and Directory Assistance services.**

2 Qwest provides monthly bills to reseller CLECs and facilities-based CLECs using
3 UNE-P combinations or unbundled switching detailing the number of calls made by a
4 CLEC's end users to directory assistance services and operator services, and
5 identifying the end user telephone number from which the calls originate. Facilities-
6 based CLECs with their own switching facilities receive monthly statements that include
7 bulk billing for their end users' use of directory assistance services and operator
8 services.³⁷

9 **III. RESOLUTION OF ISSUES IN MULTI-STATE AND OTHER STATE**
10 **WORKSHOPS**

11 The state commissions from Idaho, Iowa, Montana, New Mexico, North Dakota,
12 Utah, and Wyoming collectively conducted a "paper" 271 workshop for these checklist
13 items as part of the multi-state 271 proceeding. Interested parties filed comments or
14 testimony on Qwest's compliance with Checklist Items 7(II) and 7(III) and later
15 submitted briefs concerning Qwest's compliance with the Act's and the FCC's
16 requirements for providing CLECs with nondiscriminatory access to directory assistance
17 and operator services. The facilitator who oversaw the multi-state workshops then
18 issued a report in which the facilitator recommended no SGAT amendments relating to
19 these checklist items and recommended that Qwest meets the requirements of checklist
20 items 7(II) and 7(III), subject to satisfactory performance in the ROC process.³⁸

³⁷ See SGAT §§ 10.5.5.1 and 10.7.5.1.

³⁸ Paper Workshop Final Report at 35-41 (Multi-State Workshop Mar. 19, 2001).

1 commenting on the multi-state facilitator's report, AT&T requested that Qwest delete
2 forecasting language from its SGATs relating to directory assistance and operator
3 services, and Qwest agreed to delete the language.

4 Prior to the multi-state proceedings, Qwest, CLECs, Commission staffs, and
5 other parties participated in 271 collaborative workshops concerning operator services
6 and directory assistance services in Washington, Oregon, Colorado, and Arizona, as
7 well as in a hearing in Nebraska. Qwest received several requests from CLECs for
8 changes to SGAT language concerning operator services and directory assistance
9 services during the course of most of those proceedings. Qwest collaborated with and
10 made concessions to CLECs resulting in modified SGAT language.

11 Thus far, all state commissions that have considered Qwest's compliance with
12 Checklist Items 7(II) and 7(III) have found that Qwest satisfies the requirements subject
13 to satisfactory performance in the ROC OSS test.³⁹

³⁹

See, e.g., Investigation Into U S WEST Communications, Inc.'s Compliance With Section 271 of the Telecommunications Act of 1996, Docket No. UT-000023/UT-003040, Commission Order Addressing Workshop One Issues: Checklist Items No. 3, 7, 8, 9, 10, 12, and 13, at 15 (WUTC June 11, 2001); Investigation into the Entry of Qwest Corporation, formerly known as U S WEST Communications, Inc., into In-Region InterLATA Services under Section 271 of the Telecommunications Act of 1996, Docket UM 823, Workshop 1 Findings and Recommendation Report of the Commission, at 11 (Ore. PUC April 16, 2001); In the Matter of U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996, Docket No. T-00000A-97-0239, Decision No. 63385, Findings of Fact, (A.C.C. Feb. 16, 2001); In the Matter of U S WEST Communications, Inc., Denver, Colorado, Filing of its Notice of Intention to File Section 271(c) Application with the FCC and Request for Commission to Verify U S WEST Compliance with Section 271(c), Application No. C-1830, Final Findings and Partial Verification, at 31-35 (NE PSC Apr. 9, 1999).

1 Finally, all consensus SGAT changes agreed to in other states for operator
2 services and directory assistance services have been included in the South Dakota
3 SGAT.

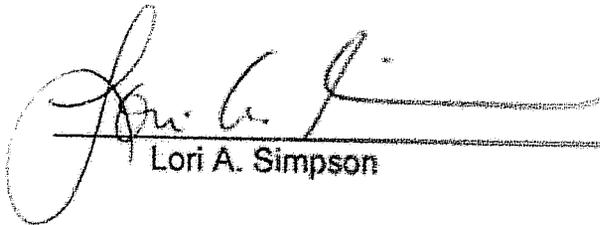
4 IV. CONCLUSION

5 Qwest has a concrete and specific legal obligation to provide operator services
6 and directory assistance in accordance with the requirements of the Act and FCC
7 orders. Qwest has participated in proceedings addressing Checklist Item 7(II) and 7(III)
8 in Arizona, Colorado, Nebraska, Oregon, and Washington, and in the multi-state "paper"
9 proceedings involving state commissions from Idaho, Iowa, Montana, New Mexico,
10 North Dakota, Utah, and Wyoming. During these workshops, Qwest agreed to several
11 modifications to its SGAT to accommodate CLECs' competitive concerns. All of these
12 consensus modifications have been included in the South Dakota SGAT. Thus far,
13 every state commission to consider whether Qwest meets the requirements of Checklist
14 Items 7(II) and 7(III) has found that it does subject to the results of the ROC OSS test.

15 As the foregoing demonstrates, Qwest satisfies the requirements of Section
16 271(c)(2)(B)(vii)(II) and (III) of the Act relating to operator and directory assistance
17 services. The South Dakota Public Utilities Commission should conclude that Qwest
18 satisfies these checklist items.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

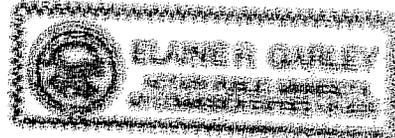
Executed on this 28th day of September, 2001.



Lori A. Simpson

STATE OF MINNESOTA

COUNTY OF HENNEPIN



Subscribed and sworn to before me this 28th day of September, 2001.



Notary Public

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION
INTO QWEST CORPORATION'S
COMPLIANCE WITH SECTION 271 (C) OF THE
TELECOMMUNICATIONS ACT OF 1996

DOCKET TC 01-

QWEST CORPORATION'S

EXHIBITS to the AFFIDAVIT

OF

LORI A. SIMPSON

CHECKLIST ITEM 7 -- OPERATOR SERVICES AND DIRECTORY ASSISTANCE
SERVICES

OCTOBER 23, 2001

- 1
- 2
- 3
- 4
- 5
- 6

DESCRIPTION

EXHIBIT

Witness Qualifications

LAS-DAOS-1

1
2 **QUALIFICATIONS OF LORI A. SIMPSON**
3

4 I have been employed by Qwest Corporation, formerly Northwestern Bell
5 Telephone Company and U S WEST Communications, for 28 years. During that
6 time I have worked in the network organization, the carrier organization, Operator
7 and Information Services, the large and small business retail organizations, as
8 well as the residence retail organization. Prior to my work on the 271 team, I
9 most recently held positions related to the Company's legal and regulatory
10 compliance.

11 I have a Bachelor of Arts degree from the University of Minnesota in
12 Minneapolis, Minnesota, and a Juris Doctor degree from William Mitchell Law
13 School in St. Paul, Minnesota.

14 In preparing this affidavit, I relied on records regularly kept in the course of
15 business by Qwest. As part of Qwest's work to ensure its compliance with
16 Section 271, I have participated extensively for more than one year in all of the
17 collaborative state workshops addressing this checklist item in Arizona,
18 Colorado, Oregon, Washington, and the seven-state joint Section 271 workshops
19 involving Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming.
20 Each of these five workshop processes were collaborative, conducted on an
21 open basis with full, active, and equal participation by competitors and state
22 commission staffs. I also participated in the Section 271 proceedings in
23 Nebraska.

TABLE OF CONTENTS

| | | | |
|----|------|--|----|
| 1 | | | |
| 2 | I. | EXECUTIVE SUMMARY | 1 |
| 3 | II. | QWEST'S PROVISION OF WHITE PAGES DIRECTORY LISTINGS | |
| 4 | | MEETS THE REQUIREMENTS OF SECTIONS 251 AND 271 OF | |
| 5 | | THE 1996 ACT. | 4 |
| 6 | A. | White Pages Directory Listings Options Available to CLECs | 6 |
| 7 | B. | Qwest Provides White Pages Listings That are Nondiscriminatory in | |
| 8 | | Appearance and Integration. | 7 |
| 9 | C. | Qwest Provides White Pages Listings to CLECs With the Same | |
| 10 | | Accuracy and Reliability That Qwest Provides for its Retail End | |
| 11 | | Users | 8 |
| 12 | D. | Listings Provided for South Dakota CLECs and Performance Results | |
| 13 | | for Listings | 9 |
| 14 | E. | Qwest's Processes Ensure That CLECs are Provided with White | |
| 15 | | Pages Listings That are Nondiscriminatory in Appearance, | |
| 16 | | Integration, Accuracy, and Reliability | 11 |
| 17 | F. | Qwest Provides for the Delivery Of White Pages Directories to CLEC | |
| 18 | | End Users on the Same Terms and Conditions as Qwest End | |
| 19 | | Users. | 16 |
| 20 | G. | Prices for White Pages Directory Listings for CLECs. | 18 |
| 21 | H. | Qwest Provides White Pages Listings to CLECs That Wish to Publish | |
| 22 | | Their Own Directories. | 17 |
| 23 | III. | RESOLUTION OF ISSUES IN MULTI-STATE AND OTHER STATE | |
| 24 | | WORKSHOPS. | 19 |
| 25 | IV. | CONCLUSION | 20 |
| 26 | | | |

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

AFFIDAVIT

OF

LORI A. SIMPSON

Checklist Item 8—White Pages Directory Listings

Lori A. Simpson states as follows:

My name is Lori A. Simpson. My business address is 301 West 65th Street, Minneapolis, Minnesota. I am Director – Legal Issues for Qwest Corporation ("Qwest"). I submit this affidavit in support of Qwest's application for authority to provide InterLATA services originating in South Dakota. In this affidavit, I show that Qwest complies with Checklist Item 8 of the competitive checklist in Section 271 of the Telecommunications Act of 1996 ("1996 Act" or "Act") concerning white pages directory listings.¹

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records regularly kept in the course of business by Qwest.²

I. EXECUTIVE SUMMARY

Qwest provides competitive local exchange carriers ("CLECs") with nondiscriminatory access to white pages directory listings in compliance with Section 251 of the 1996 Act, Section 271 of the 1996 Act, and the FCC's rules. Qwest provides

¹ See 47 U.S.C. § 271(c)(2)(B)(viii).

² A description of my professional experience and education is included in Exhibit LAS-LIST-1 to this Affidavit.

CONTINUATION

[6]

1 access to white pages directory listings pursuant to its South Dakota Statement of
2 Generally Available Terms and Conditions ("SGAT") and pursuant to its commission-
3 approved interconnection agreements.

4 Qwest provides CLECs with white pages directory listings that are
5 ~~nondiscriminatory in appearance and integration. White pages directory listings for both~~
6 ~~Qwest retail end users' and CLEC end users' listings appear in white pages directories~~
7 ~~published on Qwest's behalf in the same font, size, and typeface, and without any~~
8 ~~separate classifications or distinguishing characteristics. In addition, Qwest offers~~
9 ~~CLECs exactly the same white pages listings options that Qwest provides to its own~~
10 retail end users.

11 Qwest also provides white pages listings to CLECs with the same accuracy and
12 reliability that Qwest provides for its own retail end user customers. Qwest processes
13 CLEC end user listings using the same or similar personnel, systems, databases,
14 methods, and procedures used by Qwest for its own end user listings. Qwest and
15 CLEC end user listings are commingled in Qwest's listings database and submitted to
16 Qwest's official directory publisher, Qwest Dex, for inclusion in white pages directories.
17 Qwest's processes for submission of listings to its directory publishers make no
18 distinction between listings of CLEC end user customers and Qwest retail end user
19 customers. In addition, Qwest gives CLECs the ability to review their end user listings
20 for accuracy using verification proofs, a process that does not exist for Qwest retail
21 listings.

1 As of August 31, 2001, Qwest had included 46,299 listings for South Dakota
2 reseller CLECs and facilities-based CLECs in Qwest's listings databases.

3 Qwest measures its performance in providing listings for CLECs and Qwest retail
4 end users. Qwest's performance indicator definitions ("PIDs") were developed in the
5 Regional Oversight Committee ("ROC") collaborative Section 271 performance
6 measures workshops. Those workshops, involving both Qwest and CLECs, were
7 conducted under the auspices of the ROC performance measures committee, which is
8 composed of 13 state commissions in the Qwest region.

9 Qwest's performance data for August, 2001, provide data concerning the speed
10 and accuracy with which Qwest updates its listings databases for itself and CLECs. In
11 the month of August, Qwest completed electronically processed updates to its white
12 pages directory listings database in an average of 0.10 seconds, and completed 92.33
13 percent of those updates without error.

14 Qwest provides for the delivery of directories to CLEC end user customers on the
15 same terms and conditions as directories are delivered to Qwest's end user customers.
16 In addition, Qwest provides white pages listings to CLECs that wish to publish their own
17 directories.

18 For these reasons, the Commission should find that Qwest has satisfied the
19 requirements of Checklist Item 8.

1 II. QWEST'S PROVISION OF WHITE PAGES DIRECTORY LISTINGS MEETS
2 THE REQUIREMENTS OF SECTIONS 251 AND 271 OF THE 1996 ACT.

3 Section 271(c)(2)(B)(viii) of the 1996 Act requires Bell Operating Companies
4 ("BOCs") to provide CLECs with "[w]hite pages directory listings for customers of the
5 other carrier's telephone exchange service."³ Section 251(b)(3) of the Act requires local
6 exchange carriers, including Qwest, to

7 permit all [competitive local exchange carriers] to have
8 nondiscriminatory access to telephone numbers, operator
9 services, directory assistance, and directory listing [sic], with
10 no unreasonable dialing delays.⁴

11 The FCC has concluded that the term "white pages" in Section 271(c)(2)(B)(viii)
12 refers to the local alphabetical directory that includes the residential and business
13 listings of the customers of the local exchange provider.⁵ In addition, the FCC has
14 concluded that "the term 'directory listing,' as used in Section 271, includes, at a

3 See 47 U.S.C. § 271(c)(2)(B)(viii).

4 *Id.* § 251(b)(3).

5 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 Texas, Memorandum Opinion and Order, CC Docket No. 00-65, FCC 00-238, 15 FCC Rcd 18354, ¶ 353 (rel. June 30, 2000) ("SBC Texas Order"); Application of Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York, Memorandum Opinion and Order, CC Docket No. 99-295, FCC 00-404, 15 FCC Rcd 3953, ¶ 358 (rel. Dec. 22, 1999) ("Bell Atlantic New York Order").

1 minimum, the subscriber's name, address, telephone number, or any combination

2 thereof."⁶ According to the FCC, a BOC:

3 satisfies the requirements of checklist item 8 by
4 demonstrating that it: (1) provided nondiscriminatory
5 appearance and integration of white page directory listings to
6 competitive LECs' customers; and (2) provided white page
7 listings for competitors' customers with the same accuracy
8 and reliability that it provides its own customers.⁷

9 Qwest provides white pages directory listings in compliance with Sections 251
10 and 271 of the 1996 Act, and in accordance with the FCC's rules and orders
11 implementing those provisions. Specifically, Qwest provides CLECs with white pages
12 directory listings that are nondiscriminatory in appearance and integration and that have
13 the same accuracy and reliability that Qwest provides for its own retail end user
14 customers.

15 Qwest provides CLECs with nondiscriminatory access to white pages listings
16 pursuant to its SGAT and its commission-approved interconnection and resale
17 agreements. Section 10.4.2.24 of Qwest's SGAT, for example, states that any
18 arrangement for the publication of white pages directory listings with an affiliate,
19 including Qwest Dex ("Dex"), Qwest's official directory publisher, requires the affiliate to
20 publish a CLEC's directory listings such that the CLEC's directory listings are
21 nondiscriminatory in appearance and integration, and have the same accuracy and
22 reliability as Qwest's end user listings.

6 *Id.*

7 See SBC Texas Order, ¶ 354; see also Bell Atlantic New York Order, ¶ 359.

1 Qwest's South Dakota SGAT has been updated as a result of consensus
2 reached in collaborative workshop processes, conducted on an open basis with full,
3 active, and equal participation by competitors and state commission staffs. Specifically,
4 Qwest's South Dakota SGAT was updated with the input of competitors and
5 commission staffs through collaborative Section 271 workshops in Arizona, Colorado,
6 Oregon, Washington, and the seven-state joint Section 271 workshops involving Idaho,
7 Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming. The updated SGAT in
8 South Dakota incorporates the consensus provisions developed through the
9 collaborative workshop processes in other states relating to this checklist item.
10 Accordingly, South Dakota CLECs also benefit from the agreements reached in these
11 workshops.

12 **A. White Pages Directory Listings Options Available to CLECs**

13 Qwest's white pages listings service includes: (1) placing and updating the
14 names, addresses, and telephone numbers of CLEC end user customers in Qwest's
15 listings databases consistent with the CLEC's instructions, and (2) furnishing listings to
16 Dex and third-party directory publishers on a nondiscriminatory basis for use in
17 publishing local directories, also consistent with the CLEC's instructions.

18 Qwest offers several types of white pages directory listings to CLECs, including
19 primary, premium, and privacy listings. These options are exactly the same listings
20 options provided to Qwest's retail end users.

21 Primary Listings: A primary listing includes a telephone subscriber's name,
22 address, and telephone number. Primary listings are included in both the white pages

1 of the local telephone directory and in Qwest's directory assistance database. Qwest
2 provides one primary listing for each main telephone number at no charge to CLECs.
3 For example, Section 10.4.2.1 of Qwest's SGAT states that Qwest will accept at no
4 charge one primary listing for each main telephone number belonging to a CLEC's end
5 users.

6 Premium Listings: Premium listings include, but are not limited to, additional
7 listings for other household or business members, cross reference listings, and listings
8 from other cities outside the geographic scope of the applicable directory. Premium
9 listings also are included in both the local white pages directories and Qwest's directory
10 assistance database.

11 Privacy Listings: Privacy listings include nonlisted and nonpublished listings.
12 Nonlisted listings are available in Qwest directory assistance records, but are not
13 published in white pages directories. Nonpublished telephone numbers are omitted
14 from both Qwest's directory assistance database and white pages directories. Qwest
15 treats the private listings of CLEC end users with the same level of confidentiality as
16 Qwest treats the private listings of its own end user customers. CLECs are responsible
17 to advise Qwest whether their end users' listings are private.

18 **B. Qwest Provides White Pages Listings That are Nondiscriminatory in**
19 **Appearance and Integration.**

20 Qwest provides CLECs with white pages listings that are nondiscriminatory in
21 both appearance and integration. Qwest's SGAT states that Qwest provides
22 nondiscriminatory appearance and integration of white pages listings for all CLEC end

1 Qwest end users.⁸ Qwest's follows substantially the same processes for entering
2 listings into the listings database for CLEC end user listings and Qwest end user
3 listings. In addition, white pages directory listings for both Qwest end user and CLEC
4 end user customers appear in the same font, size, and typeface, and without any
5 separate classification or distinguishing characteristics.⁹ White pages listings for CLEC
6 end users are integrated alphabetically with Qwest retail end user listings and are
7 indistinguishable from Qwest's listings.

8 **C. Qwest Provides White Pages Listings to CLECs With the Same Accuracy**
9 **and Reliability That Qwest Provides for its Retail End Users**

10 Qwest provides white pages listings for CLEC end users with the same accuracy
11 and reliability that it provides for its retail end user listings. As discussed below, Qwest
12 satisfies these requirements by using the same or similar methods and procedures and
13 the same databases and systems for processing Qwest retail end user listings and
14 CLEC end user listings. Qwest commingles CLECs' end user listings with Qwest's retail
15 end users' listings in Qwest's listings database. Qwest's processes for submission of
16 listings to directory publishers make no distinction between listings of CLEC end user
17 customers and Qwest retail end user customers. Qwest provides single, integrated
18 listings files to Dex and to other directory publishers for the purpose of publishing white
19 pages directories. Moreover, Qwest has a formal listings review process for CLECs,
20 called the "verification proof" process, that allows CLECs to review their end user

⁸ See SGAT § 10.4.2.8.

⁹ *Id.* § 10.4.2.10.

1 listings for accuracy. This process does not exist for Qwest's retail end user listings.

2 Section 10.4.2.5 of Qwest's SGAT provides that CLEC end user listings will be
3 treated the same as Qwest's end user listings. In addition, Section 10.4.2.11 of Qwest's
4 SGAT states that Qwest's processes for the publication of white pages directory listings
5 make no distinction between CLEC and Qwest subscribers. CLEC listings are provided
6 with the same accuracy and reliability as Qwest's end user listings.¹⁰ Qwest ensures
7 that CLEC listings provided to Qwest are included in the white pages directory
8 published on Qwest's behalf under the same terms and conditions as Qwest uses for its
9 own end user listings.¹¹

10 **D. Listings Provided for South Dakota CLECs and Performance Results for**
11 **Listings**

12 As of August 31, 2001, Qwest includes 46,269 listings for South Dakota facilities-
13 based CLECs and reseller CLECs in its listings database.

14 Qwest measures its performance in providing listings for CLECs and Qwest retail
15 end users. Qwest's performance indicator definitions ("PIDs") were developed in the
16 Regional Oversight Committee ("ROC") collaborative Section 271 performance
17 measures workshops. Those workshops, involving both Qwest and CLECs, were
18 conducted under the auspices of the ROC performance measures committee, which is
19 composed of 13 state commissions in the Qwest region.

10 *Id.* § 10.4.2.11.

11 *Id.*

1 Qwest has two PIDs pertaining to listings. These PIDs measure Qwest's
2 performance in updating the listings database for CLEC end user and for Qwest retail
3 end user listings. The first PID for white pages directory listings, DB-1C-1, "Time to
4 Update Database," measures the average amount of time it takes to update the listings
5 database. In August, 2001, Qwest completed updates in an average of 0.10 seconds in
6 South Dakota. DB-2C-1, "Percentage of Accurate Database Updates," measures the
7 percentage of directory listings database updates completed without errors.¹² In South
8 Dakota in August, 2001, Qwest completed 92.33 percent of listings updates without
9 error.¹³

10 On September 25, 2001, the Liberty Consulting Group, an independent third
11 party retained as part of the ROC Operational Support System ("OSS") Test, completed
12 its audit of Qwest's performance indicators and issued its "Final Report on the Audit of
13 Qwest's Performance Measures." Liberty reported that performance indicators DB-1C¹⁴

12 Performance indicator definitions for white pages directory listings are included as Exhibit MGW-PERF-6 to the Affidavit of Michael G. Williams filed in this matter.

13 South Dakota performance results for white pages directory listings are included as Exhibit MGW-PERF-3 to the Affidavit of Michael G. Williams filed in this matter.

14 Liberty found that DB-1C "the measure DB-1C accurately calculates the average time to update the Directory Listings databases and is being reported correctly." See "Final Report on the Audit of Qwest's Performance Measures," dated September 25, 2001, at p 128, available at <http://www.nri.ohio-state.edu/oss/master/pid/sept/pmfinalreport.pdf>. The audit report is also Exhibit MGW-PERF-2 attached to Mr. Williams' Affidavit.

1 and DB-2C¹⁵ passed the audit. Liberty concluded that "the audited performance
2 measures accurately and reliably report actual Qwest performance."¹⁶ Qwest has
3 offered to have Liberty verify its audit by conducting data reconciliation with any CLEC
4 that believes Qwest's performance data is inaccurate. No party has questioned the
5 authenticity or accuracy of the performance data set forth in this affidavit.

6 **E. Qwest's Processes Ensure That CLECs are Provided with White Pages**
7 **Listings That are Nondiscriminatory in Appearance, Integration, Accuracy,**
8 **and Reliability.**

9 Qwest's provisioning processes ensure that the white pages listings for CLEC
10 end users are nondiscriminatory in appearance, integration, accuracy, and reliability.
11 Qwest processes CLEC end user listings using the same or similar systems, databases,
12 methods, procedures, and personnel used by Qwest for its retail end user listings.
13 Qwest and CLEC end user listings are commingled in Qwest's listings database. Qwest
14 submits a single daily listings file containing commingled listings to its directory
15 assistance database for purposes of updating that database, and to its official directory
16 publisher, Dex, for inclusion in white pages directories. Dex publishes CLEC and Qwest
17 end user listings under the terms and conditions of the publishing contract between
18 Qwest and Dex.

19 **CLEC Submission of Listings:** CLECs are responsible for preparing their
20 listing requests and sending them to Qwest to update Qwest's listing database. To do

15 Liberty found that "DB-2C calculates the accuracy of database updates completed without error correctly." See Final Report on the Audit of Qwest's Performance Measures," dated September 25, 2001, at p 130.

16 *Id.* at 2-3.

1 this, CLECs prepare standard Ordering and Billing Forum ("OBF") listings forms and
2 submit them to Qwest by facsimile or electronically through the Interconnect Mediated
3 Access-Electronic Data Interchange ("IMA-EDI") interface, or via the Interconnection
4 Mediated Access-Graphical User Interface ("IMA-GUI").

5 For listings-only requests submitted by facilities-based CLECs through the EDI
6 interface or IMA-GUI, Qwest's listings database is mechanically updated with the new
7 listings information from the EDI and IMA-GUI systems. For reseller CLECs and Qwest
8 retail listings requests, the listings service requests are released as service orders into
9 Qwest's service order processor, and Qwest's listings database is mechanically updated
10 with the new listings information from the service order processor. For all listings
11 submitted by facsimile, Qwest's listings personnel necessarily manually process the
12 listings and release them into Qwest's service order processor and/or listings database.

13 Once processed, all new and modified listings that are "due" on a given date,
14 whether CLEC or Qwest retail, are added to or updated in Qwest's listings database.
15 The listings are commingled, regardless of the source (i.e., reseller CLEC, facilities-
16 based CLEC, or Qwest retail) and regardless of how they were submitted to Qwest
17 (e.g., via the EDI or IMA-GUI listings applications for facilities-based CLECs with its own
18 switch, or via the IMA-GUI or IMA-EDI interface by a reseller CLEC or facilities-based
19 CLEC using UNE-P or unbundled switching, or via the service order processor by
20 Qwest retail). The listings are then downloaded into files from the listings database and
21 submitted to Dex and to the directory assistance database in nightly batch files for
22 purposes of updating the directory publishing and directory assistance databases.

1 Upon receipt of the updated commingled listing files, Dex uploads those changes into its
2 directory publishing database. Thus, Dex and the directory assistance database
3 receive all listings, Qwest retail and CLEC, on a commingled basis in the same nightly
4 files.¹⁷

5 To ensure that CLECs can submit accurate and complete listing orders to Qwest,
6 Qwest provides extensive, detailed, in-person listings training for CLECs at no charge.
7 Qwest provides these listings training sessions in various locations throughout the
8 Qwest region.¹⁸ To date, Qwest has held such training sessions in Minneapolis,
9 Minnesota; Seattle, Washington; Phoenix, Arizona; Denver, Colorado; Portland,
10 Oregon; Cedar Rapids, Iowa; and Fargo, North Dakota with representatives from
11 approximately 53 different CLECs attending. Qwest also is willing to hold such training
12 sessions in additional locations if demand exists.

13 In addition, Qwest provides detailed training manuals to CLECs at no charge.
14 These manuals are provided during the live/ training sessions and are also available on

¹⁷ When inordinately large numbers of listings from a single CLEC or retail user or an unusually complex order for listings is received, unregulated intermediate processing the listings may be required. Qwest informs the CLEC or retail user of this requirement and negotiates a due date with the CLEC or retail end user. Qwest uses the same criteria to determine the amount of time to process large or complex listings orders for CLEC listings as for retail listings. Those criteria include quantity of listings, available personnel, other large listings requests that may already have been received, and any white pages directory close dates that may be approaching.

¹⁸ See Qwest's website at: <http://www.qwest.com/wholesale/training/course_sched_reg.html#ilt>.

1 Qwest's web site for CLECs.¹⁹ The manuals are referred to as the "Qwest Facility-
2 Based Co-Provider Directory Listings User Document," and the "Qwest Provider Co-
3 Provider Directory Listings User Document." These manuals provide listing details
4 including: the identity of Qwest departments responsible for listings, types of listings,
5 processes for electronic and manual entry of listings, instructions for drafting listings,
6 listings process flow, process for problem resolution, and schedules for verification
7 proofs.

8 **Verification of Listings:** To ensure that Qwest provides CLECs with the same
9 accuracy and reliability of white pages listings that it provides for its retail end users, the
10 IMA-EDI interface, the IMA-GUI system, the listings database, and/or the service order
11 processors may identify errors in listings submitted by CLECs and Qwest retail
12 operations. If an error is identified in a listing, it is corrected by listings personnel if
13 possible, and if not, the listing is returned to the submitting CLEC or Qwest retail
14 personnel for correction.

15 Qwest also gives CLECs the opportunity to review their end user listings for
16 accuracy as they appear in Qwest's listings database.²⁰ To allow CLECs to conduct
17 these reviews, Qwest provides CLECs with monthly "verification proofs," a process that
18 does not exist for Qwest retail listings. The verification proofs show all listings to be
19 published in the white pages directory and available on directory assistance that have

19 Available at: <<http://www.qwest.com/wholesale/forms/whlistuser.html>>.

20 See SGAT § 10.4.2.20.

1 been changed or added during the prior month.²¹ Although the verification proofs do not
2 automatically include nonpublished and nonlisted listings, monthly verification reports
3 for such private listings are also available upon request.²² The verification proofs give
4 CLECs an opportunity to review and, if necessary, correct their listings prior to the close
5 date for publication of a white pages directory.²³

6 In addition, CLECs may request "on-demand" listings reports of all their listings.
7 On-demand reports are print-outs or files of all of a CLEC's listings contained in Qwest's
8 listings database as of the date of the request. Qwest has no comparable process for
9 its own retail listings. CLECs also may call Qwest's listings personnel at any time to
10 check individual listings.

11 Qwest also provides CLECs and Qwest retail representatives with white pages
12 directory closing schedules.²⁴ Neither Qwest nor CLECs can make changes to listings
13 for incorporation in the next directory after a directory close date has passed.

14 To correct an error in a listing, a CLEC must submit an order correcting the
15 listing, just as Qwest retail operations are required to do. If there is an emergency, such
16 as where a directory close date is imminent and a listing is discovered to be incorrect,
17 Qwest listings personnel will attempt to make corrections to listings manually, without an
18 electronic or written service request from the CLEC. However, such emergency

²¹ *Id.* § 10.4.2.19.

²² *Id.*

²³ *Id.* § 10.4.2.21.

²⁴ *Id.* § 10.4.2.3.

1 changes must then be followed up with a service request making the correction to the
2 listing so that Qwest's records are complete and accurate. Such "emergency"
3 procedures are the same for CLECs and for Qwest retail end users.

4 CLECs also may call their account team representative or Qwest's Listings
5 Group to discuss or ask questions about the listings process, or to ask questions about
6 specific listings.

7 **F. Qwest Provides for the Delivery Of White Pages Directories to CLEC End**
8 **Users on the Same Terms and Conditions as Qwest End Users.**

9 Qwest provides for the delivery of directories to CLEC end user customers on the
10 same terms and conditions as directories are delivered to Qwest's end user customers.

11 For example, Qwest's SGAT states that Qwest will ensure that its directory publisher or
12 its directory contractor distributes appropriate alphabetical and classified (white and
13 yellow) pages and recycling services to CLEC end users at parity with Qwest end users,
14 including providing directories: (a) upon establishment of new service, (b) during annual
15 mass distribution, and (c) upon end user request.²⁵ This ensures that the process for
16 providing white pages directories to CLEC end users is the same as that for providing
17 directories to Qwest's end user customers.

18 **G. Prices for White Pages Directory Listings for CLECs.**

19 As provided in the South Dakota SGAT, there is no charge for the inclusion of
20 primary listings in Qwest white pages directory listings for each main end user

25 *Id.* § 10.4.2.12.

1 telephone number.²⁶ This is the same policy that applies for Qwest retail end users.
2 The price for premium and privacy listings, for all CLECs - reseller and facilities-based -
3 is the Qwest retail price less the wholesale discounts approved by the South Dakota
4 Public Service Commission. The retail prices for premium and privacy listings (e.g.,
5 additional, foreign, and cross reference listings) are those set forth in Qwest's retail
6 tariff, catalog, or price list.²⁷

7 **H. Qwest Provides White Pages Listings to CLECs That Wish to Publish Their**
8 **Own Directories.**

9 Qwest provides white pages listings to CLECs that wish to publish their own
10 white pages directories. Such listings are available in electronic format or by other
11 medium as may be agreed upon between the parties. Qwest's SGAT states that,
12 pursuant to customer proprietary network information ("CPNI") laws, Qwest provides
13 subscriber list information gathered in Qwest's capacity as a provider of exchange
14 service on a timely and unbundled basis, under nondiscriminatory and reasonable rates,
15 terms, and conditions upon request for the purpose of publishing directories in any
16 format.²⁸

26 *Id.* § 10.4.2.1.

27 *Id.* § 10.4.2.2.

28 *Id.* § 10.4.2.23.

1 III. RESOLUTION OF ISSUES IN MULTI-STATE AND OTHER STATE
2 WORKSHOPS

3 Commissions from the states of Idaho, Iowa, Montana, New Mexico, North
4 Dakota, Utah, and Wyoming collectively conducted a "paper" 271 workshop for this
5 checklist item as part of multi-state 271 proceedings. Interested CLECs and state
6 commission staffs filed comments or testimony on Qwest's compliance with Checklist
7 Item 8 and later submitted briefs concerning Qwest's compliance with the Act's and the
8 FCC's requirements for white pages listings. The facilitator who oversaw that workshop
9 then issued a report in which he recommended a single SGAT change relating to white
10 pages directory listings.²⁹ Qwest agreed to incorporate the multi-state facilitator's
11 recommendation into its SGATs and also included the additional related changes AT&T
12 requested in its comments on the facilitator's report.

13 The multi-state facilitator also addressed Qwest's processes for handling
14 facilities-based CLEC stand-alone listings submitted via the IMA-GUI.³⁰ Since the multi-
15 state workshop proceedings, Qwest has implemented changes in its processing of
16 these listings. Specifically, as of April 23, 2001, updates and enhancements were made
17 in Qwest's listings database and in the IMA-GUI so that facilities-based CLECs' stand-
18 alone listings received via the IMA-GUI are processed electronically by Qwest. This
19 means that these listings now electronically flow from the IMA-GUI into Qwest's listings
20 database. Prior to these updates to Qwest's listings database, Qwest processed all

²⁹ Paper Workshop Final Report at 41-50 (Multi-State Workshop March 16, 2001).

³⁰ *Id.* at 46-47.

1 such listings manually by printing the listings and typing them into the listings database.
2 Now, listings for reseller CLECs' end users, and for facilities-based CLECs using UNE-P
3 and unbundled switching, and listings for switch-based facilities-based CLECs' end
4 users that are submitted to Qwest electronically are processed electronically. This
5 brings Qwest's listings processes into parity-by-design for all CLEC listings and for
6 Qwest retail listings.

7 Prior to the multi-state "paper" workshop, Qwest, CLECs, commission staffs, and
8 other parties participated in 271 collaborative workshops concerning white pages
9 directory listings in Washington, Oregon, Colorado, and Arizona, as well as in a hearing
10 in Nebraska. Qwest received several requests from CLECs for changes to SGAT
11 language concerning white pages directory listings during the course of some of these
12 proceedings. Qwest collaborated with and made concessions to CLECs resulting in
13 changed SGAT language.

14 State commissions that have considered Qwest's compliance with Checklist Item
15 8 have found that Qwest satisfies the requirements subject to satisfactory performance
16 in the ROC OSS test.³¹

³¹ See, e.g., Investigation Into U S WEST Communications, Inc.'s Compliance With Section 271 of the Telecommunications Act of 1996, Docket No. UT-003032/UT-003040, Commission Order Addressing Workshop One Issues: Checklist Items No. 3, 7, 8, 9, 10, 12, and 13, at 15 (WUTC June 11, 2001); Investigation into the Entry of Qwest Corporation, formerly known as U S WEST Communications, Inc., into In-Region InterLATA Services under Section 271 of the Telecommunications Act of 1996, Docket UM 823, Workshop 1 Findings and Recommendation Report of the Commission, at 13 (Ore. PUC April 16, 2001); U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996, Docket No. T-000000A-97-0238, Decision No. 62344, Findings of Fact, (A.C.C. Mar. 6, 2000); In the Matter of U S WEST

1 Finally, all SGAT changes agreed to in other states for white pages listings have
2 been included in the revised South Dakota SGAT.

3 **IV. CONCLUSION**

4 Qwest has participated in workshops addressing Checklist Item 8 in Arizona,
5 Colorado, Oregon, Washington and in the multi-state proceeding involving state
6 commissions from Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and
7 Wyoming. During these workshops, Qwest made several concessions to accommodate
8 CLECs' competitive concerns. All of these concessions have been included in the
9 South Dakota SGAT.

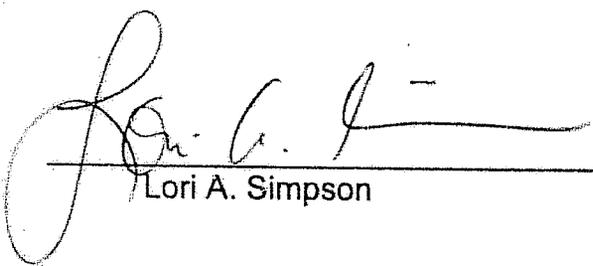
10 As demonstrated in this affidavit, Qwest provides CLECs with nondiscriminatory
11 access to white pages directory listings in compliance with Sections 251 and 271 of the
12 1996 Act and the FCC's requirements thereunder. This Commission should find that
13 Qwest has satisfied Checklist Item 8 of Section 271 of the Act.

14

Communications, Inc., Denver, Colorado, Filing of its Notice of Intention to File
Section 271(c) Application with the FCC and Request for Commission to Verify
U S WEST Compliance with Section 271(c), Application No. C-1820, Factual
Findings and Partial Verification, at 35-37 (NE PSC Apr. 9, 1999).

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

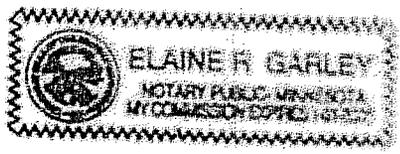
Executed on this 28th day of September, 2001.



Lori A. Simpson

STATE OF MINNESOTA

COUNTY OF HENNEPIN



Subscribed and sworn to before me this 28th day of September, 2001.



Notary Public

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S
EXHIBITS to the AFFIDAVIT
OF
LORI A. SIMPSON
CHECKLIST ITEM 8 - WHITE PAGES DIRECTORY LISTINGS
OCTOBER 23, 2001

INDEX OF EXHIBITS

1
2
3
4
5
6
7
8
9
10
11
12

DESCRIPTION

EXHIBITS

Witness Qualifications LAS-LIST-1

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

QUALIFICATIONS OF LORI A. SIMPSON

I have been employed by Qwest Corporation, formerly Northwestern Bell Telephone Company and U S WEST Communications, for 28 years. During that time I have worked in the network organization, the carrier organization, Operator and Information Services, the large and small business retail organizations, as well as the residence retail organization. Prior to my work on the 271 team, I most recently held positions related to the Company's legal and regulatory compliance.

I have a Bachelor of Arts degree from the University of Minnesota in Minneapolis, Minnesota, and a Juris Doctor degree from William Mitchell Law School in St. Paul, Minnesota.

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records regularly kept in the course of business by Qwest. As part of Qwest's work to ensure its compliance with Section 271, I have participated extensively for more than one year in all of the collaborative state workshops addressing this checklist item in Arizona, Colorado, Oregon, Washington, and the seven-state joint Section 271 workshops involving Idaho, Iowa, Utah, Montana, North Dakota, Wyoming, and New Mexico. Each of these five workshop processes were collaborative, conducted on an open basis with full, active, and equal participation by competitors and state commission staffs. I also participated in the Section 271 proceedings in Nebraska.

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION)
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

DOCKET TC 01-

QWEST CORPORATION'S

AFFIDAVIT

OF

MARGARET S. BUMGARNER

CHECKLIST ITEM 9 – NUMBERING ADMINISTRATION

October 24, 2001

TABLE OF CONTENTS

| | <u>Page</u> |
|----|-------------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

| | |
|---|----|
| I. EXECUTIVE SUMMARY | 1 |
| II. QWEST HAS COMPLIED WITH THE FCC'S REQUIREMENTS BOTH PRIOR TO AND FOLLOWING THE TRANSFER OF NUMBERING ADMINISTRATION TO THE NANPA | 4 |
| A. Background | 4 |
| B. Qwest's Performance As Central Office Code Administrator Before The Transfer of That Role to the NANPA..... | 6 |
| C. Qwest's Compliance with Numbering Administration Rules and Guidelines After the Transfer of Numbering Administration Functions to the NANPA..... | 7 |
| III. RESOLUTION OF ISSUES IN MULTI-STATE WORKSHOPS | 10 |
| IV. SUMMARY AND CONCLUSION..... | 12 |

AFFIDAVIT
OF
MARGARET S. BUMGARNER
Checklist Item 9 – Numbering Administration

Margaret S. Bumgarner states as follows:

My name is Margaret S. Bumgarner. I am a Director in the Policy and Law organization for Qwest Corporation ("Qwest"). My business address is 1600 Seventh Avenue, Seattle, Washington, 98191. I submit this affidavit in support of Qwest's application for authority to provide interLATA services originating in South Dakota. In this affidavit, I show that Qwest complies with Checklist Item 9 of Section 271 of the Telecommunications Act of 1996 ("1996 Act" or "Act") concerning numbering administration.¹

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records kept by Qwest in the regular course of business.²

I. EXECUTIVE SUMMARY

Qwest complies with Checklist Item 9 by adhering to both the industry guidelines and the FCC's rules regarding numbering administration. Qwest ceased performing any North American Numbering Plan ("NANP") numbering administration or assignment

¹ 47 U.S.C. § 271(c)(2)(B)(ix).

functions on September 1, 1998, when the FCC transferred those functions to Lockheed Martin, and subsequently to NeuStar, as the North American Numbering Plan Administrator ("NANPA"). Both before and after the transfer of the numbering administration functions to the NANPA, however, Qwest complied and continues to comply with all industry guidelines and FCC rules applicable to carriers with respect to numbering administration. Qwest's Statement of Generally Available Terms and Conditions ("SGAT") and Commission-approved interconnection agreements establish that Qwest has concrete legal obligations to comply with industry guidelines and FCC rules regarding numbering administration, including those sections requiring the accurate reporting of data to the NANPA.³

Qwest has devoted resources and implemented processes to ensure that it completes the programming of its switches necessary to recognize new NXX codes and accurately route calls to telephone numbers in those NXX codes prior to the NXX code activation dates. Qwest also has implemented performance measures to ensure timely and accurate NXX code activations. Qwest's performance measures, the performance indicator definitions ("PIDs"), were developed in the Regional Oversight Committee ("ROC") collaborative Section 271 performance measures workshops. Those workshops, involving both Qwest and CLECs, were conducted under the auspices of the ROC performance measures committee, which is composed of 13 state

² Professional experience, education and other biographical information are set forth in Exhibit MSB-NXX-1.

³ Section 13 of the SGAT addresses numbering administration.

commissions in the Qwest region. Liberty Consulting Group has also recently released its audit of Qwest's performance results and confirmed that Qwest is accurately measuring its performance in providing access to 911 and E911. In 2001, Qwest has met 100 percent of its commitments for activation of NXX codes in South Dakota.

Qwest complies with the industry guidelines and FCC rules in reporting numbering data to the NANPA. Qwest also provides the national Local Exchange Routing Guide ("LERG") with accurate and complete information regarding routing information, rating information, and effective dates for NXX codes assigned to Qwest.

Qwest has participated in Section 271 collaborative workshops addressing Checklist Item 9 in Arizona, Colorado, Oregon, Washington and in the Multi-State proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming. During these workshops, Qwest agreed to modifications to its SGAT relating to Checklist Item 9 to accommodate CLECs' competitive concerns. All of these modifications have been included in the South Dakota SGAT. In the Multi-State Paper Workshop Report, the workshop Facilitator states that for Checklist Item 9: ". . . Qwest has supported a finding that this checklist requirement has been met, subject to the completion and commission consideration of the results of any OSS testing that may related to the item."⁴

For these reasons, Qwest satisfies the requirements of Checklist Item 9.

⁴ Paper Workshop Final Report at 7 (Multi-State Workshop Mar. 19, 2001).

II. QWEST HAS COMPLIED WITH THE FCC'S REQUIREMENTS BOTH PRIOR TO AND FOLLOWING THE TRANSFER OF NUMBERING ADMINISTRATION TO THE NANPA

A. Background

The North American Numbering Plan ("NANP") is the numbering plan for the public switched telephone network in the United States and its territories, Canada, Bermuda, and some Caribbean nations. NANP numbers are made up of three components, totaling ten digits in length. NANP numbers are in the format, NXX-NXX-XXXX (where N=1-9 and X=0-9). The first three digits represent the numbering plan area ("NPA"), commonly referred to as the area code. The second three digits represent the central office -- or "NXX" -- code. The final four digits represent the line number within the NXX code.

In order to provide local exchange telephone service within the public switched telephone network, facilities-based carriers must have a NXX code(s) assigned to their switch for the provision of telephone numbers to their subscribers. Numbering administration had traditionally been the responsibility of Bellcore and the predominant local telephone company in each region. The 1996 Act, however, directed the FCC to "create or designate one or more impartial entities to administer telecommunications numbering and to make such numbers available on an equitable basis."⁵

Section 271(c)(2)(B)(ix) of the 1996 Act requires Bell Operating Companies ("BOCs") to provide "nondiscriminatory access to telephone numbers for assignment to

⁵ 47 U.S.C. § 251(e)(1).

the other carrier's telephone exchange service customers" until "the date by which telecommunications numbering administration, guidelines, plan or rules are established."⁶ This provision also requires that BOCs comply with "such guidelines, plan, or rules" after they have been established.⁷

On October 9, 1997, the FCC designated Lockheed Martin IMS as the new impartial NANPA or "Code Administrator" based on the recommendation of the FCC's Federal Advisory Committee, the North American Numbering Council ("NANC").⁸ Following the selection of the NANPA, the responsibility for central office code assignment and administration was transitioned from Qwest to Lockheed Martin in the Qwest region on September 1, 1998.⁹ On November 17, 1999, this responsibility was in

⁶ 47 U.S.C. § 271(c)(2)(B)(ix); 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 Texas, Memorandum Opinion and Order, CC Docket No. 00-65, FCC 00-238, 15 FCC Rcd 18354, ¶ 359 (rel. June 30, 2000) ("SBC Texas Order"); Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service In the State of New York, Memorandum Opinion and Order, CC Docket No. 99-295, FCC 99-404, 15 FCC Rcd 3953, ¶ 362 (rel. Dec. 22, 1999) ("Bell Atlantic New York Order").

⁷ *Id.*

⁸ Administration of the North American Numbering Plan, Report and Order, CC Docket No. 92-237, FCC 95-283, 11 FCC Rcd 2588, ¶ 2 (rel. July 13, 1995) ("NANP Report and Order"); Administration of the North American Numbering Plan, Third Report and Order, CC Docket Nos. 92-237, 95-155, FCC 97-372, 12 FCC Rcd 23040, ¶ 1 (rel. Oct. 9, 1997) ("NANP Third Report and Order").

⁹ Lockheed Martin IMS' NANPA Transition Plan for Central Office Code Administration and NPA Relief Planning; published February 12, 1998.

turn transferred from Lockheed Martin to NeuStar, the current NANPA.¹⁰ NeuStar now assigns the NXX codes to carriers and administers the NANP.

B. Qwest's Performance As Central Office Code Administrator Before The Transfer of That Role to the NANPA.

Before Lockheed Martin assumed the role of NANPA in the Qwest region in 1998, Qwest acted as the central office code administrator. In this capacity, Qwest provided nondiscriminatory access to telephone numbers for all carriers in accordance with the FCC's rules and the Alliance for Telecommunications Industry Solutions ("ATIS") Central Office Code (NXX) Assignment Guidelines ("Assignment Guidelines").¹¹

Prior to the transfer of the numbering administration functions to the new NANPA, the FCC's rules required carriers that performed numbering administration functions to: 1) charge uniform fees to all carriers, including themselves, for the assignment or use of central office codes, and 2) apply identical standards and procedures to all carriers, including themselves, for processing central office codes.¹² Qwest complied with both of these requirements by: 1) charging no fees for the assignment or use of central office codes; and 2) by applying the same industry

¹⁰ Request of Lockheed Martin Corporation and Warburg, Pincus & Co. for Review of the Transfer of the Lockheed Martin Communications Industry Services Business, Order, CC Docket No. 92-237, FCC 99-346, 14 FCC Rcd 19792 (rel. Nov. 12, 1999); NANP Report and Order, ¶ 80; NANP Third Report and Order, ¶¶ 1-9; see also 47 C.F.R. §§ 52.7-52.19; SBC Texas Order, ¶ 360.

¹¹ Alliance for Telecommunications Industry Solutions ("ATIS") Central Office Code (NXX) Assignment Guidelines ("Assignment Guidelines"), INC 95-0407-008 (June 11, 2001), available on the Internet at: <http://www.atis.org>.

¹² 47 C.F.R. § 52.15(c)(1)-(2).

guidelines and procedures for all NXX code assignments regardless of whether the request originated from a CLEC or from Qwest. In assigning new NXX codes, Qwest applied the Assignment Guidelines in a nondiscriminatory manner, on a first-come, first-served basis regardless of whether requests for new NXX codes originated from CLECs or from Qwest itself.¹³

C. Qwest's Compliance with Numbering Administration Rules and Guidelines After the Transfer of Numbering Administration Functions to the NANPA.

After the transfer of the numbering administration functions to the new NANPA in the Qwest region on September 1, 1998, Qwest ceased to be responsible for NANPA numbering administration functions. Qwest has not performed any NANPA numbering administration or assignment functions since that time. The assignment of NXX codes is now the responsibility of NeuStar as the NANPA. The NANPA is responsible for ensuring nondiscriminatory application of industry guidelines to all carriers' requests for numbering resources. Resolution of disputes or claims of discrimination regarding NANPA's processing of code requests are the responsibility of the FCC and its NANC.¹⁴

To satisfy Checklist Item 9, the FCC has stated that a BOC must demonstrate that it adheres to industry numbering administration guidelines and the FCC's rules, including provisions requiring the accurate reporting of data to the code administrator.¹⁵ Qwest has concrete and specific legal obligations pursuant to Section 13.2 of Qwest's

¹³ Assignment Guidelines, INC 95-0407-008, §§ 3.4, 4.4.

¹⁴ See 47 C.F.R. § 52.11(c).

¹⁵ SBC Texas Order, ¶ 360.

SGAT and various Commission-approved interconnection agreements establish that Qwest complies with the industry guidelines and FCC rules regarding numbering administration, including those provisions requiring the accurate reporting of data to the NANPA.

After NeuStar assigns a new NXX code to a carrier, all carriers, including Qwest, must program their switches to recognize the new NXX code and properly route calls to the telephone numbers within the new code. This programming must be completed before the activation date for the code. The routing information, rating information, and effective dates for new NXX codes are published in the national Local Exchange Routing Guide ("LERG"). Each carrier is responsible for providing accurate and complete information for the LERG for NXX codes assigned to them.¹⁶

Qwest has processes in place to ensure that all NXX codes and routing information are programmed into Qwest's switches in a nondiscriminatory and timely manner to meet the NXX code activation dates published in the LERG. Specifically, Qwest has established processes to track new NXX code due dates, verify that facilities and routing information is provided by CLECs, and ensure accurate and timely activation of NXXs. Qwest provides documentation for CLECs regarding the industry's numbering administration and assignment processes and Qwest's methods and procedures for NXX code activation and repair processes on Qwest's website.¹⁷

¹⁶ Assignment Guidelines, INC 95-0407-008, § 6.2.1.

¹⁷ The Wholesale CLEC Product Catalog ("PCAT") is available on the Qwest website at: www.qwest.com/wholesale/pcat/.

Qwest's performance measures, the Performance Indicator Definitions ("PIDs"), were developed in the Regional Oversight Committee ("ROC") collaborative Section 271 performance measures workshops.¹⁸ Qwest has two performance measures for numbering administration: 1) PID NP-1A, "NXX Code Activation," measures the percentage of NXX codes in the reporting period that are loaded and tested prior to the LERG effective date or the "revised" date; and 2) PID NP-1B, "NXX Code Activations Delayed," measures the percentage of NXX codes activated in the reporting period that are delayed beyond the LERG date or "revised" date due to Qwest-caused interconnection facility delays. Results reported under the PIDs applicable to numbering administration demonstrate that Qwest's activation of NXX codes for CLECs is at parity with Qwest's activation of NXX codes for itself. For PID NP-1A, Qwest has met 100 percent of its commitments for activation of NXX codes in South Dakota during 2001.¹⁹ The ROC established the PID NP-1B as a diagnostic measure with no stated expectation or benchmark objective. On September 25, 2001, Liberty Consulting Group, the consulting firm retained by the ROC to audit Qwest's performance measures, issued its Final Report on the Audit of Qwest's Performance Measures. Liberty Consulting Group found that all of the PIDs for Checklist Item 9 correctly measured Qwest's performance and that Qwest was accurately reporting its results.²⁰

¹⁸ Exhibit MSB-NXX-2 are the PIDs for numbering administration.

¹⁹ Exhibit MSB-NXX-3 are the performance results for numbering administration in South Dakota.

²⁰ The Liberty Consulting Group Final Report on the Audit of Qwest's Performance Measures at 2-3. The Liberty Final Audit report can be found at:

With respect to administering the individual numbers within the NXX codes that it holds, applying for new NXX codes, and accurately reporting numbering data to the NANPA, Qwest complies with the industry guidelines²¹ and applicable FCC rules.²² Qwest also provides the LERG with accurate and complete routing information, rating information, and effective dates for NXX codes assigned to Qwest.

III. RESOLUTION OF ISSUES IN MULTI-STATE WORKSHOPS

Qwest has participated in Section 271 collaborative workshops addressing Checklist Item 9 in Arizona, Colorado, Oregon, Washington and in the Multi-State proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming. The Multi-State 271 workshop for this Checklist Item was conducted as a "paper" workshop. CLECs, other interested parties, and commission staffs participated in the paper workshop. The interested parties and Qwest filed testimony regarding Qwest's compliance with Checklist Item 9. In the Multi-State Paper Workshop Report the workshop Facilitator states that for Checklist Item 9: ". . . Qwest has supported a finding that this checklist requirement has been met, subject to the completion and commission consideration of the results of any OSS testing that may

<http://www.nrri.ohio-state.edu/oss/master/pid/sept/pmafinal.report.pdf>. A copy of the Audit Report is also attached to Mr. Williams' affidavit as Exhibit MGW-PERF-2.

Assignment Guidelines, INC 95-0407-008; Thousands Block Number Pooling Administration Guidelines, INC 99-0127-023; NANP Numbering Resource Utilization/Forecast ("NRUF") Reporting Guidelines, INC 00-0127-023; Guidelines for Aging and Administration of Disconnected Telephone Numbers, INC 99-1108-024.

related to the item.²³ In addition, other states have reached a similar conclusion that Qwest satisfies the requirements for Checklist Item 9.²⁴ Thus far, every state commission to consider Qwest's compliance with Checklist Item 9 has found that Qwest complies with this Checklist Item subject to satisfactory performance in the ROC OSS test.

Also, Qwest's SGAT has been updated as a result of consensus reached in collaborative workshop processes, conducted on an open basis with full, active, and equal participation by competitors and state commission staffs. Specifically, Qwest's SGAT has been updated with the input of competitors and commission staffs through collaborative Section 271 workshops in Arizona, Colorado, Oregon, Washington, and the seven-state joint Section 271 workshops involving Idaho, Iowa, Montana, New Mexico, North Dakota, Utah and Wyoming.

²³ 47 C.F.R. §§ 52.7- 52.19.

²⁴ Paper Workshop Final Report at 7 (Multi-State Workshop Mar. 19, 2001).

²⁵ E.g., Investigation Into U S WEST Communications, Inc.'s Compliance With Section 271 of the Telecommunications Act of 1996, Docket No. UT-003022/UT-003040, Commission Order Addressing Workshop One Issues: Checklist Items No. 3, 7, 8, 9, 10, 12, and 13, at 15 (WUTC June 11, 2001); Investigation into the Entry of Qwest Corporation, formerly known as U S WEST Communications, Inc., into In-Region InterLATA Services under Section 271 of the Telecommunications Act of 1996, Docket UM 823, Workshop 1 Findings and Recommendation Report of the Commission, at 13 (Ore. PUC April 16, 2001); In the Matter of U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996, Docket No. T-00000A-97-0238, Decision No. 62344, Findings of Fact (A.C.C. Mar. 6, 2000); In the Matter of U S WEST Communications, Inc., Denver, Colorado, Filing of its Notice of Intention to File Section 271(c) Application with the FCC and Request for Commission to Verify U S WEST Compliance with Section 271(c), Application No. C-1830, Factual Findings and Partial Verification, at 37-39 (NE PSC Apr. 9, 1999).

IV. SUMMARY AND CONCLUSION

As demonstrated herein, Qwest has complied with and continues to comply with the requirements of Checklist Item 9 of Section 271 of the Act. Although Qwest no longer performs any functions with regard to NANP number administration or assignment, Qwest complies with all number administration rules, regulations, and guidelines applicable to carriers as established by the FCC and industry forums. Qwest performs its remaining numbering administration obligations pursuant to the SGAT and Commission-approved interconnection agreements. The performance results for the relevant PIDs demonstrate that Qwest performs its obligations in a manner that is at parity and that affords an efficient competitive local exchange carrier a meaningful opportunity to compete. Liberty Consulting Group has also audited Qwest's performance measures and found that Qwest properly reports its results for the measures relevant to Checklist Item 9. Therefore, the South Dakota Commission should find that Qwest satisfies Checklist Item 9.

Being first duly sworn upon oath, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on this 15th day of October, 2001.

Margaret S. Bumgarner
Margaret S. Bumgarner

STATE OF WASHINGTON

COUNTY OF KING

Subscribed and sworn to before me this 15th day of October, 2001.

Elizabeth M. Baker
Notary Public

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S
EXHIBITS to the AFFIDAVIT
OF
MARGARET S. BUMGARNER
CHECKLIST ITEM 9 – NUMBERING ADMINISTRATION

October 24, 2001

INDEX TO EXHIBITS

1
2
3
4
5
6
7

DESCRIPTION

EXHIBITS

Witness Qualifications MSB-NXX-1
PIDs for Numbering Administration..... MSB-NXX-2
Performance Results for Numbering Administration – South Dakota MSB-NXX-3

1 **QUALIFICATIONS OF MARGARET S. BUMGARNER**

2
3 My name is Margaret S. Bumgarner. My business address is 1600 Seventh
4 Avenue, Seattle, Washington, 98191. I am a Director in the Policy and Law
5 organization at Qwest Corporation ("Qwest").

6 I received a Bachelor of Science Degree in Education/Biology from Washington
7 State University. In 1973, I started working for Pacific Northwest Bell as a supervisor in
8 the network organization. I held several management positions in the network
9 organization, including installation, assignment, installation and repair service centers,
10 network budget analysis, switching operations and network administration staff. In
11 1982, I began working in the Planning and Engineering department doing network
12 planning for divestiture under the Modified Final Judgment, preparing the network equal
13 access compliance plan filed with the Department of Justice, and supervising the staff
14 for switch engineering and network design. In 1986, I became U S WEST's
15 representative to the national industry forums addressing technical network compatibility
16 issues and numbering issues and also managed the network planning groups
17 responsible for numbering and common channel signaling. In recent years, I was
18 responsible for a wide range of federal public policy issues, including numbering,
19 access reform, and interconnection.

20 I am currently a Director in the Policy and Law organization responsible for
21 several Section 271 checklist items and Qwest's filing with the Federal Communications
22 Commission ("FCC"). I base this affidavit on professional experience, personal

1 knowledge, and information available to me in the normal course of my duties, including
2 records kept by Qwest in the regular course of business. Specifically, my experience
3 has allowed me to develop an expertise in several Section 271 checklist areas such that
4 I have testified in the Section 271 workshops in Arizona, Colorado, Oregon,
5 Washington, and the joint seven-state ("Multi-State") workshops involving Idaho, Iowa,
6 Montana, New Mexico, North Dakota, Utah, and Wyoming. I also participated in the
7 Section 271 proceedings in Nebraska.

8 Through my testimony in the Section 271 workshops, I have directly participated
9 in the development and evolution of the terms and conditions of Qwest's Statement of
10 Generally Available Terms and Conditions ("SGAT"). These workshops and
11 proceedings were part of a collaborative process, conducted on an open basis with the
12 full, active, and equal participation by CLECs and state commission staffs. A significant
13 part of this process has involved responding to issues and concerns raised by
14 competitive local exchange carriers ("CLECs") and revising the SGAT when possible to
15 address their needs. I have also been responsible for ensuring that the resolution of
16 issues raised by CLECs have been integrated into the documentation of Qwest's
17 processes, methods and procedures provided to CLECs, that apply in each state of
18 Qwest's 14-state region.

NP-1 – NXX Code Activation

Purpose:

Evaluates the timeliness of Qwest's NXX code activation prior to the LERG effective date or by the "revised" effective date, as set forth herein.

Description:

NP-1A: Measures the percentage of NXX codes activated in the reporting period that are actually loaded and tested prior to the LERG effective date or the "revised" date, subject to exclusions shown below.

NP-1B: Measures the percentage of NXX codes activated in the reporting period that are delayed beyond the LERG date or "revised" date due to Qwest-caused Interconnection facility delays, subject to exclusions shown below. Included among activations counted as a Qwest delay in this sub-measurement are cases in which "2-6 codes" ^{NOTE 1} associated with the Qwest interconnection facilities are provided late by Qwest to the CLEC.

- QWEST must receive complete and accurate routing information required for code activation, which includes but is not limited to "2-6 codes" for all interconnection trunk groups associated with the activation no less than 25 days prior to the LERG Due Date or Revised Due Date.
- The "revised" date, for purposes of this measurement, is a CLEC-initiated renegotiation of the activation effective date that is no less than 25 days after Qwest receives complete and accurate routing information required for code activation, which includes but is not limited to "2-6 codes" for all interconnection trunk groups associated with the activation.
- The NXX code activation notice is provided by the LERG (Local Exchange Routing Guide) to Qwest.
- NXX code activation is defined as complete when all translations associated with the new NXX are complete by 11:59 p.m. of the day prior to the date identified in the LERG or the "revised" date (if different than the LERG date).
- The NXX code activation completion process includes testing, including calls to the test number when provided.

| | |
|---|---|
| Reporting Period: One month | Unit of Measure: Percent |
| Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results. | Disaggregation Reporting: State level. |

Formula:

NP-1A = $\left[\frac{\text{Number of NXX codes loaded and tested in the reporting period prior to the LERG effective date or the "revised" date}}{\text{Number of NXX codes loaded and tested in the reporting period}} \right] \times 100$

NP-1B = $\left[\frac{\text{Number of NXX codes loaded and tested in the reporting period that were delayed past the LERG effective date or "revised" date affected by Qwest Interconnection Facility Delays}}{\text{Number of NXX codes loaded and tested in the reporting period, including NXX codes loaded and tested in the reporting period that were delayed past the LERG effective date or the "revised" date due to Interconnection Facility Delays}} \right] \times 100$

Exclusions:

NP-1A:

- NXX code activations completed after the LERG date or "revised" date due to delays in the installation of Qwest provided interconnection facilities associated with the activations. ^{NOTE 2}

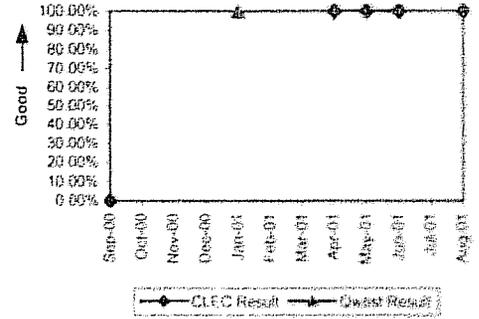
NP-1A and NP-1B:

- * NXX codes with LERG dates or "revised" dates resulting in loading intervals shorter than industry standard (currently 45 calendar days).
- * NXX codes where QWEST received complete and accurate routing information required for code activations less than 25 days prior to the LERG due date or Revised due date.

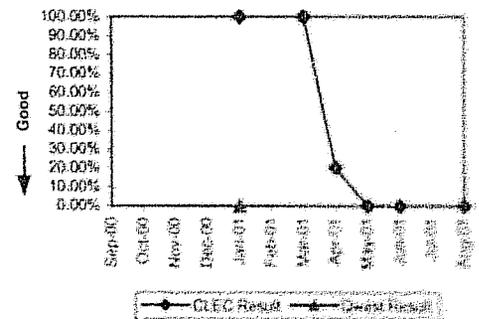
| | |
|--|---|
| Product Reporting: None | Standard: NP1-A – Parity NP1-B – Diagnostic |
| Availability: <p style="text-align: center;">Available</p> | Notes: <ol style="list-style-type: none"> 1. "2-6 codes" are industry-standard designators for local interconnection trunk groups, consisting of 2 alpha letters and six numeric digits. 2. Only Qwest-provided interconnection facilities are noted in this exclusion, because delays related to facilities provided by CLECs or others are accounted for by revising the due date. |

Checklist #9 - NXX Code Activation

| NXX Code Activation (Percent) (NP-1 A) | | | | | | |
|--|----------|------------|-------------|-----------|-------------|--------------|
| Date | CLEC Num | CLEC Denom | CLEC Result | Qwest Num | Qwest Denom | Qwest Result |
| Sep-00 | 0 | 4 | 0.00% | | | |
| Oct-00 | | | | | | |
| Nov-00 | | | | | | |
| Dec-00 | | | | | | |
| Jan-01 | | | | 1 | 1 | 100.00% |
| Feb-01 | | | | | | |
| Mar-01 | | | | | | |
| Apr-01 | 4 | 4 | 100.00% | | | |
| May-01 | 1 | 1 | 100.00% | | | |
| Jun-01 | 2 | 2 | 100.00% | | | |
| Jul-01 | | | | | | |
| Aug-01 | 1 | 1 | 100.00% | | | |



| NXX Code Activation - Facility Delays (Percent) (NP-1 B) | | | | | | |
|--|----------|------------|-------------|-----------|-------------|--------------|
| Date | CLEC Num | CLEC Denom | CLEC Result | Qwest Num | Qwest Denom | Qwest Result |
| Sep-00 | | | | | | |
| Oct-00 | | | | | | |
| Nov-00 | | | | | | |
| Dec-00 | | | | | | |
| Jan-01 | 4 | 4 | 100.00% | 0 | 1 | 0.00% |
| Feb-01 | | | | | | |
| Mar-01 | 1 | 1 | 100.00% | | | |
| Apr-01 | 1 | 5 | 20.00% | | | |
| May-01 | 0 | 1 | 0.00% | | | |
| Jun-01 | 0 | 2 | 0.00% | | | |
| Jul-01 | | | | | | |
| Aug-01 | 0 | 1 | 0.00% | | | |



BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S

AFFIDAVIT

OF

MARGARET S. BUMGARNER

CHECKLIST ITEM 10 -CALL-RELATED DATABASES AND ASSOCIATED
SIGNALING

October 24, 2001

TABLE OF CONTENTS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

| | <u>Page</u> |
|--|-------------|
| I. EXECUTIVE SUMMARY | 1 |
| II. QWEST PROVIDES ACCESS TO CALL-RELATED DATABASES AND ASSOCIATED SIGNALING IN COMPLIANCE WITH THE 1996 ACT AND THE FCC'S RULES | 5 |
| A. Qwest Provides CLECs with Nondiscriminatory Access to Signaling Networks, Signaling Links, and Signaling Transfer Points..... | 6 |
| B. Qwest Provides CLECs With Nondiscriminatory Access to Call- Related Databases | 10 |
| III. RESOLUTION OF ISSUES IN THE MULTI-STATE WORKSHOPS | 22 |
| IV. SUMMARY AND CONCLUSION..... | 24 |

AFFIDAVIT

OF

MARGARET S. BUMGARNER

Checklist Item 10 – Call-Related Databases and Signaling

1
2
3
4
5
6
7
8
9
10 Margaret S. Bumgarner states as follows:

11 My name is Margaret S. Bumgarner. My business address is 1600 Seventh
12 Avenue, Seattle, Washington, 98191. I am a Director in the Policy and Law
13 organization at Qwest Corporation ("Qwest"). I submit this affidavit in support of
14 Qwest's application for authority to provide interLATA services originating in South
15 Dakota. Specifically, this affidavit demonstrates Qwest's compliance with Checklist Item
16 10, call-related databases and associated signaling, of the Telecommunications Act of
17 1996 ("1996 Act" or "Act").¹

18 I base this affidavit on professional experience, personal knowledge, and
19 information available to me in the normal course of my duties, including records kept by
20 Qwest in the regular course of business.²

21 **I. EXECUTIVE SUMMARY**

22 Qwest provides nondiscriminatory access to its call-related databases and the
23 associated signaling necessary for call routing and completion in compliance with

¹ 47 U.S.C. § 271(c)(2)(B)(x).

² Professional experience, education and other biographical information are set forth in Exhibit MSB-SIG-1.

1 database, and Advanced Intelligent Network ("AIN") databases. If any additional
2 databases are determined to be necessary for call routing and completion, Qwest will
3 make such databases and associated signaling available to requesting carriers. As of
4 August 31, 2001, there was one facilities-based CLEC purchasing unbundled access to
5 the 8XX database, the Line Information Database ("LIDB"), the InterNetwork Calling
6 Name Database ("ICNAM"), and the Local Number Portability Database ("LNP"). There
7 were no CLECs using Qwest's Advanced Intelligent Network databases ("AIN").

8 In addition to providing access to its call-related databases, Qwest provides
9 CLECs with access to Qwest's SMS to create, modify, or update information in the call-
10 related databases, and to Qwest's service creation environment in order to design,
11 create, test, and deploy AIN-based services.

12 Qwest's performance measurements, the Performance Indicator Definitions
13 ("PIDs"), were developed in the Regional Oversight Committee ("ROC") collaborative
14 Section 271 performance measures workshops. Those workshops, involving both
15 Qwest and CLECs, were conducted under the auspices of the ROC which is composed
16 of 13 state commissions in the Qwest region, including South Dakota. Qwest's has two
17 performance measures for access to the call-related databases LIDB and E911. The
18 PIDs, DB-1A and DB-1B, "Time to Update Databases," measure, respectively, the time
19 required to complete database updates for E911 (DB-1A) and for the LIDB (DB-1B).
20 These are "parity by design" measures with no benchmark objective established
21 because all updates for CLECs are commingled with Qwest's updates. The measure is
22 an aggregate average time for Qwest and CLEC updates. Thus, the updates are

1 performed in a nondiscriminatory manner (i.e., "parity by design"). On September 25,
2 2001, Liberty Consulting Group, the consulting firm retained by the ROC to audit
3 Qwest's performance measures, released its Final Report on the Audit of Qwest's
4 performance measures. The auditor found that the performance measures relating to
5 Checklist Item 10 passed the audit and that the measures were generating accurate
6 and reliable results.

7 Qwest has participated in Section 271 collaborative workshops addressing
8 Checklist Item 10 in Arizona, Colorado, Oregon, Washington and in the Multi-State
9 proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North
10 Dakota, Utah, and Wyoming. During these workshops, Qwest agreed to several
11 modifications to its SGAT to accommodate CLECs' competitive concerns. All of these
12 modifications have been included in the South Dakota SGAT. In the Multi-State Paper
13 Workshop Final Report the workshop Facilitator states that the "issues have been
14 resolved in a manner that is consistent with the public interest and with the requirement
15 that Qwest comply with checklist item 10."³

16 Qwest provides CLECs with nondiscriminatory access to Qwest's call-related
17 databases and associated signaling in compliance with the 1996 Act and the FCC's
18 rules. For these reasons, the South Dakota Commission should find that Qwest has
19 satisfied the requirements of Checklist Item 10.

³ Paper Workshop Final Report at 51-52 (Multi-State Workshop Mar. 19, 2001).

QWEST PROVIDES ACCESS TO CALL-RELATED DATABASES AND ASSOCIATED SIGNALING IN COMPLIANCE WITH THE 1996 ACT AND THE FCC'S RULES.

Section 271 of the 1996 Act requires a Bell Operating Company ("BOC") to provide nondiscriminatory access to databases and associated signaling necessary for call routing and completion.⁴ Qwest provides CLECs with nondiscriminatory access to call-related databases and associated signaling in compliance with the requirements of both the 1996 Act and the FCC's rules. Qwest provides CLECs with access to call-related databases and associated signaling pursuant to its SGAT and its Commission-approved interconnection agreements.⁵ Qwest's SGAT was updated as a result of consensus reached in collaborative workshop processes, conducted on an open basis with full, active, and equal participation by competitors and state commission staffs. Specifically, Qwest's SGAT was developed with the input of competitors and commission staffs through collaborative Section 271 workshops in Arizona, Colorado,

⁴ 47 U.S.C. § 271(c)(2)(B)(x); see also 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 Texas, Memorandum Opinion and Order, CC Docket No. 00-65, FCC 00-238, 15 FCC Rcd 18354, ¶ 362 (rel. June 30, 2000) ("SBC Texas Order"); see also Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service In the State of New York, Memorandum Opinion and Order, CC Docket No. 99-295, FCC 99-404, 15 FCC Rcd 3953, ¶ 365 (rel. Dec. 22, 1999) ("Bell Atlantic New York Order").

⁵ SGAT §§ 9.13, 9.15, 9.16, 9.17, 10.2, and 10.3 address the provisions for call-related databases and associated signaling.

1 Oregon, Washington, and the seven-state joint workshops involving Idaho, Iowa,
2 Montana, New Mexico, North Dakota, Utah and Wyoming.

3 CLECs can gain access to Qwest's call-related databases and associated
4 signaling in the same manner and using the same facilities, equipment, and procedures
5 as Qwest uses to provide such access and call routing to itself. Qwest's signaling
6 network and call-related databases automatically handle all call routing messages and
7 database queries in the same manner, regardless of whether a query originates on a
8 CLEC network or on Qwest's network. Qwest's signaling network commingles all
9 routing messages and database queries, and Qwest's call-related databases process all
10 queries on a first-come, first-served basis. As of August 31, 2001, no facilities-based
11 CLEC in South Dakota was purchasing unbundled access to Qwest's signaling network.

12 Qwest has documented its processes and procedures for accessing Qwest's
13 signaling network and call-related databases. This documentation is available to
14 CLECs in Qwest's wholesale Product Catalog ("PCAT").⁶ Notification of changes to this
15 documentation is sent to CLECs by their Qwest account managers and through the
16 Change Management Process ("CMP").

17 **A. Qwest Provides CLECs with Nondiscriminatory Access to Signaling**
18 **Networks, Signaling Links, and Signaling Transfer Points.**

19 To satisfy the requirements of Checklist Item 10, the FCC has concluded that a
20 BOC must demonstrate that it provides requesting carriers with nondiscriminatory

⁶ The CLEC Product Catalog is available on the Qwest website at
<http://www.qwest.com/wholesale/pcat/>.

1 access to "signaling networks, including signaling links and signaling transfer points."⁷
2 Qwest provides CLECs with unbundled, nondiscriminatory access to its signaling
3 network, including signaling links and STPs.⁸ CLECs may interconnect with Qwest's
4 signaling network to facilitate signaling among their switches, to Qwest's end office and
5 tandem switches or call-related databases, and to other carriers' switches that are
6 connected to Qwest's signaling network.⁹

7 Qwest's network consists of end office switches, tandem switches, and call-
8 related databases. This network is interconnected with other networks, including the
9 switches of CLECs, interexchange carriers, and other local exchange carriers. Each of
10 these switches and call-related databases, regardless of service provider, can be
11 considered a "node" in the public switched telephone network ("PSTN"). Each node in
12 the PSTN must exchange information with other nodes to facilitate the completion of a
13 local or long distance telephone call. The exchange of information between network
14 nodes is referred to as signaling.

15 Qwest utilizes a Signaling System 7 ("SS7") signaling network, which is a
16 common channel signaling network. Common channel signaling networks carry
17 signaling information and voice information on separate facilities. The SS7 signaling

7 SBC Texas Order, ¶ 362, *citing* Application of BellSouth Corporation for Provision of In-Region, Inter-LATA Services in Louisiana, Memorandum Opinion and Order, CC Docket No. 98-121, FCC 98-271, 13 FCC Red 20599, ¶ 267 (rel. Oct. 13, 1998) ("BellSouth Louisiana II Order"); see also Bell Atlantic New York Order, ¶ 365.

8 See SGAT § 9.13.1.1.

9 See SGAT § 9.13.1.1.

1 network is a packet switched network that allows call control information (signaling
2 information) to be transported on a dedicated high-speed data network that is separate
3 and distinct from the voice communication network. It facilitates signaling and
4 communication among Qwest end office switches, Qwest tandem switches,
5 interexchange carrier switches, CLEC switches, and other local exchange carrier
6 switches. It also facilitates signaling and communication between these switches and
7 various call-related databases associated with the signaling network.¹⁰

8 Qwest's signaling network and processes are based on industry guidelines and
9 standards.¹¹ Qwest's signaling network consists of the following components:¹²

- 10 • *Signaling Links.* Signaling links connect a network node, such as an end
11 office, tandem, or call-related database to the signaling network.
12 Signaling links running from a network node to an STP are called Access
13 Links or A-Links. Signaling links running between STPs on different
14 networks are called Bridge Links or B-Links. Signaling links connecting
15 STPs in the same network are called Crossover Links or C-Links.
- 16 • *Signal Transfer Points ("STPs").* STPs are the "tandem switches" of the
17 signaling network. Signaling links from network nodes are terminated at
18 the STP. A network node will deliver a signaling message via its signaling
19 link to the STP. Depending on the destination of that signaling message,
20 the STP delivers the signaling message to another signaling link for
21 delivery to the terminating network node. The connectivity provided by
22 STPs fully supports the functions of all other network elements connected
23 to Qwest's SS7 network. This includes the use of the Qwest SS7 network
24 to convey messages that neither originate nor terminate at a signaling end
25 point directly connected to Qwest's SS7 network.

¹⁰ See SGAT § 9.13.1.1.

¹¹ See SGAT § 21.0.

¹² Exhibit MSB-SIG-2 is a diagram of the signaling network.

- 1
2
3
4
5
6
7
- *Call-Related Databases.* Service Control Points ("SCPs") are the call-related databases connected to STPs to provide call control information. Call-related databases are used in the routing of voice and data traffic on the PSTN. Call-related databases are connected, like other network nodes, to an STP via a signaling link.
 - *Service Management System ("SMS").* An SMS is a system that is used to update the contents of a call-related database.

8 Reseller CLECs and CLECs using unbundled local switching have exactly the
9 same access to Qwest's signaling network that Qwest uses to provide services to its
10 own retail customers. CLECs that purchase unbundled switching from Qwest obtain
11 access to Qwest's signaling network in the same manner, and using the same facilities,
12 equipment, and procedures, as Qwest uses to provide such access to itself. Since
13 CLECs that purchase unbundled switching purchase the same switching facilities that
14 Qwest uses to provide service to its own customers, all signaling functions are
15 identical.¹³

16 CLECs that use their own switching facilities can obtain access to Qwest's
17 signaling network by self-provisioning or purchasing unbundled signaling links to
18 facilitate signaling among their own switches, Qwest end office and tandem switches,
19 the switches of other carriers connected to the Qwest SS7 network, and call-related
20 databases. CLECs that use their own switching facilities can obtain access to Qwest's
21 STPs by interconnecting their switches directly to Qwest's STPs or interconnecting their
22 STPs with Qwest's STPs.

¹³ See SGAT § 9.11.2.2.

1 CLECs also may interconnect with Qwest's signaling network through a third
2 party signaling network provider. In all events, a CLEC's call routing and database
3 queries are handled in the same manner as Qwest's call routing and database queries.

4 In interconnecting with Qwest's signaling network, facilities-based CLECs may
5 use direct connections to Qwest cross-connect frames. Qwest does not require an
6 intermediate frame for CLEC signaling interconnection.¹⁴

7 **B. Qwest Provides CLECs With Nondiscriminatory Access to Call-**
8 **Related Databases.**

9 To satisfy the requirements of Checklist Item 10, the FCC also has concluded
10 that a BOC must demonstrate that it provides requesting carriers with
11 "nondiscriminatory access to: . . . (2) certain call-related databases necessary for call
12 routing and completion, or in the alternative, a means of physical access to the signaling
13 transfer point linked to the unbundled database; and (3) Service Management Systems
14 (SMS)."¹⁵ The FCC also has concluded that a BOC must design, create, test, and
15 deploy AIN-based services through a service creation environment ("SCE").¹⁶

16 As defined by the FCC, call-related databases are databases, other than
17 operations support systems, that are used in signaling networks to store data that is
18 used for billing and collection, or the transmission, routing, or other provision of a

¹⁴ See SGAT §§ 8.2.1.24-8.2.1.25.

¹⁵ SBC Texas Order, ¶ 362, citing BellSouth Louisiana II Order, ¶ 237; see also Bell
Atlantic New York Order, ¶ 365.

¹⁶ SBC Texas Order, ¶ 362, citing BellSouth Louisiana II Order, ¶ 272; see also Bell
Atlantic New York Order, ¶ 365.

1 telecommunications service.¹⁷ If information from a call-related database is required for
2 a given call, the end office switch or tandem switch will send a query over the signaling
3 network to the appropriate call-related database, which will return the information
4 needed to process the call. The FCC requires incumbent local exchange carriers
5 ("ILECs") to provide unbundled access to their call-related databases "including, but not
6 limited to, the Calling Name Database ('CNAM'), 911 Database, E911 Database, Line
7 Information Database ('LIDB'), Toll Free Calling Database, AIN Databases, and
8 downstream number portability databases by means of physical access at the signaling
9 transfer point linked to the unbundled databases."¹⁸

10 Qwest provides CLECs with nondiscriminatory, unbundled access to its call-
11 related databases, signaling transfer points, and SMS. Qwest also designs, creates,
12 tests, and deploys AIN-based services for CLECs through a SCE. As of August 31,
13 2001, in South Dakota there was one facilities-based CLEC purchasing unbundled
14 access to the 8XX database, the Line Information Database ("LIDB"), the InterNetwork
15 Calling Name Database ("ICNAM"), and the Local Number Portability Database ("LNP").
16 There were no CLECs using Qwest's Advanced Intelligent Network databases ("AIN").

¹⁷ SBC Texas Order, ¶ 363, *citing*, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Report and Order, CC Docket Nos. 96-98 and 95-185, 11 FCC Rcd 15499, n.1126 (Local Competition Order); Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, CC Docket No. 96-98, 15 FCC Rcd 3696, ¶ 403 (rel. Nov. 5, 1999) ("UNE Remand Order").

¹⁸ 47 C.F.R. § 51.319(e)(2)(i); *see also* SBC Texas Order, ¶ 363.

1 Reseller CLECs have precisely the same access to Qwest databases that Qwest
2 provides to its own retail customers. Carriers purchasing unbundled switching obtain
3 access to Qwest's signaling network as part of the switching unbundled network
4 element ("UNE") and therefore obtain the ability to query Qwest's databases via
5 Qwest's SS7 network in exactly the same manner and over the same facilities as
6 Qwest. CLECs that use their own switching facilities also may query Qwest's
7 databases in exactly the same manner as Qwest.

8 Qwest's SS7 network and Qwest's call-related databases automatically handle
9 all queries in the same manner and using the same facilities, equipment, and
10 procedures, regardless of whether a query originates on a CLEC network or on Qwest's
11 network. Qwest's SS7 signaling network commingles all database queries, regardless
12 of whether they originated on Qwest's or another carrier's network. Qwest's databases
13 process all queries on a first-come, first-served basis.

14 **Description of Qwest Call-Related Databases:**

15 *InterNetwork Calling Name ("ICNAM") Database.* The ICNAM database enables
16 a CLEC to obtain the listed name information for a requested telephone number in order
17 to deliver that information to the CLEC's end users for Caller ID services ("Calling Name
18 Service").¹⁹ The ICNAM database contains current listed name information by working
19 telephone number served or administered by Qwest. The ICNAM database also
20 contains listed name information provided by other carriers participating in Qwest's
21 Calling Name Delivery Service arrangement. Qwest provides CLECs with access to the

¹⁹ See SGAT § 9.17.

1 ICNAM database through access to Qwest's signaling network. CLECs can provide the
2 same features and functions for the Calling Name Service to their customers as Qwest
3 provides to its retail customers. Qwest provides CLECs with unbundled
4 non-discriminatory access to the ICNAM database pursuant to Section 9.17 of its SGAT
5 and other Commission-approved interconnection agreements.

6 To update the ICNAM database, Qwest uses the Service Order Provisioning
7 Interface ("SOPI") system. Qwest also uses SOPI to update customer information in the
8 ICNAM database for reseller CLECs and CLECs that use unbundled local switching. In
9 so doing, the record updates of Qwest, reseller CLECs, and CLECs that use unbundled
10 local switching are commingled and loaded into the Line Validation Administration
11 System ("LVAS") which then loads and updates the customer information in the ICNAM
12 database in the same batch files. Facilities-based CLECs can perform additions,
13 changes and deletions through a dial-up Interconnect Mediated Access interface to load
14 information into LVAS which then loads and updates the customer information in the
15 ICNAM database in the same batch files that contain Qwest, reseller CLECs, and
16 CLECs that use unbundled local switching updates. In addition, facilities-based CLECs
17 that use their own switching facilities can also update customer records in the ICNAM
18 database by transmitting updates by facsimile or in electronic files for input into the
19 LVAS to update the ICNAM database. The facsimiles or electronic files are loaded by
20 Qwest into the LVAS, which then loads and updates the customer information in the
21 ICNAM database.²⁰ CLECs can use this process for multiple updates daily.

²⁰ See Local Competition Order, ¶ 494.

1 *Line Information Database ("LIDB")*. The LIDB stores customer information to
2 *provide screening and validation on alternately billed services for operator handled*
3 *calls, including bill-to-third-party, collect, and calling card calls.* For example, the
4 *records in LIDB can be used by a CLEC that provides its own operator services to query*
5 *LIDB to determine whether a particular end user will accept a collect call.*

6 The records in the LIDB include those of Qwest's end user customers, as well as
7 information entered into the LIDB by other carriers, including CLECs, regarding their
8 end user customers. CLECs can access the LIDB through Qwest's signaling network to
9 provide the same features and functions as Qwest provides for its retail customers.
10 Qwest provides nondiscriminatory unbundled access to its LIDB pursuant to Section
11 9.10 of its SGAT and other Commission-approved interconnection agreements. The
12 ICNAM database is part of the LIDB database. Thus, the LIDB is updated in the same
13 manner and using the same processes as described above for the ICNAM database.

14 Qwest's performance measurements, the Performance Indicator Definitions
15 (PIDs), were developed in the Regional Oversight Committee ("ROC") collaborative
16 Section 271 performance measures workshops. Those workshops, involving both
17 Qwest and CLECs, were conducted under the auspices of the ROC which is composed
18 of 13 state commissions in the Qwest region. Qwest has a performance measure for
19 the time required to complete LIDB updates. The PID for LIDB is DB-1B, "Time to
20 Update Databases."²¹ In June, July and August 2001, Qwest completed updates to the

²¹ Exhibit MSB-SIG-3 is the PIDs for call-related databases.

1 LIDB in an average of 3.12, 3.55 and 3.28 seconds, respectively.²² All updates for
2 CLECs' end user records are commingled with Qwest's updates and the updates are
3 performed in a nondiscriminatory manner (i.e., "parity by design"). Because the ROC
4 has determined that Qwest provides access that is considered "parity by design," DB-1B
5 does not have a benchmark objective. The measure is an aggregate average time for
6 Qwest and CLEC updates to LIDB. Thus, the updates are performed in a non-
7 discriminatory manner (i.e., "parity by design").

8 *Toll Free Calling Database.* The Toll Free Calling database (also referred to as
9 the 8XX database) enables a facilities-based CLEC to determine where an originating
10 8XX toll-free call should be routed. On such a call, a CLEC will send a query through
11 the Qwest SS7 network to the 8XX database to determine the call routing information
12 for the specific 8XX-NXX-XXXX telephone number dialed. The database transmits the
13 call routing information to the CLEC to forward the call to the appropriate network for
14 call completion. Reseller CLECs and CLECs purchasing unbundled switching from
15 Qwest have access to the 8XX database that is identical to that used by Qwest from the
16 same switch. Facilities-based CLECs that use their own switching facilities can access
17 the Qwest 8XX database through Qwest's SS7 network. All CLECs, therefore, can
18 access the Qwest 8XX database through Qwest's signaling network to provide the
19 same features and functions that Qwest provides to its retail customers. Qwest
20 provides CLECs with nondiscriminatory unbundled access to the 8XX database

²² Exhibit MSB-SIG-4 is Qwest's performance results for call-related databases in South Dakota.

1 pursuant to Section 9.16 of its SGAT and other Commission-approved interconnection
2 agreements.

3 Qwest also provides CLECs with three additional optional features in accessing
4 Qwest's 8XX database. First, Qwest can convert 8XX numbers into a designated 10-
5 digit telephone number and return this information to a CLEC sending a query. Second,
6 Qwest can provide a customized service area that will release 8XX call routing
7 information only for calls originating from an 8XX subscriber's desired service area. The
8 database screens calls originating outside the area and sends a recording to the calling
9 carrier for such calls. Third, Qwest can route calls based on one, or any combination, of
10 the following: time of day, day of week, percent allocation, and specific 10-digit
11 automatic number identification.

12 Records in Qwest's 8XX database are provided and updated through the
13 downloading of information from a national toll free database SMS. The national toll
14 free database is administered by Telcordia's Database Services Management, Inc.
15 ("DSMI").

16 *Local Number Portability ("LNP") Database.* The LNP database stores the
17 identification of the end office switch that serves a particular ported telephone number.
18 Number portability permits end users to keep their original telephone numbers when
19 they change service providers. Reseller CLECs and CLECs purchasing unbundled
20 switching from Qwest have access to the LNP database identical to that used by Qwest
21 for the same switch. Facilities-based CLECs that use their own switching facilities can

1 access Qwest's LNP database through the SS7 network to determine how to route calls
2 to telephone numbers that have been ported.

3 If a telephone number has been ported, the LNP database will return the
4 Location Routing Number ("LRN") (i.e., the network address of the switch currently
5 serving the telephone number) such that the call can be routed to the appropriate
6 network and switch for call completion. On a local call, the originating end office queries
7 the LNP database for routing information. If the telephone number in the LNP database
8 shows that the number has not been ported, the call is terminated in the original switch
9 as usual. If the telephone number in the LNP database shows that the number has
10 been ported, the new routing information is returned and the call is routed to the new
11 service provider's switch for call termination. CLECs can access the Qwest LNP
12 database to provide the same features and functions to their end user customers as
13 Qwest provides to its own retail customers. Qwest provides CLECs with
14 nondiscriminatory unbundled access to the LNP database pursuant to Section 10.2 of
15 its SGAT and other Commission-approved interconnection agreements.

16 Records in Qwest's LNP database are updated through the downloading of
17 information from a regional Number Portability Administration Center ("NPAC")
18 database. The NPAC database is owned and administered by the North American
19 Numbering Plan Administrator, NeuStar. The LNP database is discussed further in my
20 affidavit on Checklist Item 11.

21 *E911 Database.* As described in my affidavit regarding Checklist Item 7(i)
22 concerning 911 and E911 services, Enhanced 911 service is an emergency call service

1 that provides emergency personnel with the name and address of a person making an
2 emergency call. Specifically, E911 service routes end user emergency calls and a
3 calling party's Automatic Number Identification ("ANI") to the appropriate Public Safety
4 Answering Point ("PSAP"). The PSAP is the local entity that handles 911/E911
5 emergency calls based on the geographical location of the end user. The PSAP then
6 uses the ANI to query the E911 database, which provides the PSAP with the end user
7 name and address associated with the ANI.

8 The E911 (or Automatic Location Identification ("ALI") database) contains the
9 ANI, name, and street address information for each end user customer in the
10 geographic area that the E911 database serves. Qwest employs a third party, Intrado
11 Inc. (formerly SCC Communications Corp.), to administer its E911 database. Intrado
12 provides E911 database management services for Qwest, CLECs, and other local
13 exchange carriers. Qwest's SGAT and Qwest's contract with Intrado both provide that
14 database updates are provided to, and managed for, CLECs with the same accuracy
15 and reliability as that provided for Qwest.²³

16 Qwest's performance measure or PID, DB-1A, "Time to Update Databases,"
17 measures the time required to complete E911 database updates for Qwest, resellers
18 and CLECs purchasing unbundled switching.²⁴ In June, July and August 2001, Qwest
19 completed updates to the E911 database in an average of 6:04, 2:18, and 1:44 hours

²³ See SGAT § 10.3.4.1.

²⁴ See Exhibit MSB-SIG-3.

1 and minutes, respectively.²⁵ All updates to the E911 database for CLECs are
2 commingled with Qwest's updates, and the E911 updates are performed in a non-
3 discriminatory manner (i.e., "parity by design"). Thus, DB-1A, like DB-1B for LDB, is
4 also a "parity by design" measure with no benchmark objective established. All updates
5 to the E911 database for CLECs are commingled with Qwest's updates. The measure
6 is an aggregate average time for Qwest and CLEC updates. Thus, the E911 updates
7 are performed in a nondiscriminatory manner (i.e., "parity by design"). Qwest's SGAT
8 establishes that Qwest, through Intrado, will provide CLECs with nondiscriminatory error
9 correction for database records.²⁶

10 For reseller CLECs and CLECs using unbundled local switching, Qwest provides
11 E911 database updates in the same manner that Qwest provides for its own retail end
12 users. Specifically, record updates for reseller CLECs, CLECs using unbundled local
13 switching, and Qwest are commingled together in the same batch files for completed
14 service orders that Qwest sends to Intrado. Facilities-based CLECs that use their own
15 switching facilities make the same direct arrangements with Intrado for providing and
16 processing database updates that Qwest makes with Intrado.

17 *Advanced Intelligent Network ("AIN") Databases.* AIN is a network architecture
18 that uses distributed intelligence in centralized databases to control call processing and
19 manage network information, rather than performing those functions at each switch.
20 AIN capabilities also can be used to provide new or enhanced features for an end user.

²⁵ See Exhibit MSB-SIG-4.

²⁶ See SGAT §§ 10.3.4.1, 10.3.5.1.

1 The capabilities of an AIN database are activated through AIN triggers in the switch. A
2 trigger is a function in the processing of a call that prompts the sending of a database
3 query in order to determine what action should be taken by the network. Qwest
4 provides nondiscriminatory access to AIN databases pursuant to Section 9.14 of its
5 SGAT and other Commission-approved interconnection agreements.

6 For example, an end user on a Qwest end office switch may establish a
7 restricted calling list that will not allow calls to be placed from the end user's telephone
8 line to specific telephone numbers. The list will be stored in an AIN database and an
9 AIN trigger will be established in the switch to notify the call processing equipment to
10 check this list on every call originated from the end user's line. Then, when a call is
11 originated from this line, the end office switch will analyze the called telephone number
12 and find the AIN trigger that will instruct the switch to query an AIN database. The
13 switch will then send a query to the designated database and review the restricted
14 dialing list. If the dialed number is on the list, the call will be directed to an interrupt
15 announcement. If the dialed number is not on the restricted list, the call will be sent to
16 the appropriate destination for call completion.

17 Qwest provides CLECs with access to the Qwest service creation process to
18 create new AIN services to be placed in a Qwest AIN database for the CLEC's use. For
19 service creation, Qwest provides access to its AIN Customized Services ("ACS"),
20 allowing CLECs to use Qwest's service application development process on a
21 nondiscriminatory basis to design, create, test, and deploy AIN-based services. The
22 elements of service creation and testing are combined to meet the individual needs of

1 the CLEC. The service creation process is manual, built by a Qwest technician, and is
2 the same manual process used by Qwest for its own retail service creation. Services
3 developed through the ACS process for use by the CLEC can either be implemented in
4 Qwest's network for the CLEC or provided to the CLEC to be installed in its own
5 network.

6 CLECs also have access to Qwest's AIN Platform Access (APA) process to
7 update a record in an existing Qwest AIN database for a particular service. The AIN
8 APA process involves building and maintaining carrier and user line records in Qwest's
9 AIN databases for provisioning and call processing. Qwest updates its database for
10 itself and for reseller CLECs through Qwest's service order process. CLECs that
11 purchase unbundled local switching or that use their own switching facilities, can update
12 their customer's line records either by using the Internet Services Gateway (ISG) or by
13 sending an electronic file which is loaded by Qwest into the AIN database. Other types
14 of electronic access to the APA process can be developed for individual CLECs through
15 the AIN ACS development process.

16 **Access to Additional Signaling and Call-Related Databases.** If any additional
17 databases are determined to be necessary for call routing and completion, Qwest will
18 make access to such databases available to CLECs through its signaling network.

19 **Qwest Protects the Confidentiality of Information in its Databases.** Qwest
20 protects the confidentiality of CLEC and customer proprietary information in its call-
21 related databases in accordance with the FCC's rules and the customer proprietary

1 network information provisions, Section 222, of the 1996 Act.²⁷ All of Qwest's call-
2 related databases have service provider identifiers for each customer record in the
3 databases. These service provider identifiers permit only the specified service provider
4 to add, delete or change its customer records, and thus prevent other carriers from
5 changing the information in those customer records. The LNP, 8XX, and E911
6 databases also have service provider identifiers even though they are administered by
7 third parties.

8 In addition, for CLECs using manual processes to provide updates to Qwest's
9 databases, Qwest has established a "safe harbor," in Qwest, meaning access to the
10 databases is limited to a specific group of employees responsible for managing those
11 databases. By using service provider identifiers and providing only restricted employee
12 access to these databases, Qwest ensures that the confidentiality of customer records
13 is maintained.

14 **III. RESOLUTION OF ISSUES IN THE MULTI-STATE WORKSHOPS**

15 Qwest has participated in Section 271 collaborative workshops addressing
16 Checklist Item 10 in Arizona, Colorado, Oregon, Washington and in the Multi-State
17 proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North
18 Dakota, Utah, and Wyoming. The Multi-State 271 workshop for this Checklist Item was
19 conducted as a "paper" workshop. CLECs, other interested parties, and commission
20 staffs participated in the paper workshop. The interested parties and Qwest filed

²⁷ 47 U.S.C. § 222.

1 testimony regarding Qwest's compliance with Checklist Item 10. In the Multi-State
2 Paper Workshop Final Report the workshop facilitator states that ". . . issues have been
3 resolved in a manner that is consistent with the public interest and with the requirement
4 that Qwest comply with checklist item 10."²⁸ In addition, other states have reached a
5 similar conclusion that Qwest satisfies the requirements for Checklist Item 10.²⁹ Thus
6 far, every state commission to consider Qwest's compliance with Checklist Item 10 has
7 found that Qwest complies with this Checklist Item subject to satisfactory performance
8 in the ROC OSS test.

9 On September 25, 2001, Liberty Consulting Group, an independent third party
10 retained as part of the ROC OSS Test, completed its audit of Qwest's performance
11 measures (PIDs) and concluded that "the audited performance measures accurately

²⁸ Paper Workshop Final Report at 51-52 (Multi-State Workshop Mar. 19, 2001).

²⁹ *E.g.*, Investigation Into U S WEST Communications, Inc.'s Compliance With Section 271 of the Telecommunications Act of 1996, Docket No. UT-003022/UT-003040, Commission Order Addressing Workshop One Issues: Checklist Items No. 3, 7, 8, 9, 10, 12, and 13, at 15 (WUTC June 11, 2001); Investigation into the Entry of Qwest Corporation, formerly known as U S WEST Communications, Inc., into In-Region InterLATA Services under Section 271 of the Telecommunications Act of 1996, Docket UM 823, Workshop 1 Findings and Recommendation Report of the Commission, at 13-14 (Ore. PUC April 16, 2001); In the Matter of U S WEST Communications, Inc.'s Compliance with Section 271 of the Telecommunications Act of 1996, Docket No. T-00000A-97-0238, Decision No. 63384, Findings of Fact, (A.C.C. Feb. 16, 2000); In the Matter of U S WEST Communications, Inc., Denver, Colorado, Filing of its Notice of Intention to File Section 271(c) Application with the FCC and Request for Commission to Verify U S WEST Compliance with Section 271(c), Application No. C-1830, Factual Findings and Partial Verification, at 39-41 (NE PSC Apr. 9, 1999).

1 and reliably report actual Qwest performance."³⁰ Qwest has offered to have Liberty
2 verify its audit by conducting data reconciliation with any CLEC that believes Qwest's
3 performance data is inaccurate. No party has questioned the authenticity or accuracy of
4 the performance data related to Checklist Item 10.

5 Qwest participated in Section 271 collaborative workshops addressing Checklist
6 Item 10 in Arizona, Colorado, Oregon, Washington and in the Multi-State proceeding
7 involving state commissions from Idaho, Iowa, Montana, New Mexico, North Dakota,
8 Utah, and Wyoming. In these workshops, Qwest made several SGAT modifications
9 suggested by CLECs, and those modifications relating to Checklist Item 10 have been
10 incorporated into the South Dakota SGAT.

11 **IV. SUMMARY AND CONCLUSION**

12 As demonstrated in this affidavit, Qwest provides competitors with
13 nondiscriminatory access to call-related databases and signaling as required by
14 Checklist Item 10. Consistent with the FCC's rules, Qwest has concrete and specific
15 legal obligations to provide CLECs with unbundled, nondiscriminatory access to its
16 signaling network, including signaling links and signaling transfer points. Qwest also
17 provides CLECs unbundled, nondiscriminatory access to its call-related databases and
18 the ability to update the information in those databases using the service management

³⁰ The Liberty Consulting Group Final Report on the Audit of Qwest's Performance Measures at 2-3. The Liberty Final Audit report can be found at: <http://www.nrri.ohio-state.edu/oss/master/pid/sept/pmafinalreport.pdf>. A copy of the Audit Report is also attached to Mr. Williams' affidavit as Exhibit MGW-PERF-2.

1 systems. The performance results for the relevant PIDs demonstrate that Qwest
2 performs its obligations in a manner that is at parity and that affords an efficient
3 competitive local exchange carrier a meaningful opportunity to compete. Liberty
4 Consulting Group has also audited Qwest's performance measures and found that
5 Qwest properly reports its results for the measures relevant to Checklist Item 10. The
6 South Dakota Commission should find that Qwest has met the requirements of
7 Checklist Item 10 for access to call-related databases and signaling.

Being first duly sworn upon oath, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

I executed on this 15th day of October, 2001.

Margaret S. Bumgarner
Margaret S. Bumgarner

STATE OF WASHINGTON

COUNTY OF KING

Subscribed and sworn to before me this 15th day of October, 2001.

[Signature]
Notary Public

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S
EXHIBITS to the AFFIDAVIT
OF
MARGARET S. BUMGARNER
CHECKLIST ITEM 10 – CALL-RELATED DATABASES AND ASSOCIATED
SIGNALING

October 24, 2001

INDEX TO EXHIBITS

| <u>DESCRIPTION</u> | <u>EXHIBITS</u> |
|---|-----------------|
| Witness Qualifications | MSB-SIG-1 |
| Signaling Network Diagram | MSB-SIG-2 |
| Performance Indicator Definitions for Call-Related Databases | MSB-SIG-3 |
| Performance Results for Call-Related Databases – South Dakota | MSB-SIG-4 |

1 **QUALIFICATIONS OF MARGARET S. BUMGARNER**

2
3 My name is Margaret S. Bumgarner. My business address is 1600 Seventh
4 Avenue, Seattle, Washington, 98191. I am a Director in the Policy and Law
5 organization at Qwest Corporation ("Qwest").

6 I received a Bachelor of Science Degree in Education/Biology from Washington
7 State University. In 1973, I started working for Pacific Northwest Bell as a supervisor in
8 the network organization. I held several management positions in the network
9 organization, including installation, assignment, installation and repair service centers,
10 network budget analysis, switching operations and network administration staff. In
11 1982, I began working in the Planning and Engineering department doing network
12 planning for divestiture under the Modified Final Judgment, preparing the network equal
13 access compliance plan filed with the Department of Justice, and supervising the staff
14 for switch engineering and network design. In 1986, I became U S WEST's
15 representative to the national industry forums addressing technical network compatibility
16 issues and numbering issues and also managed the network planning groups
17 responsible for numbering and common channel signaling. In recent years, I was
18 responsible for a wide range of federal public policy issues, including numbering,
19 access reform, and interconnection.

20 I am currently a Director in the Policy and Law organization responsible for
21 several Section 271 checklist items and Qwest's filing with the Federal Communications
22 Commission ("FCC"). I base this affidavit on professional experience, personal

1 knowledge, and information available to me in the normal course of my duties, including
2 records kept by Qwest in the regular course of business. Specifically, my experience
3 has allowed me to develop an expertise in several Section 271 checklist areas such that
4 I have testified in the Section 271 workshops in Arizona, Colorado, Oregon,
5 Washington, and the joint seven-state ("Multi-State") workshops involving Idaho, Iowa,
6 Montana, New Mexico, North Dakota, Utah, and Wyoming. I also participated in the
7 Section 271 proceedings in Nebraska.

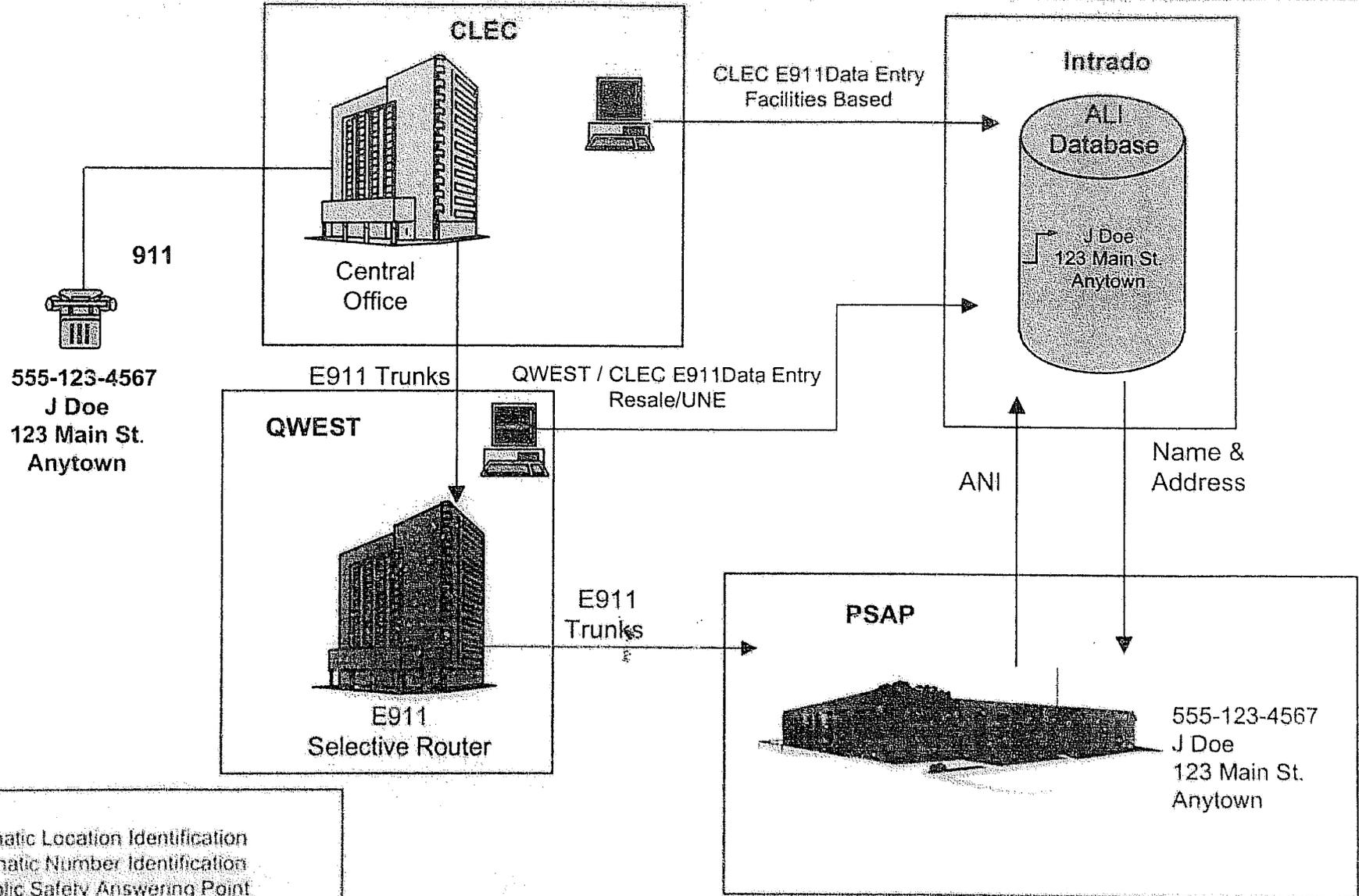
8 Through my testimony in the Section 271 workshops, I have directly participated
9 in the development and evolution of the terms and conditions of Qwest's Statement of
10 Generally Available Terms and Conditions ("SGAT"). These workshops and
11 proceedings were part of a collaborative process, conducted on an open basis with the
12 full, active, and equal participation by CLECs and state commission staffs. A significant
13 part of this process has involved responding to issues and concerns raised by
14 competitive local exchange carriers ("CLECs") and revising the SGAT when possible to
15 address their needs. I have also been responsible for ensuring that the resolution of
16 issues raised by CLECs have been integrated into the documentation of Qwest's
17 processes, methods and procedures provided to CLECs, that apply in each state of
18 Qwest's 14-state region.

19

CONTINUATION

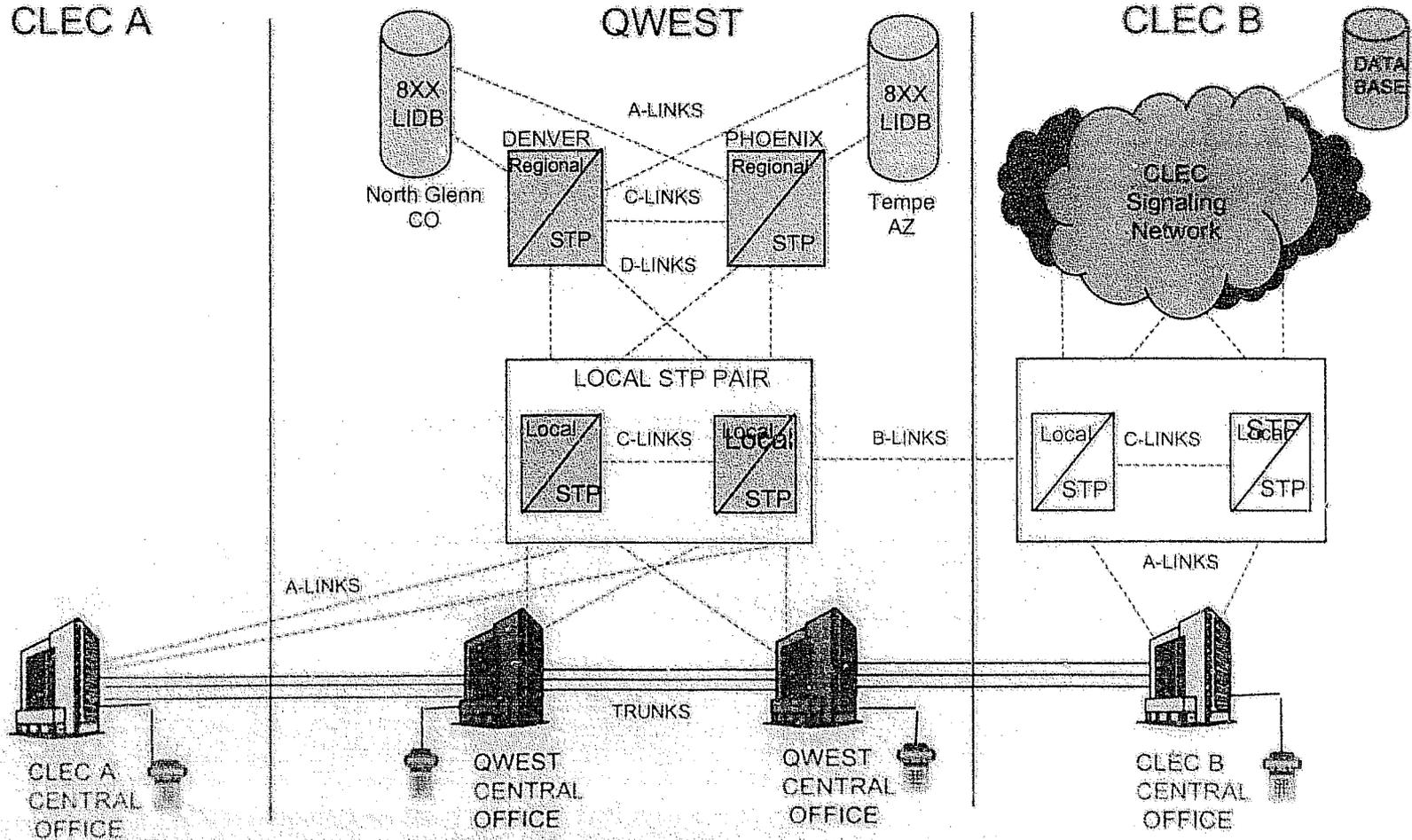
7 -

ENHANCED 911



Legend:
 ALI - Automatic Location Identification
 ANI - Automatic Number Identification
 PSAP - Public Safety Answering Point
 UNE - Unbundled Network Elements

CLEC Signaling Network Interconnection



CONTINUATION

[8.]

DB-1 - Time to Update Databases

Purpose:

Evaluate the time required for updates to the databases of E911, LIDB, and Listing Services System (LSS).

Description:

- Measures the average time required to update the databases of E911, LIDB, and LSS.
- Includes all database updates as specified under Disaggregation Reporting completed during the reporting period.
- For DB-1A the time to update the E911 database is provided by the third party vendor that performs the update. The elapsed time is captured automatically by the database system. There are no "individual E911 database update records" provided with which to measure the database update process.
- The numerator of DB-1A is calculated by multiplying the vendor-calculated results (Average Minutes in Process Time) by the denominator (Count of records Processed). This method produces a result from the vendor data that is the same as that which would be produced by totalling the update times from individual E911 database update records.

Reporting Period: One month

Unit of Measure:

E911 – Hrs: Mins.
 LIDB & Directory Listings – Seconds

Reporting Comparisons:

DB-1A-E911 – Combined results for Qwest Retail and Reseller CLEC Aggregate;
 DB-1B – LIDB – Combined results for all Qwest Retail, Reseller CLEC and Facilities Based CLEC updates;
 DB-1C-1 Listings – Combined results for all Provider types including Qwest Retail, Reseller CLEC, and Facilities Based CLEC, ILEC and Unknown Provider, Electronically Submitted, Electronically Processed updates; NOTE 1
 DB-1C-2 Listings – Combined results for all Provider types including Qwest Retail, Reseller CLEC, CLEC Aggregate for Facilities-based, ILEC, and Unknown Provider Manually Processed updates. NOTE 1

Disaggregation Reporting:

DB-1A – E911 for Qwest Retail and Reseller CLEC–State level;
 DB-1B – LIDB for Qwest Retail, Reseller CLEC and Facilities Based CLEC – Multi state region-wide level
 DB-1C-1 – Listings for all Provider types including Qwest Retail, Reseller CLEC, and Facilities Based CLEC, ILEC and Unknown Provider, Electronically Submitted, Electronically Processed– Sub-region applicable to state
 DB-1C-2 – Listings for all Provider types including Qwest Retail, Reseller CLEC, Facilities-Based CLEC, ILEC and Unknown Provider – Manually Processed – region-wide level

Formula:

((Date and Time of database update for each database update as specified under Disaggregation Reporting in the reporting period) – (Date and Time of submissions of data for entry into the database for each database update as specified under Disaggregation Reporting in the reporting period) / Total database updates as

specified under Disaggregation Reporting completed in the reporting period]

Exclusions:

Invalid start/stop dates/times.

Product Reporting:

Not applicable (Reported by database type)

Standard:

DB-1A-E911 – Parity by design
 DB-1B-LIDB – Parity by design
 DB-1C-1– Listings – Parity by design
 DB-1C-2 – Listings – Parity with DB-1C-1 results for all Provider types combined Qwest Retail, Reseller CLEC, Facilities Based, ILEC, and Unknown Provider, Electronically Submitted, Electronically Processed, updates

Availability:

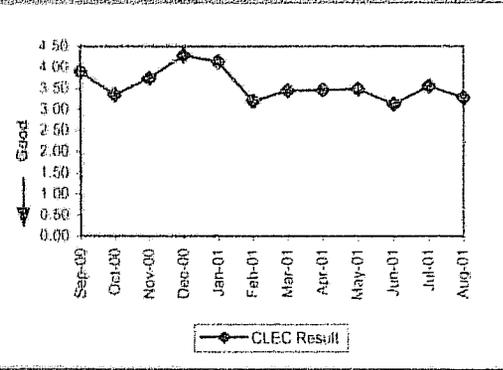
Available

Notes:

Because they cannot be separated, results for Qwest Retail, Reseller CLEC, Facilities-based CLECs, ILEC and Unknown Provider updates are reported combined within these disaggregations.

Exhibit #15 - Databases and Signaling

| Month | Value |
|--------|-------|
| Sep-00 | 3.89 |
| Oct-00 | 3.35 |
| Nov-00 | 3.74 |
| Dec-00 | 4.28 |
| Jan-01 | 4.13 |
| Feb-01 | 3.19 |
| Mar-01 | 3.44 |
| Apr-01 | 3.46 |
| May-01 | 3.48 |
| Jun-01 | 3.12 |
| Jul-01 | 3.55 |
| Aug-01 | 3.28 |



BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S
AFFIDAVIT
OF
MARGARET S. BUMGARNER
CHECKLIST ITEM 11- NUMBER PORTABILITY

OCTOBER 24, 2001

TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| I. EXECUTIVE SUMMARY | 1 |
| II. QWEST COMPLIES WITH THE 1996 ACT AND FCC'S NUMBER PORTABILITY REQUIREMENTS. | 5 |
| A. Qwest Deployed LNP In Compliance With the FCC's Deployment Schedule..... | 6 |
| B. Qwest Complies With The FCC's LNP Performance Criteria. | 8 |
| C. Qwest Complies With The FCC's Technical, Operational, Architectural, and Administrative Requirements For Number Portability..... | 13 |
| D. Processing and Provisioning of LNP Requests. | 15 |
| E. Qwest Complies With The FCC's Number Portability Cost Recovery Requirements. | 17 |
| III. RESOLUTION OF ISSUES IN THE MULTI-STATE WORKSHOPS | 18 |
| IV. SUMMARY AND CONCLUSION..... | 21 |

AFFIDAVIT

OF

MARGARET S. BUMGARNER

Checklist Item 11 – Number Portability

Margaret S. Bumgarner states as follows:

My name is Margaret S. Bumgarner. I am a Director in the Policy and Law organization for Qwest Corporation ("Qwest"). My business address is 1600 Seventh Avenue, Seattle, Washington, 98191. I submit this affidavit in support of Qwest's application for authority to provide interLATA services originating in South Dakota. In this affidavit, I show that Qwest has complied with Checklist Item 11 of Section 271 of the Telecommunications Act of 1996 ("1996 Act" or "Act") concerning number portability.¹

I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties, including records kept by Qwest in the regular course of business.²

I. EXECUTIVE SUMMARY

Qwest satisfies the requirements of Section 271(c)(2)(B)(xi) of the 1996 Act and the FCC's number portability regulations. Specifically, Qwest has complied with the FCC's (a) long term number portability ("LNP") implementation schedule, (b)

¹ 47 U.S.C. § 271(c)(2)(B)(xi).

1 performance criteria, (c) technical, operational, architectural, and administrative
2 requirements, and (d) cost recovery rules for number portability. Number portability is
3 available to CLECs in South Dakota under Qwest's Statement of Generally Available
4 Terms and Conditions ("SGAT") and Qwest's Commission-approved interconnection
5 agreements.

6 As of October 2000, Qwest had deployed long-term number portability
7 throughout the state of South Dakota, making LNP available to 100 percent of Qwest's
8 access lines in the state. Qwest accomplished this deployment in full compliance with
9 the FCC's rules and deployment schedule.

10 Qwest has also complied with the FCC's LNP performance criteria through its
11 deployment of LNP utilizing the Location Routing Number ("LRN") method in
12 accordance with industry guidelines. The FCC has recognized the LRN method as
13 consistent with the FCC's LNP performance criteria.

14 In addition, Qwest has complied with the FCC's technical, operational,
15 architectural, and administrative requirements by (a) integrating National Portability
16 Administration Center ("NPAC") Service Management System ("SMS") Provisioning
17 Process Flows into its number porting functions and operational support systems
18 ("OSS"); (b) implementing number portability in compliance with the NPAC SMS
19 Functional Requirements Specification ("FRS") and Interoperable Interface Specification
20 ("IIS"); (c) developing processes to port reserved numbers in compliance with North

21 Professional experience, education and other biographical information are set
22 forth in Exhibit MSB-LNP-1.

1 American Numbering Council ("NANC") policies; (d) complying with the NANC's change
2 management process; (e) designing Qwest's network to perform database queries as
3 the 10-1 center; and (f) integrating a process for the "snapback" of disconnected ported
4 numbers to the service provider listed in the national Local Exchange Routing Guide
5 (LERG).

6
7 Firstly, Qwest has complied with the FCC's cost recovery rules for number
8 portability by establishing monthly number portability charges and number portability
9 query charges in its FCC Tariff No. 1. The FCC found the number portability charges in
10 this tariff to be reasonable and lawful in an order released July 16, 1999.

11
12 As of August 31, 2001, Qwest had ported 22,678 telephone numbers in South
13 Dakota and 2,061,035 telephone numbers region-wide using the same systems and
14 processes.

15
16 Qwest's performance data for number portability demonstrate that Qwest is
17 performing well above the 95 percent performance benchmark for the number portability
18 performance measures. Qwest's performance measures, the Performance Indicator
19 Definitions ("PIDs"), were developed in the Regional Oversight Committee ("ROC")
20 collaborative Section 271 performance measures workshops. Those workshops,
21 involving both Qwest and CLECs, were conducted under the auspices of the ROC
22 which is composed of 13 state commissions in the Qwest region. For number
23 portability, PIDs OP-8B, "LNP Timeliness with Loop Coordination," and OP-8C, "LNP
24 Timeliness Without Loop Coordination," measure the percentage of LSA triggers, also
25 referred to as unconditional 10-digit or Line Side Attribute ("LSA") triggers, that Qwest

1 ~~installs ("sets")~~ in the switch prior to the scheduled start time for unbundled loop
2 ~~orders requiring coordination~~ and for LNP orders not requiring loop coordination,
3 ~~respectively~~. When the LSA trigger is set prior to the start time for a cutover, the CLEC
4 ~~controls the activation of number portability~~ without the need for any involvement by, or
5 ~~coordination with, Qwest~~. Liberty Consulting Group has also recently released its audit
6 ~~of Qwest's performance results~~ and confirmed that Qwest is accurately measuring its
7 ~~performance in providing number portability~~.

8 Recently, three additional measures for number portability have been agreed to
9 in the ROC performance workshop: 1) OP-17 "Timeliness of Disconnects associated
10 with LNP orders" measures the quality of Qwest completing telephone number porting
11 without performing the associated disconnects before the scheduled time and date; 2)
12 MR-11 "LNP Trouble Reports Cleared within 24 Hours" measures the timeliness of
13 clearing LNP trouble reports; and, 3) MR-12 "LNP Trouble Reports – Mean Time to
14 Restore" measures how long it takes to clear LNP trouble reports. Qwest is currently
15 developing the procedures for producing these new performance measures.

16 Qwest has participated in Section 271 collaborative workshops addressing
17 Checklist Item 11 in Arizona, Colorado, Oregon, Washington and in the Multi-State
18 proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North
19 Dakota, Utah, and Wyoming. During these workshops, Qwest agreed to several
20 modifications to its SGAT to accommodate CLECs' competitive concerns. All of these
21 modifications have been included in the South Dakota SGAT. In the Multi-State
22 Workshop One Final Report, the workshop Facilitator states there is one issue at

1 ~~impose~~ for Checklist Item 11 that requires an SGAT language change and Qwest
2 ~~should not be deemed~~ to be in compliance with this Checklist Item before it makes the
3 ~~changes necessary~~ to deal with this issue. The Facilitator goes on to state, “. . . upon
4 ~~making the changes~~, Qwest can be deemed to have met its burden of proof, subject to
5 ~~the completion and commission consideration~~ of the results of any OSS testing that may
6 ~~relate to this item.~~” Qwest has made the change recommended by the Multi-State
7 ~~Facilitator~~ and it is included in the South Dakota SGAT. Qwest has also made
8 ~~significant mechanized changes~~ since the Multi-State Report was released that provide
9 ~~improvements to the porting processes~~ beyond what the Multi-State Facilitator deemed
10 ~~necessary for Qwest to do to satisfy the requirements of Checklist Item 11.~~

11 Qwest thus provides number portability in South Dakota in compliance with both
12 ~~the 1996 Act and FCC rules.~~ For these reasons, the South Dakota Commission should
13 ~~find that Qwest satisfies the requirements of Section 271(c)(2)(B)(xi) for number~~
14 ~~portability.~~

15 **II. QWEST COMPLIES WITH THE 1996 ACT AND FCC'S NUMBER**
16 **PORTABILITY REQUIREMENTS.**

17 Number portability is defined as the ability of users of telecommunications
18 ~~services to retain~~, at the same location, existing telecommunications numbers without
19 ~~impairment of quality, reliability, or convenience~~ when switching from one
20 ~~telecommunications carrier to another.~~³

³ 47 U.S.C. § 153(30).

1 Section 271(c)(2)(B)(xi) of the Act (Checklist Item 11) requires Bell Operating
2 Companies ("BOCs") to comply with the number portability regulations adopted by the
3 FCC pursuant to Section 251 of the Act.⁴ Section 251(b)(2) of the Act requires local
4 exchange carriers ("LECs") to "provide, to the extent technically feasible, number
5 portability in accordance with requirements prescribed by the [FCC]."⁵

6 As demonstrated below, Qwest complies with the FCC's rules regarding number
7 portability.

8 **A. Qwest Deployed LNP In Compliance With the FCC's Deployment**
9 **Schedule.**

10 As of October 2000, Qwest completed its deployment of LNP in all of its switches
11 in South Dakota, making LNP available to 100 percent of its access lines in the state.
12 Qwest deployed LNP in South Dakota in full compliance with the FCC's deployment
13 schedule.⁶ Qwest's LNP deployment schedule for South Dakota is available on Qwest's

⁴ 47 U.S.C. § 271(c)(2)(B)(xi); 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 Texas, Memorandum Opinion and Order, CC Docket No. 00-65, FCC 00-238, 15 FCC Rcd 18354, ¶ 369 (rel. June 30, 2000) ("SBC Texas Order"). See also Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service In the State of New York, Memorandum Opinion and Order, CC Docket No. 99-295, FCC 99-404, 15 FCC Rcd 3953, ¶367 (rel. Dec. 22, 1999) ("Bell Atlantic New York Order").

⁵ 47 U.S.C. § 251(b)(2).

⁶ Telephone Number Portability, First Memorandum Opinion and Order on Reconsideration, CC Docket No. 95-116, FCC 97-74, 12 FCC Rcd 7236, App. E (rel. March 11, 1997) ("First Memorandum Opinion and Order on Reconsideration").

1 Network Disclosure website⁷ and is included in the national Local Exchange Routing
2 Guide ("LERG"). Exhibit MSB-LNP-2 is the LNP deployment schedule for South
3 Dakota.

4 Qwest has concrete and specific legal commitments to provide LNP through
5 Qwest's SGAT⁸ and Qwest's Commission-approved interconnection agreements.
6 Qwest's SGAT was updated as a result of consensus reached in collaborative Section
7 271 workshop processes, conducted on an open basis with full, active, and equal
8 participation by competitors and state commission staffs. Specifically, Qwest's SGAT
9 was developed with the input of competitors and commission staffs through
10 collaborative Section 271 workshops in Arizona, Colorado, Oregon, Washington, and
11 the Multi-State Section 271 workshops involving Idaho, Iowa, Montana, New Mexico,
12 North Dakota, Utah, and Wyoming. All of these modifications have been included in the
13 South Dakota SGAT.

14 As of August 31, 2001, Qwest had ported 22,678 telephone numbers in South
15 Dakota and 2,061,038 telephone numbers region-wide using the same systems and
16 processes. Exhibit MSB-LNP-3 provides the volumes of telephone numbers ported
17 each month for each state and the cumulative total as of the end of August 2001.

18 Given Qwest's deployment of LNP in South Dakota, there has been no interim
19 number portability ("INP") activity in South Dakota for over a year. The FCC requires

⁷ Qwest's Network Disclosure website showing scheduled and completed LNP conversions is available at Qwest's website at:
www.qwest.com/disclosures/netdisclosure414/index.html.

⁸ See SGAT § 10.2.

1 that when LNP has been deployed in an area, interim methods can no longer be used.⁶
2 Interim number portability, therefore, is no longer available for ordering by CLECs in
3 South Dakota.⁷

4 **B. Qwest Complies With The FCC's LNP Performance Criteria.**

5 The FCC established eight performance criteria that long-term number portability
6 architectures must meet.¹¹ Qwest complied with the FCC's eight LNP performance
7 criteria by deploying LNP utilizing the Location Routing Number ("LRN") method in
8 conformance with industry guidelines. The FCC has recognized the LRN method as
9 consistent with the FCC's LNP performance criteria.¹² Specifically, LRN:

- 10 (1) supports existing network services, features, and capabilities;
- 11 (2) uses numbering resources efficiently;

⁶ See 47 C.F.R. § 52.27(d); Telephone Number Portability, Second Memorandum Opinion and Order on Reconsideration, CC Docket No. 95-116, FCC 98-275, 13 FCC Rcd 21204, ¶ 16 (rel. Oct. 20, 1998) ("Second Memorandum Opinion and Order on Reconsideration").

⁷ See § 10.1 of the SGAT that previously addressed INP has been removed.

⁸ 47 C.F.R. § 52.23(a); Telephone Number Portability, First Report and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116, FCC 96-286 11 FCC Rcd 8352, ¶¶ 21-22; ¶ 54 (rel. July 2, 1996) ("First Report and Order"); First Memorandum Opinion and Order on Reconsideration, ¶ 19.

⁹ See Telephone Number Portability, Second Report and Order, CC Docket No. 95-116, FCC 97-289, 12 FCC Rcd at 12287, ¶¶ 8, 74 (rel. Aug. 18, 1997) ("Second Report and Order") (stating that "[i]ndustry consensus is that the Location Routing Number system is the best method to satisfy the Commission's performance criteria for long-term local number portability"), citing First Memorandum Opinion and Order on Reconsideration, ¶¶ 8-10; see also Working Group Report, App. D, "Architecture and Administrative Plan for Local Number Portability" § 7.2 ("Architecture Task Force Report").

- (1) does not require end users to change their telecommunications numbers;
- (2) does not result in a degradation of service quality or network reliability;
- (3) does not cause a degradation of service quality or network reliability when end users change service providers;
- (4) does not give any carrier a proprietary interest in LRN or any other LNP method;
- (5) will be able to accommodate location and service portability in the future;
- and
- (6) has no adverse impact outside the areas where it has been deployed.

LRN is an addressing and routing method that allows the re-homing of individual telephone numbers to other switches through the use of a database. With LRN, each public network switch is assigned a ten-digit LRN, which identifies the address of that switch. Each ported telephone number is matched in the regional NPAC database with the LRN for the switch that serves that telephone number. The regional NPAC database is currently provided and administered by NeuStar as a neutral third party administrator. The regional NPAC database downloads the LRN information into service providers' local service management system ("LSMS") databases. Qwest's number portability LSMS then downloads the information into Qwest's number portability service control points ("SCPs") (the "LNP databases"), which respond to number portability queries.¹³ Qwest's provision of nondiscriminatory access to its LNP

¹³ CLECs can either own a local number portability database or lease access to a local number portability database from Qwest or a third party.

1 database is discussed in my affidavit regarding Checklist Item 10, regarding call-related
2 databases and associated signaling.

3 Unlike interim number portability methods, LNP does not operate by routing a
4 telephone call through the Qwest central office switch that originally served the specific
5 telephone number. Instead, an Advanced Intelligent Network ("AIN") trigger, the Line
6 Side Attribute ("LSA"), also called the "unconditional 10-digit trigger," causes a query to
7 be launched through the SS7 signaling network to the LNP databases to determine the
8 current routing address for the number. The SS7 signaling network then routes the call
9 to the switch that currently serves that telephone number for call completion.

10 Qwest has exerted considerable effort on switch and system development and
11 improved processes to mechanize and increase the pre-setting of LSA triggers in its
12 switches. Qwest electronically pre-sets a trigger on each telephone number in a
13 CLEC's local service request ("LSR") for number portability. Pre-setting the LSA trigger
14 allows the CLEC to control the activation of number portability on the CLEC's
15 designated due date.

16 The translation in the switch of an LSA trigger, referred to as "setting a trigger"
17 causes the suspension of call termination within the original "donor" switch to a specific
18 line's telephone number, while a query is sent by the SS7 signaling network to the LNP
19 database for routing information. If the telephone number in the LNP database shows
20 that the number has not yet been ported, the call is terminated in the original switch as
21 usual. If the telephone number in the LNP database shows that number portability has
22 been activated by the CLEC, the new routing information is returned and the call is

1 routed to the CLEC's switch for call termination. When the LSA trigger has been set on
2 a telephone number prior to the Frame Due Time or prior to the start time of an
3 unbundled loop cutover, the CLEC controls the activation of number portability. The
4 LSA trigger process eliminates the need to coordinate Qwest's switch disconnect
5 translation with the new service provider's switch provisioning and with any physical
6 loop work that may be required. In short, by electronically pre-setting the LSA trigger,
7 Qwest pre-provisions the capability to port a number and the CLEC then controls the
8 activation of number portability on the due date.

9 The LSA trigger can be pre-set for all ported telephone numbers except on Direct
10 Inward Dialing ("DID") numbers in Nortel DMS10 and Ericsson AXE10 switches.
11 However, Qwest's DMS10 and AXE10 switches do not typically serve DID-type
12 services. Thus, there are very few instances when the LSA trigger cannot be pre-set.
13 When the LSA trigger cannot be pre-set, Qwest recommends a coordinated conversion
14 (i.e., a project managed cut) for a CLEC-provided loop cut-over.¹⁴

15 Qwest's performance data for number portability demonstrate that Qwest is
16 performing well above the 95 percent performance benchmark for number portability
17 performance measures in South Dakota. Qwest's performance measures, the
18 performance indicator definitions ("PIDs"), were developed in the Regional Oversight
19 Committee ("ROC") collaborative Section 271 performance measures workshops.

¹⁴ See SGAT §§ 10.2.5.3 - 10.2.5.4 for coordinated conversions, "Managed Cuts," associated with CLEC-provided loops, and SGAT §§ 9.2.2.3 - 9.2.2.4 for coordinated conversions with Qwest unbundled loops. Managed Cuts are available 24 hours a day, seven days a week.

These workshops, involving both Qwest and CLECs, were conducted under the auspices of the ROC, which is composed of 13 state commissions in the Qwest region. For number portability, PIDs OP-8B, "LNP Timeliness with Loop Coordination," and OP-8C, "LNP Timeliness Without Loop Coordination," measure the percentage of LSA triggers that Qwest translates ("sets") in the switch prior to the scheduled start time for unbundled loop cutovers requiring coordination and for LNP orders not requiring coordination, respectively.¹⁵ On September 25, 2001, Liberty Consulting Group, the third-party consulting firm retained by the ROC to audit Qwest's performance measures, issued its Final Report on the Audit of Qwest's Performance measures. Liberty Consulting Group found that all of the PIDs for Checklist Item 11 correctly measured Qwest's performance and that Qwest was accurately reporting its results.¹⁶

Recently, three additional measures for number portability have been agreed to in the ROC: 1) OP-17 "Timeliness of Disconnects associated with LNP orders" measures the quality of Qwest completing telephone number porting without implementing the associated disconnects before the scheduled time and date; 2) MR-11 "LNP Trouble Reports Cleared within 24 Hours" measures the timeliness of clearing LNP trouble reports; and, 3) MR-12 "LNP Trouble Reports – Mean Time to Restore"

¹⁵ Exhibit MSB-LNP-4 are the PIDs for number portability.

¹⁶ The Liberty Consulting Group Final Report on the Audit of Qwest's Performance Measures at 2-3. The Liberty Final Audit report can be found at: <http://www.nrri.ohio-state.edu/oss/master/pid/sept/pmafinalreport.pdf>. A copy of the Audit Report is also attached to Mr. Williams' affidavit as Exhibit MGW-PERF-2.

1 ~~measures~~ how long it takes to clear LNP trouble reports. Qwest is currently developing
2 ~~the~~ procedures for producing the results for these new performance measures.

3 in South Dakota, from April through August 2001, Qwest set 100 percent each
4 month, except for May that had no data to report, of LNP triggers for coordinated loop
5 cutovers prior to the scheduled start time for the loop. Qwest also set 98.38, 99.85,
6 99.46, 99.83 and 97.70 percent, in April, May, June, July, and August, respectively, of
7 LSA triggers for LNP orders not requiring loop coordination prior to the scheduled start
8 time for the LNP cutover.¹⁷ Performance data is not available yet for the three new
9 PDs. Qwest's performance for the current LNP measures are well above the
10 benchmark objective of 95 percent.

11 **C. Qwest Complies With The FCC's Technical, Operational,**
12 **Architectural, and Administrative Requirements For Number**
13 **Portability.**

14 The FCC's technical, operational, architectural, and administrative requirements
15 for number portability consist of the recommendations set forth in the NANC's Technical
16 and Operational Task Force Report and Architecture Task Force Report. The FCC
17 adopted these as requirements in 1997.¹⁸

18 Qwest complies with the FCC's technical, operational, architectural, and
19 administrative requirements. Specifically, Qwest has:

20 ¹⁷ Exhibit MSB-LNP-5 are the performance results for LNP in South Dakota.

21 ¹⁸ Second Report and Order, ¶¶ 54-55, 71.

- 1 (a) integrated the National Portability Administration Center ("NPAC")
2 Service Management System ("SMS") Provisioning Process Flows
3 into its number porting functions and operations support systems;
- 4 (b) implemented number portability in compliance with the NPAC SMS
5 Functional Requirements Specification ("FRS"), which defines the
6 functional requirements of the NPAC SMS, and in compliance with
7 the NPAC SMS Interoperable Interface Specification ("IIS"), which
8 defines the interfaces between the NPAC SMS and the local
9 Service Management Systems of different service providers;
- 10 (c) developed processes to port reserved numbers in compliance with
11 the NANC's policies;
- 12 (d) complied with the NANC's change management process governing
13 the process for designing, developing, testing, and implementing
14 changes to the NPAC SMS, NPAC SMS Provisioning Process
15 Flows, NPAC SMS FRS and IIS, and related specifications and
16 processes;
- 17 (e) designed Qwest's network to perform database queries required as
18 the N-1 carrier (the carrier in the call routing process immediately
19 preceding the terminating carrier), and established processes to
20 ensure that any network management controls required to prevent
21 potential overload conditions on default routed calls (calls routed to

1 non-N-1 LECs when the N-1 carrier fails to perform a query) are
2 used in a nondiscriminatory fashion; and

3 (f) integrated a process for the "snapback" of disconnected ported
4 numbers to the service provider listed in the LERG for the assigned
5 NXX.¹⁹

6 **D. Processing and Provisioning of LNP Requests.**

7 To initiate a number portability request, a CLEC submits a local service request
8 ("LSR") to port the end user's telephone number(s). The LSR can be submitted by
9 facsimile or electronically. When Qwest receives the LSR, Qwest processes the LSR
10 and returns a firm order confirmation ("FOC") to the requesting CLEC. After the CLEC
11 receives the FOC, the CLEC is required to forward a "subscription version" ("SV") to the
12 NPAC indicating its intent to port a telephone number. Qwest also will create an NPAC
13 SV, which will match the CLEC's NPAC SV to port the number. (These procedures are
14 described in the NANC's Provisioning Process Flows.²⁰) The requesting CLEC
15 activates its NPAC SV on the due date designated in the CLEC's LSR. The NPAC then

¹⁹ See Second Report and Order, ¶¶ 55-79.

²⁰ NANC Working Group Report at Appendix E, "Inter-Service Provider LNP Operations Flows," ("Technical and Operational Task Force Report"), at Appendix B, submitted in Letter from Alan C. Hasselwander, Chairman, NANC, to Reed Hundt, Chairman, FCC, CC Docket No. 95-116 (May 1, 1997); see FCC Public Notice, CC Docket No. 95-116, DA 97-916, 12 FCC Rcd 5003 (1997).

1 ~~transmits~~ the telephone number(s) with the associated LRN routing information to all
2 of the local number portability databases.²¹

3 Qwest implemented a mechanized process in June 2001 that holds the
4 disconnect of the switch translations until 11:59 p.m. of the day after the CLEC's
5 requested due date. This allows the CLEC an additional day to complete its
6 provisioning of the end-user customer's service and activate the number port in the
7 NPAC. Previously, Qwest processed disconnects of the switch translations late at night
8 on the CLEC's scheduled due date. Qwest made this mechanized change to provide
9 the CLEC additional time to notify Qwest if the CLEC cannot complete its provisioning
10 work on the scheduled due date and needs to delay the due date or cancel the number
11 portability service order.

12 Qwest's LNP product and process management team has continued to meet
13 weekly to improve LNP provisioning and repair. Qwest provides CLECs with
14 documentation regarding Qwest's methods and procedures for ordering, provisioning,
15 and conducting maintenance and repair of number portability arrangements. This
16 documentation is sent directly to CLECs through their Qwest account managers,
17 notifications that are sent to CLECs through the Change Management Process ("CMP"),
18 and is included in Qwest's wholesale CLEC Product Catalog ("PCAT") which is
19 available on Qwest's website.²² Qwest provides CLECs with updates of this

²¹ Exhibit MSB-LNP-6 provides diagrams of the number portability processes.

²² The Wholesale Product Catalog for CLECs is available at Qwest's website at:
www.qwest.com/wholesale/pcat/.

1 documentation periodically to incorporate new legal requirements, product or process
2 enhancements, and changes to industry guidelines and standards. In addition, Qwest
3 has held several workshops for CLECs on number portability and has provided
4 individual CLEC training when requested. Training is also available, either instructor led
5 or interactive web-based, for number portability through Qwest's wholesale Product
6 Catalog website.

7 The minimum interval to port a number is three business days. Some intervals
8 are longer due to the complexity of the service type and/or size of an LNP request.
9 Qwest's SGAT establishes prescribed intervals for requests that meet certain volumes
10 of telephone numbers and service types.²³ Qwest's LNP intervals were established
11 through agreement reached with competitors and state commission staffs participating
12 in the collaborative Section 271 workshops in Arizona, Colorado, Oregon, Washington,
13 and the Multi-State workshops.

14 **E. Qwest Complies With The FCC's Number Portability Cost Recovery**
15 **Requirements.**

16 With respect to cost recovery, the FCC created a competitively neutral cost-
17 recovery mechanism for long-term number portability.²⁴ Under this mechanism, the
18 FCC allows LECs to recover their directly related, carrier-specific number portability

²³ See SGAT § 10.2.5.2.

²⁴ See 47 C.F.R. §§ 52.32, 52.33; SBC Texas Order, ¶ 370; Telephone Number Portability, Third Report and Order, CC Docket No. 95-116, FCC 98-82, 13 FCC Rcd 11701, ¶¶ 8, 29 (rel. May 12, 1998) ("Third Report and Order"); Telephone Number Portability, Fourth Memorandum Opinion and Order on Reconsideration, CC Docket No. 95-116, FCC 99-151, 14 FCC Rcd 16459, ¶ 9 (rel. July 16, 1999) ("Fourth Memorandum Opinion and Order on Reconsideration").

1 costs by filing tariffs with the FCC for a monthly number portability charge and a number
2 portability query service charge.²⁵

3 In accordance with the FCC's LNP cost-recovery mechanism, Qwest's FCC Tariff
4 No. 1 sets forth database query charges and monthly end user LNP charges.²⁶ In an
5 order released July 16, 1999, the FCC concluded that the current number portability
6 charges in Qwest Tariff FCC No. 1 are reasonable and lawful.²⁷

7 III. RESOLUTION OF ISSUES IN THE MULTI-STATE WORKSHOPS

8 Qwest has participated in Section 271 collaborative workshops addressing
9 Checklist Item 11 in Arizona, Colorado, Oregon, Washington and in the Multi-State
10 proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North
11 Dakota, Utah, and Wyoming. Qwest's SGAT has been updated as a result of
12 consensus reached in the collaborative workshop processes, conducted on an open
13 basis with full, active, and equal participation by competitors and state commission
14 staffs. Those modifications have been incorporated into the South Dakota SGAT.

15 On September 25, 2001, Liberty Consulting Group, an independent third party
16 retained as part of the ROC OSS Test, completed its audit of Qwest's performance
17 measures (PIDs) and concluded that "the audited performance measures accurately

²⁵ Third Report and Order, ¶ 142.

²⁶ Qwest Tariff FCC No. 1 at pages 13-84 through 13-89, 20-22 through 20-24, and 20-28.

²⁷ Long-Term Number Portability Tariff Filings; US West Communications, Inc. Transmittal Nos. 965, 975, 1002, Memorandum Opinion and Order, CC Docket No. 99-35, FCC 99-169, 14 FCC Rcd 11983, 11985, ¶ 3 (ref. July 16, 1999).

1 and reliably report actual Qwest performance.”²⁸ Qwest has offered to have Liberty
2 verify its audit by conducting data reconciliation with any CLEC that believes Qwest’s
3 performance data is inaccurate. No party has questioned the authenticity or accuracy of
4 the performance data related to Checklist Item 11.

5 In the Multi-State Workshop One Final Report, the workshop Facilitator states
6 there is one issue at impasse for Checklist Item 11 that requires an SGAT language
7 change and Qwest should not be deemed to be in compliance with this Checklist Item
8 before it makes the changes necessary to deal with this issue. The Facilitator goes on
9 to state, “. . . upon making the changes, Qwest can be deemed to have met its burden
10 of proof, subject to the completion and commission consideration of the results of any
11 OSS testing that may relate to this item.”²⁹ Qwest has made the language change
12 recommended by the Multi-State Facilitator to SGAT Section 10.2.2.4 to “assure that
13 Qwest is subject to a sufficient obligation to minimize disconnects.”³⁰ and the
14 recommended language is included in the South Dakota SGAT. Qwest has also made
15 significant mechanized changes since the Multi-State Report was released that provide
16 improvements to the porting processes beyond what the Multi-State Facilitator deemed

²⁸ The Liberty Consulting Group Final Report on the Audit of Qwest’s Performance Measures at 2-3. A copy of the Liberty Final Audit report can be found at <http://www.nrri.ohio-state.edu/oss/master/pid/sept/pmfinalreport.pdf>. A copy of the Audit Report is also attached to Mr. Williams’ affidavit as Exhibit MGW-PERF-2.

²⁹ Second Report – Workshop One; Multi-State Facilitator’s report, issued May 15, 2001, at Pg. 12.

³⁰ Second Report – Workshop One; Multi-State Facilitator’s report, issued May 15, 2001, at Pg. 107.

1 necessary for Qwest to do to satisfy the requirements of this Checklist Item. As
2 described previously, Qwest is providing an additional twenty-four hours beyond what
3 the Multi-State Facilitator concluded was reasonable for the CLEC to be able to either
4 complete its provisioning work or notify Qwest to delay the due date or cancel the
5 service order. Qwest implemented a mechanized process in June 2001 that holds the
6 disconnect of the switch translations until 11:59 p.m. of the day after the CLEC's
7 requested due date. This allows the CLEC an additional day to complete its
8 provisioning of the end-user customer's service and activate the number port in the
9 NPAC. Qwest made this mechanized change to provide the CLEC additional time to
10 notify Qwest if the CLEC cannot complete its provisioning work on the scheduled due
11 date and needs to delay the due date or cancel the number portability service order.
12 Qwest has gone beyond what the Multi-State Facilitator recommended in the Final
13 Report.

14 The Facilitator also recommended that "Qwest should commit to the study of
15 more automated means of providing the required coordination." Qwest currently has a
16 study under way and is waiting for responses from vendors. However, as stated above,
17 Qwest already took action and implemented a mechanized solution that should provide
18 CLECs more than sufficient time to complete their work or notify Qwest that the service
19 order needs to be delayed or canceled. In addition, the three new performance
20 measures, described previously, were developed by the ROC to measure the
21 effectiveness of Qwest's processes for performing the LNP disconnects after the CLEC
22 has completed its provisioning work and activated the number port.

1 **IV. SUMMARY AND CONCLUSION**

2 For the foregoing reasons, Qwest provides number portability in South Dakota
3 that satisfies the requirements of both the 1996 Act and FCC regulations. There are
4 concrete and specific legal commitments in the SGAT and Commission-approved
5 interconnection agreements making number portability available in South Dakota and
6 Qwest is actually providing number portability to CLECs in South Dakota. Qwest has
7 complied with the FCC's implementation schedule for LNP and the FCC's requirements
8 for performance criteria, technical, operational, architectural, administrative
9 requirements, and cost recovery. Qwest has demonstrated that it is exceeding the
10 performance levels that were established by the ROC for number portability and is
11 currently implementing three additional performance measures for LNP. Liberty
12 Consulting Group has also audited Qwest's performance measures and found that
13 Qwest properly reports its results for the measures relevant to Checklist Item 11.
14 Therefore, the South Dakota Commission should find that Qwest satisfies Checklist
15 Item 11 for number portability.

Being first duly sworn upon oath, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge, information, and belief.

Executed on this 15th day of October, 2001.

Margaret S. Bumgarner
Margaret S. Bumgarner

STATE OF WASHINGTON

COUNTY OF KING

Subscribed and sworn to before me this 15th day of October, 2001.

Elizabeth M. [Signature]
Notary Public

BEFORE THE
PUBLIC UTILITIES COMMISSION
STATE OF SOUTH DAKOTA

IN THE MATTER OF THE INVESTIGATION) DOCKET TC 01-
INTO QWEST CORPORATION'S)
COMPLIANCE WITH SECTION 271 (C) OF THE)
TELECOMMUNICATIONS ACT OF 1996)

QWEST CORPORATION'S
EXHIBITS to the AFFIDAVIT
OF
MARGARET S. BUMGARNER
CHECKLIST ITEM 11 – NUMBER PORTABILITY
OCTOBER 24, 2001

INDEX TO EXHIBITS

| <u>DESCRIPTION</u> | <u>EXHIBIT</u> |
|---|----------------|
| 1 | |
| 2 | |
| 3 | |
| 4 Witness Qualifications | MSB-LNP-1 |
| 5 South Dakota LNP Deployment Schedule | MSB-LNP-2 |
| 6 State/Region Volume of Telephone Numbers Ported | MSB-LNP-3 |
| 7 LNP Performance Indicator Definitions | MSB-LNP-4 |
| 8 LNP Performance Results – South Dakota | MSB-LNP-5 |
| 9 LNP Diagrams of Number Portability Processes/Call Flows | MSB-LNP-6 |

QUALIFICATIONS OF MARGARET S. BUMGARNER

1
2
3 My name is Margaret S. Bumgarner. My business address is 1600 Seventh
4 Avenue, Seattle, Washington, 98191. I am a Director in the Policy and Law
5 organization at Qwest Corporation ("Qwest").

6 I received a Bachelor of Science Degree in Education/Biology from Washington
7 State University. In 1973, I started working for Pacific Northwest Bell as a supervisor in
8 the network organization. I held several management positions in the network
9 organization, including installation, assignment, installation and repair service centers,
10 network budget analysis, switching operations and network administration staff. In
11 1982, I began working in the Planning and Engineering department doing network
12 planning for divestiture under the Modified Final Judgment, preparing the network equal
13 access compliance plan filed with the Department of Justice, and supervising the staff
14 for switch engineering and network design. In 1986, I became U.S. WEST's
15 representative to the national industry forums addressing technical network compatibility
16 issues and numbering issues and also managed the network planning groups
17 responsible for numbering and common channel signaling. In recent years, I was
18 responsible for a wide range of federal public policy issues, including numbering
19 access reform, and interconnection.

20 I am currently a Director in the Policy and Law organization responsible for
21 several Section 271 checklist items and Qwest's filing with the Federal Communications
22 Commission ("FCC"). I base this affidavit on professional experience, personal

1 knowledge, and information available to me in the normal course of my duties, including
2 records kept by Qwest in the regular course of business. Specifically, my experience
3 has allowed me to develop an expertise in several Section 271 checklist areas such that
4 I have testified in the Section 271 workshops in Arizona, Colorado, Oregon,
5 Washington, and the joint seven-state ("Multi-State") workshops involving Idaho, Iowa,
6 Montana, New Mexico, North Dakota, Utah, and Wyoming. I also participated in the
7 Section 271 proceedings in Nebraska.

8 Through my testimony in the Section 271 workshops, I have directly participated
9 in the development and evolution of the terms and conditions of Qwest's Statement of
10 Generally Available Terms and Conditions ("SGAT"). These workshops and
11 proceedings were part of a collaborative process, conducted on an open basis with the
12 full, active, and equal participation by CLECs and state commission staffs. A significant
13 part of this process has involved responding to issues and concerns raised by
14 competitive local exchange carriers ("CLECs") and revising the SGAT when possible to
15 address their needs. I have also been responsible for ensuring that the resolution of
16 issues raised by CLECs have been integrated into the documentation of Qwest's
17 processes, methods and procedures provided to CLECs, that apply in each state of
18 Qwest's 14-state region.

19

**Local Number Portability
 South Dakota Switch Deployment List**

| Locality State | Locality Name | Switch | LNP Date | Portable Indicator |
|----------------|-----------------------|-------------|----------|--------------------|
| SD | ABERDEEN | ABRSDCCO050 | 09/07/99 | Y |
| SD | ABERDEEN ISDN | ABRSDCCORS2 | 03/05/00 | Y |
| SD | ARLINGTON | ARTNSDCORS1 | 04/03/99 | Y |
| SD | BELLE FOURCHE | BLFRSDCORS1 | 07/02/99 | Y |
| SD | BLACK HAWK | BLHKSDCERS1 | 07/02/99 | Y |
| SD | CANTON | CNTNSDCORS1 | 09/08/99 | Y |
| SD | CAVOUR | CAVRSDCORS1 | 07/31/00 | Y |
| SD | CHAMBERLAIN | CHBLSDCORS1 | 03/08/00 | Y |
| SD | COLMAN | CLMNSDCORS1 | 09/04/99 | Y |
| SD | DEADWOOD | DDWSDCCORS1 | 07/02/99 | Y |
| SD | DESMET | DESMSDCORS1 | 07/31/99 | Y |
| SD | ELK POINT | ELPNSDCORS1 | 09/08/99 | Y |
| SD | FLANDREAU | FLNSDCORS1 | 09/05/99 | Y |
| SD | FORT PIERRE | FTPRSDCERS1 | 03/08/00 | Y |
| SD | HARRISBURG | HRBGSDCORS1 | 09/03/99 | Y |
| SD | HILL CITY | HLCYSDCORS1 | 07/02/99 | Y |
| SD | HURON | HURNSDCO050 | 07/31/99 | Y |
| SD | HURON | HURNSDCO051 | 03/08/00 | Y |
| SD | IROQUOIS | IROSSDCORS1 | 07/31/00 | Y |
| SD | LAKE PRESTON | LKPRSDCORS1 | 07/31/00 | Y |
| SD | LEAD | LEADSDCORS1 | 07/02/99 | Y |
| SD | MADISON | MDSNSDCERS1 | 09/03/99 | Y |
| SD | MC INTOSH | MCINSDCO050 | 10/02/00 | Y |
| SD | MILBANK | MLBNSDCORS1 | 03/08/00 | Y |
| SD | MILLER | MLLRSDCORS1 | 07/31/00 | Y |
| SD | MITCHELL | MTCHSDCO051 | 05/04/00 | Y |
| SD | MITCHELL | MTCHSDCORS1 | 09/08/99 | Y |
| SD | MORRISTOWN | MRTWSDCORS2 | 10/02/00 | Y |
| SD | PIERRE | PIRRSDCO050 | 03/08/00 | Y |
| SD | RAPID CITY | RPCYSDCO051 | 07/02/99 | Y |
| SD | RAPID VALLEY | RPVYSDCORS1 | 07/02/99 | Y |
| SD | REDFIELD RS1 | RDFSDCORS1 | 03/08/00 | Y |
| SD | SIOUX FALLS | SXFLSDCO050 | 09/08/99 | Y |
| SD | SIOUX FALLS | SXFLSDCO051 | 09/03/99 | Y |
| SD | SIOUX FALLS | SXFLSDCO052 | 01/21/00 | Y |
| SD | SIOUX FALLS SOUTHEAST | SXFLSDSER1 | 09/03/99 | Y |
| SD | SIOUX FALLS SOUTHWEST | SXFLSDSW050 | 09/03/99 | Y |
| SD | SISSETON | SSTNSDCORS0 | 03/08/00 | Y |
| SD | SPEARFISH | SPRFSDCORS1 | 07/02/99 | Y |
| SD | STURGIS | STRGSDCORS1 | 07/02/99 | Y |
| SD | TEA | TEA-SDCORS1 | 09/03/99 | Y |
| SD | TIMBER LAKE | TMLKSDCORS2 | 10/02/00 | Y |

| | | | | |
|----|------------|-------------|----------|---|
| SD | VERMILLION | VRMLSDCORS1 | 09/08/99 | Y |
| SD | VOLGA | VOLGSDCORS1 | 09/08/99 | Y |
| SD | WARWICK | WRWKSDCORS1 | 07/02/99 | Y |
| SD | WATERTOWN | WTTWSDCODS0 | 03/08/00 | Y |
| SD | WATERTOWN | WTTWSDCODS1 | 03/08/00 | Y |
| SD | WHITE WOOD | WHWDSDCORS1 | 07/02/99 | Y |
| SD | YANKTON | YNTNSDCODS1 | 09/08/99 | Y |

CONTINUATION

[9]

**Telephone Numbers Ported
 By State / By Month**

| State | Cum EOY '99 | Cum EOY '00 | Jan-01 | Feb-01 | Mar-01 | Apr-01 | May-01 | Jun-01 | Jul-01 | Aug-01 | INP | Cum YTD '01 |
|-------|----------------|----------------|--------|--------|--------|--------|--------|--------|--------|--------|-----|----------------|
| AZ | 168,544 | 308,721 | 8,505 | 13,065 | 18,342 | 8,910 | 9,584 | 8,193 | 14,571 | 12,143 | 230 | 402,264 |
| CO | 130,490 | 253,708 | 17,027 | 16,905 | 23,211 | 11,654 | 17,513 | 22,735 | 24,499 | 13,172 | 229 | 400,653 |
| IA | 7,544 | 31,595 | 1,127 | 1,854 | 2,344 | 1,878 | 3,634 | 6,421 | 2,758 | 2,214 | 0 | 53,825 |
| ID | 2,311 | 9,422 | 696 | 724 | 81 | 430 | 7,503 | 87 | 118 | 820 | 84 | 19,965 |
| MN | 118,491 | 323,346 | 18,979 | 13,074 | 16,253 | 13,916 | 18,142 | 9,716 | 12,866 | 15,182 | 14 | 441,488 |
| MT | 0 | 7,511 | 573 | 272 | 1,194 | 536 | 637 | 214 | 232 | 1,763 | 81 | 13,013 |
| ND | 15 | 826 | 149 | 132 | 237 | 372 | 931 | 1,285 | 543 | 444 | 1 | 4,920 |
| NE | 39,203 | 83,142 | 2,536 | 10,553 | 9,180 | 2,135 | 2,897 | 3,092 | 2,300 | 3,626 | 0 | 119,461 |
| NM | 25,305 | 31,550 | 258 | 1,075 | 489 | 196 | 448 | 995 | 130 | 181 | 103 | 35,425 |
| OR | 35,077 | 80,206 | 3,624 | 5,340 | 5,006 | 4,879 | 5,386 | 4,422 | 5,706 | 7,661 | 0 | 122,230 |
| SD | 326 | 10,024 | 3,073 | 2,967 | 1,241 | 1,534 | 909 | 1,062 | 1,006 | 857 | 5 | 22,678 |
| UT | 49,738 | 112,362 | 5,294 | 3,823 | 4,285 | 9,054 | 9,634 | 6,709 | 5,224 | 5,694 | 1 | 162,080 |
| WA | 55,331 | 167,163 | 10,646 | 8,756 | 15,753 | 14,168 | 8,822 | 14,274 | 11,512 | 11,720 | 217 | 263,031 |
| WY | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 5 |
| RG | 632,375 | 1,419,576 | 72,487 | 78,540 | 97,616 | 69,662 | 86,040 | 79,207 | 81,467 | 75,478 | 965 | 2,061,038 |

CONTINUATION

[10.]

OP-8 – Number Portability Timeliness

| | |
|--|---|
| Purpose: Evaluates the timeliness of cutovers of local number portability (LNP). | |
| Description: OP-8B – LNP Timeliness with Loop Coordination (percent): Measures the percentage of coordinated LNP triggers set prior to the scheduled start time for the loop. <ul style="list-style-type: none"> All orders for LNP coordinated with unbundled loops that are completed/closed during the reporting period are measured, subject to exclusions specified below. OP-8C – LNP Timeliness without Loop Coordination (percent): Measures the percentage of LNP triggers set prior to the Frame Due Time or scheduled start time for the LNP cutover as applicable. <ul style="list-style-type: none"> All orders for LNP for which coordination with a loop was not requested that are completed/closed during the reporting period are measured (including standalone LNP coordinated with other than Qwest-provided Unbundled Loops and non-coordinated, standalone LNP), subject to exclusions specified below. For purposes of these measurements (OP-8B and -8C), "trigger" refers to the "10-digit unconditional trigger" or Line Side Attribute (LSA) that is set or translated by Qwest. "Scheduled start time" is defined as the confirmed appointment time (as stated on the FOC), or a newly negotiated time. In the case of LNP cutovers coordinated with loops, the scheduled time used in this measurement will be no later than the "lay" time for the loop. | |
| Reporting Period: One month | Unit of Measure: Percent of triggers set on time |
| Reporting Comparisons: CLEC aggregate and individual CLEC results | Disaggregation Reporting: Statewide level. |
| Formula: OP-8B = $[(\text{Number of LNP triggers set before the scheduled time for the coordinated loop cutover}) / (\text{Total Number of LNP activations coordinated with unbundled loops completed})] \times 100$ OP-8C = $[(\text{Number of LNP triggers set before the Frame Due Time or Scheduled Start Time}) / (\text{Total Number of LNP activations without loop cutovers completed})] \times 100$ | |
| Exclusions: <ul style="list-style-type: none"> CLEC-caused delays in trigger setting. LNP requests that do not involve automatic triggers (e.g., DID lines without separate, unique telephone numbers and Centrex 21). LNP requests for which the records used as sources of data for these measurements have the following types of errors: <ul style="list-style-type: none"> Records with no PON (purchase order number) or STATE Records where triggers cannot be set due to switch capabilities Records with invalid due dates, application dates, or start dates. Records with invalid completion dates. Records missing data essential to the calculation of the measurement per the PID. Invalid start/stop dates/times or invalid frame due or scheduled date/times. | |
| Product Reporting: None | Standard: 95% |
| Availability: Available | Notes: |

OP-17 Timeliness of Disconnects associated with LNP Orders

Purpose:

Evaluates the quality of Qwest completing LNP telephone number porting, focusing on the degree to which porting occurs without implementing associated disconnects before the scheduled time/date.

Description:

- Measures the percentage of all LNP telephone numbers (TNs), both stand alone and associated with loops, that are ported without the incidence of disconnects being made by Qwest before the scheduled time/date, as identified by associated qualifying trouble reports.
- The scheduled time/date is defined as 11:59 p.m. on (1) the due date of the LNP order recorded by Qwest or (2) the delayed disconnect date requested by the CLEC, where the CLEC submits a timely request for delay of disconnection.
- A CLEC request for delay of disconnection is considered timely if received by Qwest before 8:00 p.m. on the current due date of the LNP order recorded by Qwest.
- Disconnects are defined as the removal of switch translations, including the 10-digit trigger.
- Disconnects that are implemented early, and thus counted as a "miss" under this measurement, are those that the CLEC identifies as such to Qwest via trouble reports, within 96 clock hours of the actual disconnect time/date, that are confirmed to be caused by disconnects being made before to the scheduled time.
- Includes all CLEC orders for LNP TNs completed in the reporting period, subject to exclusions specified below.

| | |
|---|--|
| Reporting Period: One month | Unit of Measure: Percent |
| Reporting Comparisons: Individual CLEC | Disaggregation Reporting: Statewide |

Formula:

$$\frac{[(\text{Total number of LNP TNs ported pursuant to orders completed in the reporting period} - \text{Number of TNs with qualifying trouble reports notifying Qwest that disconnection before the scheduled time has occurred}) / \text{Total Number of LNP TNs ported pursuant to orders completed in the reporting period}] \times 100}{100}$$

Exclusions:

- Trouble reports notifying Qwest of early disconnects associated with situations for which the CLEC has failed to submit timely requests, by 8:00 p.m. on the LNP due date, to have disconnects held for later implementation.
- Trouble reports not related to valid requests (LSRs) for LNP and associated disconnects.
- LNP requests that do not involve automatic triggers (e.g., DID lines without separate, unique TNs, and Centrex 21).
- Records with invalid trouble receipt dates
- Records with invalid cleared, closed or due dates
- Records with invalid product codes

Records missing data essential to the calculation of the measurement per the PD

| | |
|--|-------------------------|
| Product Reporting: LNP | Standard: 99.95% |
| Availability: Under Development: Beginning with Oct 01 data on the Nov 01 report. | Notes: |

MR-11 – LNP Trouble Reports Cleared within 24 Hours – 19 Jul 01

| | |
|---|--|
| Purpose: Evaluates timeliness of clearing LNP trouble reports, focusing on the degree to which LNP trouble reports are cleared within 24 hours. | |
| Description: Measures the percentage of specified LNP trouble reports that are cleared within 24 hours of LNP trouble reports from CLECs. <ul style="list-style-type: none"> Includes all LNP trouble reports, received within 96 clock hours of the actual disconnect date/time, that are closed during the reporting period, subject to exclusions specified below. Time measured is from the date and time Qwest receives the trouble report to the date and time trouble is cleared. | |
| Reporting Period: One month | Unit of Measure: Percent |
| Reporting Comparisons: Individual CLEC compared against specified retail standard | Disaggregation Reporting: Statewide level (all are "non-dispatched"). |
| Formula: $\frac{\text{(Number of specified LNP Trouble Reports closed in the reporting period that were cleared within 24 hours)}}{\text{(Total Number of specified LNP Trouble Reports closed in the reporting period)}} \times 100$ | |
| Exclusions: <ul style="list-style-type: none"> Trouble reports attributed to customer or non-Qwest reasons. For products measured from MTAS data, trouble reports coded to disposition codes for: Customer Action, Non-Telco Plant, Trouble Beyond the Network Interface, and Miscellaneous – Non-Dispatch, non-Qwest (includes CPE, Customer Instruction, Carrier, Alternate Provider). Trouble reports not related to valid requests (LSRs) for LNP and associated disconnects. Subsequent trouble reports of LNP trouble before the original trouble report is closed. Information tickets generated for internal Qwest system/network monitoring purposes. Records involving official company services. Records with invalid trouble receipt dates. Records with invalid cleared or closed dates. Records with invalid product codes. Records missing data essential to the calculation of the measurement per the PID. | |
| Product Reporting: LNP | Standards: Parity with MR-3C results for Retail Residence |
| Availability: TBD | Notes: |

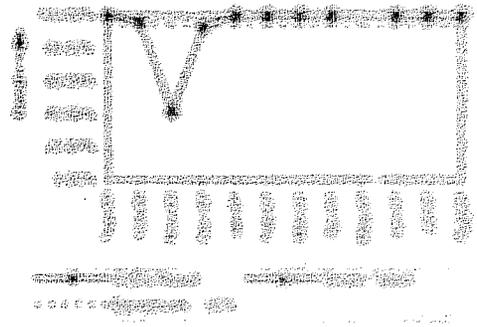
MR-12 – LNP Trouble Reports – Mean Time to Restore – 19 Jul 01

| | |
|---|--|
| Purpose: Evaluates timeliness of clearing LNP Trouble Reports, focusing how long it takes to clear the trouble. | |
| Description: Measures the time actually taken to clear trouble reports. <ul style="list-style-type: none"> Includes all LNP trouble reports, received within 50 clock hours of the actual disconnect date, that are closed during the reporting period, subject to exclusions specified below Time measured is from date and time of receipt to date and time trouble is cleared. | |
| Reporting Period: One month | Unit of Measure: Hours and Minutes |
| Reporting Comparisons: Individual CLEC compared against specified retail standard | Disaggregation Reporting: Statewide level (all and "non-dispatched"). |
| Formula: $\frac{\sum[(\text{Date \& Time specified LNP Trouble Reports Cleared}) - (\text{Date \& Time specified LNP Trouble Reports Opened})]}{(\text{Total number of specified LNP Trouble Reports closed in the reporting period})}$ | |
| Exclusions: <ul style="list-style-type: none"> Trouble reports attributed to customer or non-Quest reasons. For products measured from MR-12, this includes reports coded to disposition codes for: Customer Action, Non-Tech Plant, Trouble Beyond the Network Interface, and Miscellaneous – Non-Dispatch, non-Quest (includes CPE, Customer Installation, Service Alternate Provider). Trouble reports not related to valid requests (LNRs) for LNP and associated documents. Subsequent trouble reports of LNP trouble before the original trouble report is closed. Information tickets generated for internal Quest system/network monitoring purposes. Records involving official company services. Records with invalid trouble receipt dates. Records with invalid cleared or closed dates. Records with invalid product codes. Records missing data essential to the calculation of the measurement per the MR. | |
| Product Reporting: LNP | Standards: Party with MR-12 results for Retail Residences |
| Availability: TBD | Notes: |

Chart #21 - Monthly Performance

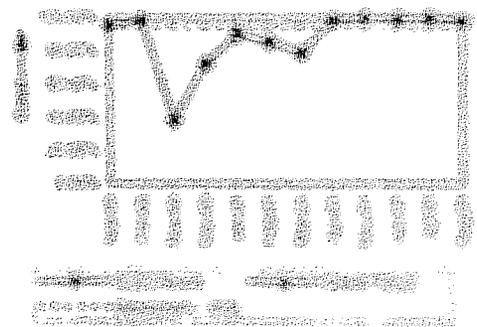
Number of Projects Completed (Thousands of Dollars)

| Date | CLEC Num | CLEC Desc | CLEC Rev | Proj Desc | Project Rev | Project Desc | Project Rev | Project Desc |
|--------|----------|-----------|----------|-----------|-------------|--------------|-------------|--------------|
| Sep-00 | 21 | 21 | 100.00% | 0.00% | | | | |
| Oct-00 | 24 | 24 | 96.00% | 10.00% | | | | |
| Nov-00 | 10 | 24 | 41.67% | 40.00% | | | | |
| Dec-00 | 13 | 14 | 92.86% | 25.71% | | | | |
| Jan-01 | 3 | 3 | 100.00% | 0.00% | | | | |
| Feb-01 | 11 | 10 | 90.91% | 0.00% | | | | |
| Mar-01 | 14 | 14 | 100.00% | 0.00% | | | | |
| Apr-01 | 5 | 5 | 100.00% | 0.00% | | | | |
| May-01 | | | | | | | | |
| Jun-01 | 11 | 11 | 100.00% | 0.00% | | | | |
| Jul-01 | 9 | 9 | 100.00% | 0.00% | | | | |
| Aug-01 | 9 | 9 | 100.00% | 0.00% | | | | |



Percentage of LTR Projects that Report the Same or Less than Same (Thousands of Dollars)

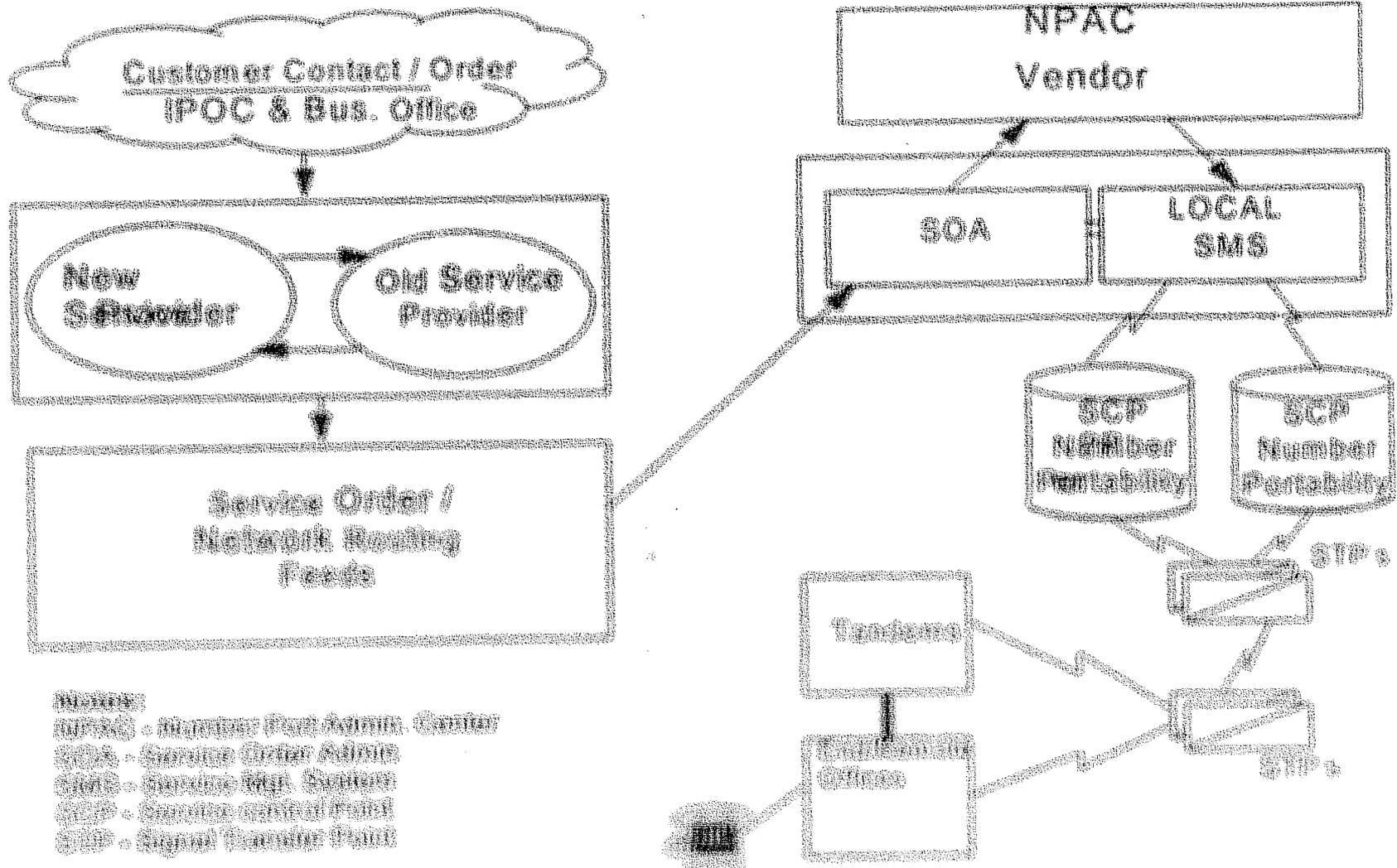
| Date | CLEC Num | CLEC Desc | CLEC Rev | Proj Desc | Project Rev | Project Desc | Project Rev | Project Desc |
|--------|----------|-----------|----------|-----------|-------------|--------------|-------------|--------------|
| Sep-00 | 348 | 364 | 95.61% | 71.07% | | | | |
| Oct-00 | 212 | 215 | 98.60% | 11.63% | | | | |
| Nov-00 | 70 | 102 | 68.63% | 48.04% | | | | |
| Dec-00 | 145 | 200 | 72.50% | 44.00% | | | | |
| Jan-01 | 333 | 360 | 92.50% | 28.33% | | | | |
| Feb-01 | 478 | 508 | 94.29% | 30.00% | | | | |
| Mar-01 | 611 | 770 | 79.36% | 40.00% | | | | |
| Apr-01 | 730 | 742 | 98.38% | 17.00% | | | | |
| May-01 | 653 | 614 | 93.88% | 5.00% | | | | |
| Jun-01 | 652 | 606 | 92.33% | 7.00% | | | | |
| Jul-01 | 591 | 570 | 96.45% | 4.00% | | | | |
| Aug-01 | 465 | 470 | 99.15% | 0.00% | | | | |



CONTINUATION

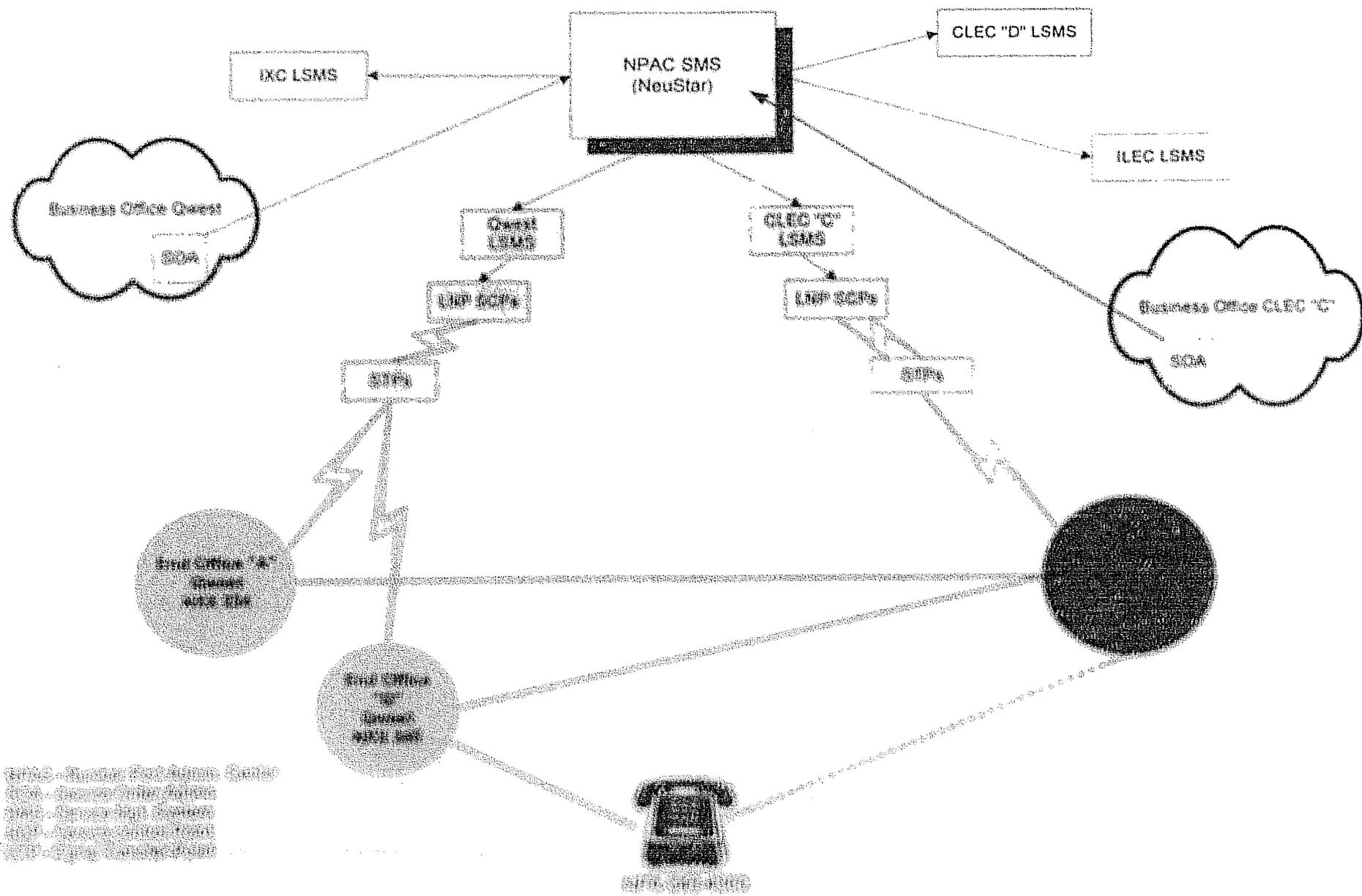
[11]

Local Number Portability Data Flow



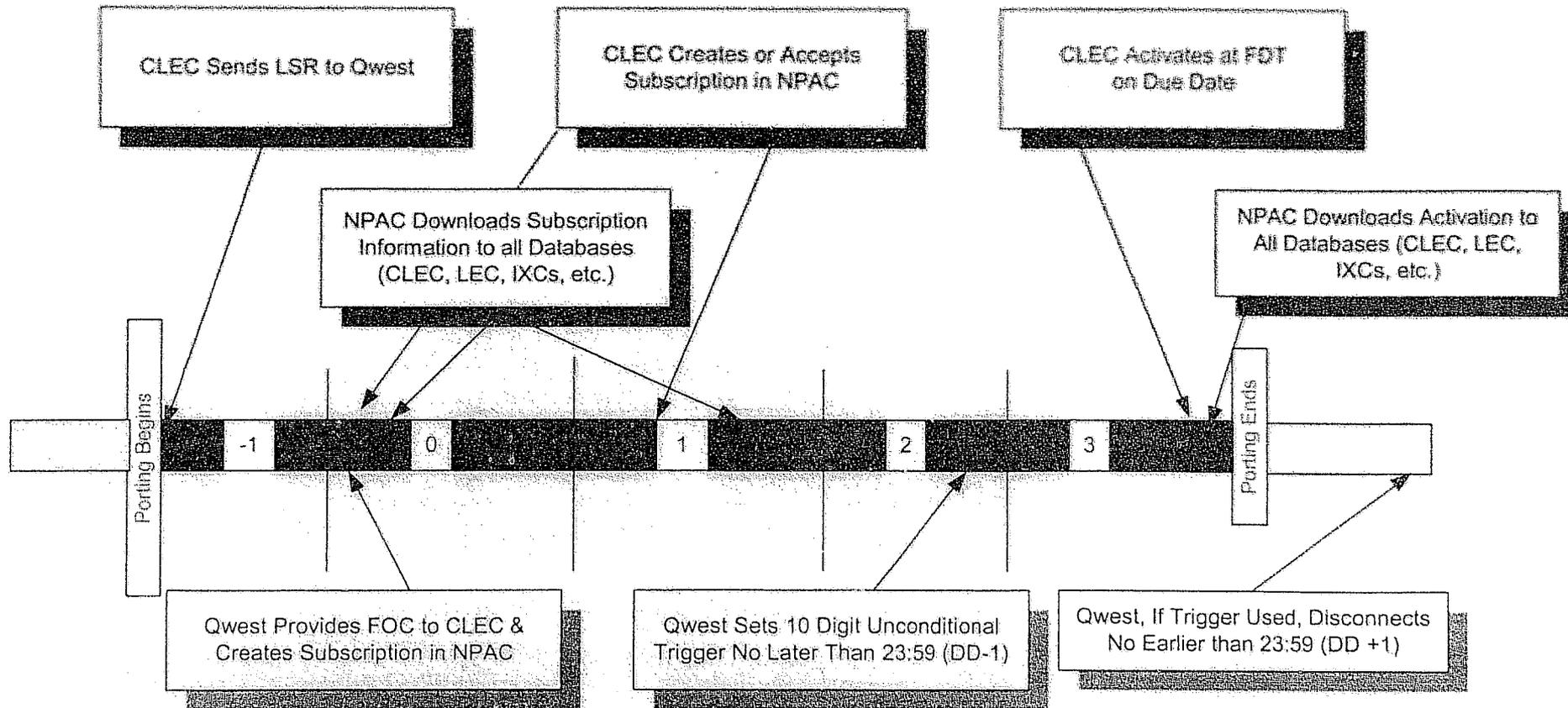
- Legend:**
 NPAC - Number Portability Admin. Center
 SOA - Service Order Admin.
 LOCAL - Service Local System
 SCP - Service Control Point
 STP - Signal Transfer Point

Local Number Portability



1. IXC - Interexchange Carrier
 2. ILEC - Incumbent Local Exchange Carrier
 3. CLEC - Competitive Local Exchange Carrier
 4. SIP - Service Interface Point
 5. SOA - Service Order Administration

Local Number Portability Provisioning Timeline



Local Number Portability Call Flow

Call made from 245-8888
 generates a query to the LNP
 SCP. It sends the LRN for the
 LSP1 EO1(End Office) and
 completes the call to the ported
 customer.

