Affidavit of Jean Listor Karen Stewart Attachment 9:10

TC01-165

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October 25, 2001

HAND DELIVERY

Pamela Bonrud, Executive Director
Public Utilities Commission
500 East Capitol
Pierre, SD 57501

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. Bonrud:

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

QWEST CORPORATION'S

AFFIDAVIT

OF

JEAN M. LISTON

CHECKLIST ITEM 4 – UNBUNDLED LOOPS, NIDs, and LINE SPLITTING

October 24, 2001

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AFFIDAVIT

OF

JEAN M. LISTON

Checklist Item 4 – Unbundled Loops, NIDs, and Line Splitting

Jean M. Liston states as follows:

My name is Jean M. Liston. My business address is 1600 Seventh Avenue, Seattle, Washington, 98191. I am a Director in the Policy and Law organization at Qwest Corporation ("Qwest"). I submit this affidavit in support of Qwest's application for authority to provide interLATA services originating in South Dakota. Specifically, this affidavit demonstrates Qwest's compliance with Checklist Item 4, unbundled loops, of the Telecommunications Act of 1996 ("1996 Act" or "Act").[1] This affidavit also addresses Qwest's compliance with the Act and FCC rules regarding provision of Network Interface Devices ("NIDs") and line splitting.

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]

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[1] 47 U.S.C. § 271(c)(2)(B)(iv).

[2] Professional experience, education and other biographical information are set forth in Exhibit JML-LOOP-1.

1. EXECUTIVE SUMMARY

Qwest complies with the Federal Communications Commission's ("FCC") requirements regarding access to unbundled loops. Unbundled loops, including analog/voice grade loops, high capacity loops, Digital Subscriber Line ("xDSL") loops, loop conditioning, line and loop splitting, are now available to competitive local exchange carriers ("CLECs") under Qwest's Statement of Generally Available Terms ("SGAT") as well as through individually negotiated interconnection agreements. The SGAT is Qwest's standard wholesale contract offer, which provides competitors with the rates, terms and conditions that Qwest commits to provide in the provisioning of unbundled network elements, including unbundled loops, line splitting and NIDs. The SGAT also delineates methods and procedures for handling spectrum management issues.

Qwest currently provides unbundled loops to CLECs in South Dakota in a timely and nondiscriminatory manner. As I describe more fully below, Qwest has processes in place to make unbundled loops available to CLECs upon request and has performance indicator definitions ("PIDs") in place allowing CLECs and state commissions to assess Qwest's unbundled loop service performance. These indicators and their measurements were established in a collaborative process involving the Regional Oversight Committee("ROC"), with the participation of state commission staffs, CLECs, and Qwest.

This affidavit identifies the specific unbundled loops that Qwest provides, and it explains how Qwest provisions loops, what responsibilities the CLECs have in ordering

loops, and the installation and repair performance standards applicable to Qwest's various unbundled loop offerings. The affidavit also describes Qwest's success in satisfying applicable performance standards.

Qwest has engaged in workshops in Arizona, Colorado, Oregon, Washington, and in a multi-state 271 proceeding involving state commissions in Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming. These proceedings were collaborative processes, conducted on an open basis with the full, active, and equal participation by CLECs and state commission staffs. A significant portion of this process involved responding to concerns raised by CLECs regarding Qwest's obligation to provide access to unbundled loops and the associated SGAT language. Throughout the process, Qwest attempted to obtain consensus SGAT language. When this was not possible, the parties presented legal briefs on their disputes and the workshop Facilitator, Administrative Law Judge, or the Commission staff presented recommendations to the state commission. For example, seven states (Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming) developed a collaborative process including joint workshop sessions overseen by a Facilitator, Mr. John Antonuk ("the Multi-State Facilitator"). During the workshop process, Qwest agreed to changes in its SGAT and processes to address CLEC concerns. For those issues upon which the parties could not agree, the Multi-State Facilitator considered the legal and factual

positions of the parties and issued recommendations to the seven state commissions.[3] Qwest's South Dakota SGAT reflects the workshop agreements and incorporates the recommendations of the Multi-State Facilitator regarding Checklist Item 4.

As of August 31, 2001, Qwest had provided six South Dakota CLECs with 1,392 unbundled loops in South Dakota. Specifically, Qwest was providing 1,351 voice grade/analog loops, 26 xDSL capable loops, and 15 high-capacity loops in South Dakota. Throughout its 14-state territory Qwest has 264,802 unbundled loops in service as of the end of August. Of this total, 206,655 are voice grade/analog loops and 58,147 are digital capable loops.

For these reasons and those set forth below, the Commission should find that Qwest satisfies the requirements of Checklist Item 4.

II. QWEST COMPLIES WITH THE FCC'S UNBUNDLED LOOP REQUIREMENTS.

Qwest satisfies the criterion in 47 U.S.C. § 271(c)(2)(B)(iv) of the 1996 Act. Section 271(c)(2)(B)(iv) requires Bell operating companies ("BOCs"), such as Qwest, wishing to offer in-region interLATA service to provide "local loop transmission from the central office to the customer's premises, unbundled from local switching or other services." In the UNE Remand Order, the FCC defined the local loop as:

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3 Multi-State Unbundled Network Element Report (Multi-State Workshop, Aug. 20, 2001) ("Multi-State UNE Report").[4] 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 at 3696, ¶¶ 166-79 (rel. Nov. 5, 1999) ("UNE Remand Order"); *see also* 47 C.F.R. § 51.319(a)(1).

> a transmission facility between a distribution frame (or its equivalent) in the incumbent LEC central office and the loop demarcation point at an end-user customer premises, including inside wire owned by the incumbent LEC. The local loop network element includes . . . dark fiber, attached electronics (except those electronics used for the provision of advanced services, such as Digital Subscriber Line Access Multiplexers), and line conditioning.[4]

Pursuant to Section 9.2 of its SGAT, Qwest has a concrete and specific legal obligation to provide CLECs with access to unbundled loops capable of transmitting analog voice service, digital subscriber line service (xDSL), and high-capacity services. For example, Qwest's SGAT, as well as interconnection agreements with individual carriers, obligate Qwest to provide CLECs unbundled loops, such as 2 and 4-wire analog loops, 2 and 4-wire non-loaded loops that have been conditioned to transmit digital signals, xDSL-I loops, ISDN-capable loops, and DS-1, DS-3, fiber, and OCn high capacity loops.[5] The SGAT also sets forth terms and conditions for conditioning of loops, access to loops provisioned using Integrated Digital Loop Carrier ("IDLC"), and access to loop make-up information.

Moreover, Qwest is obligated to provide such loops to CLECs in a nondiscriminatory manner and to provide loops of substantially the same quality as the loop that Qwest uses to provide service to its own end users.[6] For those loops with retail analogues, Qwest commits to provide the loops in substantially the same time and

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[5] *Id.*

[6] *See* SGAT § 9.2.2.1.

manner as Qwest provides such loops to itself. For those loops for which the ROC has established performance benchmarks, Qwest commits to provide such loops in accordance with the PIDs established in the ROC and the installation intervals set forth in Exhibit C to the SGAT.

A. Qwest Offers All Required Categories of Unbundled Loops.

Qwest allows CLECs to select from the complete range of unbundled loops. Specifically, Qwest offers (1) 2-wire and 4-wire voice-grade/analog loops; (2) four types of high-capacity loops; and (3) four types of loops that generally can be grouped together in the category of "xDSL capable" loops.[7]

1. Voice-Grade/Analog Loops

Basic 2-Wire/4-Wire Analog Loop. The basic 2-wire/4-wire analog loop is available as a 2-wire or 4-wire voice grade, point-to-point configuration suitable for local exchange type services. This service is a transmission path that provides a connection from the Qwest serving Central Office Distribution Frame or equivalent to the demarcation point at the end user's location. The actual loop facilities may utilize various technologies or combinations of technologies.[8] The analog loop can be purchased in conjunction with number portability.

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[7] *See* SGAT §§ 9.2.2.2-9.2.2.3, 9.2.6.1. The SGAT also provides for access to OCn loops. Qwest recently established prices for OCn loops, and the South Dakota rates are included in Exhibit A to the SGAT. The installation interval for these loops is determined on an Individual Case Basis ("ICB"). *Id.* § 9.2.2.3.1.

[8] SGAT § 9.2.2.2.

2. High Capacity Loops

Qwest offers four types of high-capacity loops under general terms and conditions in the SGAT: (1) DS-1 capable loops, (2) DS-3 capable loops, (3) OCn loops, and (4) dark fiber loops.[9]

DS-1 Capable Loop. The DS-1 capable loop is a transmission path between the Qwest Serving Central Office Distribution Frame, or equivalent, and the demarcation point at the end user location. The DS-1 capable loop transports bi-directional DS-1 signals with a nominal transmission rate of 1.544 Mbps and will meet the design requirements specified in standard industry technical publications.[10]

DS-3 Capable Loop. The DS-3 capable loop is a transmission path between a Qwest serving Central Office Distribution Frame, or equivalent, and a demarcation point at an end user location. The DS-3 capable loop transports bi-directional DS-3 signals with a nominal transmission rate of 44.736 Mbps that meets the design requirements specified in standard industry technical publications.[11] Availability of the DS-3 capable loop is limited to those routes where DS-3 facilities have already been deployed.

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[9] SGAT § 9.2.1.

[10] SGAT § 9.2.2.6.1.

[11] SGAT § 9.2.2.6.2.

For DS-1 or DS-3 capable loop, Qwest will provide the necessary electronics at both ends including any intermediate repeaters. In addition, the CLEC will have access to these terminations for testing purposes.[12]

OCn Capable Loops. Qwest also stands ready to provide access to higher capacity loops, including but not limited to OC3, OC12, OC48, and OC192 loops.[13] To date, no CLEC in the Qwest 14-state region, including South Dakota, has requested loops at OCn or any other capacity higher than DS-3.

Dark Fiber Loops. Qwest also offers unbundled dark fiber loops on an individual case basis ("ICB"), where facilities are available.[14] Dark fiber issues are discussed in greater detail in the affidavit of Ms. Karen Stewart on Emerging Services.

3. xDSL Capable Loops

a. Categories of xDSL Capable Loops

Qwest offers four categories of loops that can be classified as "xDSL capable" loops: (1) 2-wire and 4-wire "non-loaded" loops; (2) Basic Rate ISDN ("BRI") capable loops; (3) asymmetrical digital subscriber line ("ADSL") compatible loops; and (4) xDSL-I capable loops.

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[12] SGAT § 9.2.2.6.

[13] SGAT § 9.2.2.3.1.

[14] SGAT § 9.2.2.3.1.

2-Wire/4-Wire Non-Loaded Loop. The 2-wire/4-wire non-loaded loop is a metallic facility that provides a transmission path from the Qwest serving Central Office Distribution Frame, or equivalent, to the end user's demarcation point. It is a metallic, wire cable pair with no load coils, and, depending on the Network Channel and Network Channel Interface codes specified by the CLEC, some limited lengths of bridged tap. Qwest will condition loops at the CLEC's request. The conditioning process is described at length below.

Basic Rate ISDN ("BRI") Capable Loop. The Basic Rate ISDN capable loop is a Qwest facility with a 2-wire interface that provides a transmission path from the Qwest serving Central Office Distribution Frame, or equivalent, to an end user's demarcation point. This loop transports bi-directional, 2-wire, signals with a nominal transmission rate of 160 KBPS, meets the performance requirements specified in standard technical publications, and permits access to 144 KBPS channelized payload bandwidth for transport of services.

ADSL Compatible Loop. The ADSL compatible loop is an unbundled 2-wire metallic facility that establishes a transmission path between a Qwest serving Central Office Distribution Frame and the demarcation point located at the end user's designated premises. This loop will meet the ADSL performance requirements specified in relevant technical publications. If necessary, Qwest will condition the loop at the CLEC's request to meet the ADSL technical parameters.

xDSL-I Capable Loop. The xDSL-I capable loop is a 2-wire facility that provides a transmission path from the Qwest serving Central Office Distribution Frame, or

equivalent, to an end user demarcation point. This loop transports bi-directional, 2-wire signals with a nominal transmission rate of 160 KBPS, meets the performance requirements specified in standard technical publications, and permits access to 144 KBPS unchannelized payload bandwidth for transport of services.[15]

Qwest uses the terms "capable" and "compatible" to make it clear that, while Qwest provides the loop facility, the CLECs provide the service over those unbundled loops. Specifically, "capable" means that Qwest assures that the loop is going to pass the technically-specified signal, consistent with industry standards.[16] The term "compatible" means that Qwest assures that the loop complies with the ordered Network Channel ("NC") and Network Channel Interface ("NCI") codes, but makes no assumptions as to the capabilities of the CLEC's central office equipment or customer premises equipment ("CPE").[17] If a CLEC uses sensitive equipment – for example, equipment that exceeds industry signal-to-noise ratio standards – the CLEC may well be able to use loops that are considered beyond normal length or loss, and therefore Qwest does not restrict the use of the loop due to loop length.

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[15] Performance results for xDSL-I capable loops are grouped with ISDN capable loops.

[16] SGAT § 9.2.2.1.1. For example, ANSI Standards T1.601 and T1.102 specify the ISDN and DS-1 interfaces. There are test sets that indicate whether the loop is performing to the established standards. Qwest will build the capable loop using whatever equipment it takes, such as subscriber loop carrier or range extenders, to insure that the loop meets the standards.

[17] SGAT § 9.2.2.1.2.

The facilities used to provide the xDSL capable unbundled loop categories listed above are different from those that Qwest uses to provide its retail DSL service. The unbundled xDSL capable loop is a dedicated facility designed to support high-speed digital transmissions; such facilities may need to be conditioned to enable CLECs to offer xDSL service. On the other hand, the Qwest DSL (formerly known as "Megabit") retail offering uses an existing line, provides service only in locations where no loop conditioning is necessary, and utilizes a shared facility technology, in which the data signals are transmitted over the same copper facility as the voice signals (*i.e.*, line sharing).

Extension Technology. Qwest provides extension technology if needed for Basic Rate ISDN ("BRI") capable loops and xDSL-I capable loops. Extension technology takes into account, for example, additional regenerator placement, central office powering, and mid-span repeaters, if required, as well as BRITE cards in order to provision the Basic Rate ISDN capable or xDSL-I capable loops. Extension technology may be required to bring the circuit to the specifications necessary to accommodate the requested service. Qwest will add extension technology if the circuit design requires it or if requested by a CLEC to meet its specific needs. If the circuit design requires extension technology to meet the technical standards, then Qwest will add it at no charge.[18] However, if a CLEC requests the addition of extension technology to the loop

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[18] *See* SGAT § 9.2.2.5.

even though it is not needed to meet technical standards, the installation of extension technology will result in a monthly recurring charge to the CLEC.

Loops with Multiplexing. Multiplexing is offered in DS-3 to DS-1 and DS-1 to DS0 configurations. Qwest permits CLECs to combine unbundled loops with multiplexing devices and also the conversion of existing private line or special access circuits into unbundled loops with a multiplexing device.[19]

b. Line Conditioning

Line conditioning or loop conditioning is the term used to describe the process of removing load coils, bridged tap, and any other devices from existing copper loops that would negatively affect the transmission of a digital signal. In many cases, the data portion of the loop will not work correctly if there are load coils or certain amounts of bridged tap on the loop. Qwest provides CLECs with loop conditioning for xDSL compatible loops upon request, consistent with 47 C.F.R. § 51.319(a)(3)(i) & (h)(5).[20]

This ability to condition lines is not, however, unlimited. The conditioning requirement is subject to a technical feasibility standard as delineated by the FCC.[21]

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[19] See SGAT §§ 9.2.2.10, 9.2.4.6.

[20] SGAT §§ 9.2.2.4 and 9.2.4.9; *see also* 47 C.F.R. § 319(a)(3)(i) (defining "line conditioning as "the removal from the loop of any devices that may diminish the capability of the loop to deliver high-speed switched wireline telecommunications capability, including xDSL service").

[21] Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, Order, CC Docket Nos. 96-98 and 95-185, FCC

Although no FCC order requires Qwest to condition loops proactively, in 2000 Qwest voluntarily established a bulk de-loading project to remove load coils from copper loops that are under 18,000 feet in length in selected wire centers in which CLECs and Qwest were providing DSL services. This project minimized the occurrence of short copper loops that needed to be conditioned on a one-by-one basis. Qwest provided the CLECs with a web-based tool that identified the wire centers and the routes impacted and also included an expected completion date. Once Qwest deloaded a route and updated the databases, the route was posted on the web as a completed route. Three South Dakota wire centers, including Sioux Falls, were included in this project.

B. Qwest Has Unbundled Loops Procedures In Place.

In the following sections of my affidavit, I describe the steps through which a CLEC orders and obtains unbundled loops from Qwest, including (a) pre-ordering and ordering, (b) installation, (c) maintenance and repair, and (d) billing. I discuss the PIDs that have been developed to measure and assess Qwest's performance with respect to each of these steps in providing unbundled loops, and I describe how Qwest's actual performance meets or exceeds the great majority of these standards. Because Qwest has now provisioned over 259,624 loops in its 14-state area, there is now a well-developed process in place that allows CLECs to order loops from Qwest.

96-325, 11 FCC Rcd 15499, ¶ 381 (rel. Aug. 8, 1996) ("Local Competition Order").

1. Pre-Ordering and Ordering Process

Overview of Process. In general, a CLEC first utilizes pre-order transactions, such as address validation, Customer Service Request ("CSR"), facility check and loop make up tools to gather information necessary to place an unbundled loop order. The CLEC then orders an unbundled loop by submitting a Local Service Request ("LSR")[22] via two methods of Interconnection Mediated Access ("IMA") – either a web-based Graphical User Interface ("IMA GUI"), or an Electronic Data Interchange system ("IMA EDI") – or by fax. The CLEC order is processed and entered into the Qwest service order processor ("SOP") which then issues a Firm Order Confirmation ("FOC") to the CLEC. This constitutes the normal ordering procedure for the CLEC.

a. Pre-Order xDSL Qualification Tools.

The UNE Remand Order requires Qwest to provide loop make up information to CLECs to permit the CLEC to evaluate whether a requested loop facility is capable of providing the service the CLEC seeks to offer.[23] Qwest provides several tools to enable CLECs to gather data on loop facilities. These tools, described in Section 9.2.2.8 of the SGAT, include:

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[22] SGAT § 9.2.4.1.

[23] UNE Remand Order, ¶¶ 426-431.

[24] The ADSL Loop Qualification Tool is accessible to the CLECs via IMA.

(1) The ADSL Loop Qualification Tool, first introduced in October 1999, which provides line-by-line data on loop plant composition tailored to the needs of CLECs.[24] This tool indicates if the loop is capable of supporting ADSL service and it also includes loop length, type of facility, presence of bridged tap or load coils, and the insertion loss.

(2) The Bulk Wire Center Loop Make-Up Tool, introduced in August 2000, which provides a bulk "batch file" of data on all loops in each wire center.[25] The tool provides by telephone number or circuit id the actual loop make-up including loop length, the type of facility, and the wire gauge by segment (F1 or F2). Additionally CLECs are provided information regarding the presence of load coils and bridged tap. The data supporting this tool is obtained from the same data source as Qwest uses to qualify its retail DSL service.

(3) The Raw Loop Data Tool, introduced in December 2000, which provides, on a line-by-line basis, the same data as the bulk wire center tool.[26] The CLECs have the option of obtaining this data by address or telephone number. In August 2001 a new option was added, CLECs now can obtain information regarding spare facilities by using an unassigned address query.

In addition to these loop make-up tools that were created for unbundled loops, Qwest also offers a MegaBit Qualification, POTS to Unbundled Loop Conversion, and ISDN Qualification tools. Qwest originally built these tools in IMA for resale purposes, but CLECs can also use them to obtain information on unbundled loops. Exhibit-JML-LOOP-2 contains a detailed description of the various loop qualification tools. These

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[25] The Bulk Wire Center Loop Make-Up Tool is a web based tool and requires electronic certification.

[26] The Raw Loop Data Tool is accessible to the CLECs via IMA.

does comply fully with the FCC's requirement that Qwest provide "nondiscriminatory access to the same detailed information about the loop that is available" to itself.[27]

Raw Loop Data tool. The database that supports the IMA Raw Loop Data tool and the Bulk Wire Center tool is the same database that is used to support the DSL qualification tool used by Qwest retail representatives. Additionally, through the ROC Master Test Plan, the third-party tester will validate whether the loop qualification information Qwest provides to CLECs is at parity with information Qwest provides to itself. Specifically, the OSS test will validate that the wholesale tool is in parity with the retail qualification tool and that the results from the wholesale and retail tools are the same. Also, it will verify that the databases that feed the tools use the same source data and are updated in the same time frame.[28] Finally, with the tools that Qwest has provided for the CLECs to use, they actually have more information available to them than do the Qwest retail representatives when they sell DSL service to a customer.

Based on feedback received during the workshops, Qwest is continually improving the Raw Loop Data tool. For example, Qwest expanded the loop make-up information to include the make-up of spare facilities. This new query option,

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[27] UNE Remand Order, ¶ 427.

[28] Exhibit-JML-LOOP-3 is an excerpt from the ROC Master Test Plan regarding evaluation of Qwest's loop qualification tools.

[29] The website for the ICONN database is http://www.qwest.com/iconn. *See also* SGAT § 9.1.2.1.4.

Unassigned Address, was introduced in August 2001 as part of IMA Release 8.0. By selecting this option the CLECs can obtain loop make-up information associated with spare facilities that are connected through to the Qwest switch and also spare sub-segments. Qwest has also proactively implemented system enhancements to correct errors uncovered during the workshop process such as displaying loop make-up for lines associated with non-listed and non-published telephone numbers.

Wire Center Raw Loop Data tool. Qwest introduced a mechanized bulk wire center loop make-up tool in August 2000. Qwest provides CLECs with access to a web-site where they can obtain a comma delimited batch file that includes all active telephone numbers within a particular wire center as well as detailed raw loop information for each telephone number listed. This provides the CLECs with a means to look at the network infrastructure for an entire wire center. For instance during the loop workshops in other jurisdictions the CLECs asked how they could determine if a community was served by IDLC technology. If the CLEC downloaded the wire center data, the CLEC could sort the file so that premises served by IDLC are grouped together or by a terminal address, F1 or F2, to obtain the loop make-up for a particular community.

Qwest Network Changes. Qwest provides CLECs with web-access to the Interconnection Network Disclosure, ICONN database. The ICONN database provides CLECs with a wealth of information regarding the Qwest network such as: central office information and changes, NXX assignments, Remote Terminal Deployment and outside plant build information for funded jobs in excess of $100,000.[20]

b. The Local Service Request Form.

CLECs order unbundled loops and other UNEs by completing an LSR and submitting it over one of Qwest's electronic or manual interfaces.[30] For each unbundled loop ordered, CLECs must specify the loop type including the Network Channel and Network Channel Interface codes, provide the Connecting Facility Assignment which identifies where the loop should be wired in the central office, provide the desired installation option, and note a desired due date.

Desired Due Dates and Standard Installation Intervals. The CLECs may calculate a due date based on the minimum number of days provided in Exhibit C to the SGAT or the Standard Interval Guide ("SIG") as Qwest's standard installation interval for the specified loop type. The intervals are based on Qwest's extensive experience region-wide in providing unbundled loops. Alternatively, the CLEC may specify a later date (*i.e.*, select a longer installation interval than the standard interval). Exhibit C of the SGAT specifies the installation intervals listed in the following table. All installation intervals are expressed in business days:

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[30] SGAT §§ 9.2.4.1, 9.2.4.4.

Loop Type	1-8 loops	9-16 loops	17-24 loops	25+ loops
Analog/Voice Grade and xDSL Capable (except loops that need conditioning)	5 days	6 days	7 days	ICB
Quick Loop	3 days	3 days	3 days	ICB
Quick Loop with LNP	3 days	4 days	4 days	ICB
DS-3 Capable	7 days (1-3 loops)	ICB (4 + loops)	ICB (4 + loops)	ICB (4 + loops)
DS-1 Capable	9 days	9 days	9 days	ICB
xDSL Capable Loops that need conditioning	15 days	ICB	ICB	ICB
Fiber/OCn/Other High Capacity	ICB	ICB	ICB	ICB

Qwest's standard intervals served as the basis for the creation of the PIDs, particularly the OP-4 measure, and were discussed extensively during the ROC Technical Advisory Group ("TAG") meetings.[31] In fact, the PIDs define a standard

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[31] The FCC has emphasized that performance measures and benchmarks established in a collaborative process with the input of CLECs presumptively reflect the performance requirements CLECs require to have a meaningful opportunity to compete. Application of Verizon New England, Inc., Bell Atlantic Communications, Inc. (d/b/a Verizon Long Distance), NYNEX Long Distance Company (d/b/a Verizon Enterprise Solutions) and Verizon Global Networks Inc., for Authorization to Provide In-Region, InterLATA Services in Massachusetts, Memorandum Opinion and Order, CC Docket No. 01-9, FCC 01-130, ¶ 13 (rel. Dec. 22, 1999) ("Verizon Massachusetts Order") ("The Commission has explained in prior orders that parity and benchmark standards established by state commissions do not represent absolute maximum or minimum levels of performance necessary to satisfy the competitive checklist. Rather, where, as here, these standards are developed through open proceedings with the input from both the incumbent and competing carriers, these standards can represent informed and reliable attempts to objectively approximate whether competing carriers are being served by the incumbent in substantially the same time and

interval with reference to the Qwest Standard Interval Guide, the basis for the intervals in Exhibit C of the SGAT. The creation of the PIDs was a collaborative process between Qwest and CLECs. Exhibit JML-LOOP-4 displays the evolution of the installation interval measure, OP-4. This exhibit clearly demonstrates that the Exhibit C intervals were discussed, and, in fact, the installation intervals were changed during the negotiations. For example, there is now no differentiation between high and low density areas and the 2-wire non-loaded intervals mirror the 2-wire analog intervals. During the workshop process, Qwest has made additional CLEC-friendly modifications to the intervals. For example, Qwest reduced the Exhibit C intervals for xDSL-I loops from 10 days to align with ISDN capable intervals of 5, 6, and 7 days. Qwest has also created a shorter installation interval for analog loops called Quick Loop. This option provides for a three-day basic installation interval for converting 2-wire analog loops from existing service.[32] Effective October 22, 2001, this option is also available for analog loops with

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manner, or in a way that provides them a meaningful opportunity to compete") (footnotes omitted); 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, ¶ 55 (rel. Dec. 22, 1999) ("Bell Atlantic New York Order") ("At the same time, for functions for which there are no retail analogues, and for which performance benchmarks have been developed with the ongoing participation of affected competitors and the BOC, those standards may well reflect what competitors in the marketplace feel they need in order to have a meaningful opportunity to compete").

[32] This shortened interval is not available for coordinated installations, cooperative testing, or when loops are served by IDLC.

number portability. This new offering has been added to Section 9.2.2.9.1.3 and to Exhibit C of the SGAT.

The Qwest intervals provide CLECs a meaningful opportunity to compete. The Multi-State Facilitator supported the Qwest intervals.[33]

Process for Ordering Loop Conditioning. The loop qualification tools described above provide CLECs with information to determine if loop conditioning will be required. In submitting an order, CLECs may indicate that they approve the loop conditioning charge, where needed, by entering a "Y" (for yes) in the space provided for "special construction authorization" in the LSR form.[34] When the form contains that indicator and conditioning is necessary for the requested unbundled loop, Qwest will conduct the loop conditioning activities described above, and complete the loop provisioning within the standard 15 business day interval and assess the applicable non-recurring conditioning charge. If the LSR form contains the indicator for loop conditioning but conditioning is not required, then the due date will be consistent with the installation

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33 Multi-State UNE Report, at 49.

34 The FCC has explicitly authorized the ILECs to charge for conditioning requested by a CLEC regardless of the distance from the Central Office. *See* Local Competition Order, ¶ 382; UNE Remand Order, ¶ 193. This decision was affirmed in federal court in *U S WEST Communications, Inc. v. Hix*, Civil Action No. 97-D-152, Order at 9 – 10 (D. Colo. June 23, 2000.) The Multi-State Facilitator also agreed that charging CLECs for conditioning was appropriate. Multi-State UNE Report at 40.

interval based on loop type and the number of loops ordered, as described above, and no conditioning charges will apply.

If the CLEC fails to indicate on the LSR form that loop conditioning is approved, but Qwest determines that conditioning is required, then Qwest will inform the CLEC of the need for conditioning. To avoid incurring costs for conditioning loops that were not authorized by the requesting CLEC, the LSR will be rejected and the order cancelled.

Firm Order Confirmation ("FOC"). Qwest will provide the CLECs with confirmation of the receipt of their LSR and indicate the due date for the service installation. The process is completed via a Firm Order Confirmation or FOC. The current PIDs require Qwest to provide the CLEC with an FOC for unbundled loops within 24 hours of receiving a valid and complete LSR. Beginning on March 1, 2001, Qwest implemented a two-month trial in Colorado to determine if withholding an FOC for xDSL loops for 72 hours would provide CLECs a more meaningful FOC and a more reliable indication of the installation interval that will apply. During the 72 hours, Qwest determined the availability of facilities to meet the CLEC's request and identified the need for conditioning. Based on the trial and because many CLECs currently purchasing xDSL loops already have a 72-hour FOC as a contractual term, Qwest and CLECs alike agreed that Qwest should move to change the FOC interval for xDSL loops to a 72-hour interval. Qwest is bringing this proposal forth to the ROC PID team for approval.

2. Provisioning

When Qwest provisions an unbundled loop, the same processes and systems, including loop assignment system, are used that Qwest would normally use to provide service for its end users. First, since the unbundled loop is a dedicated facility, it is provisioned using a circuit identifier. Second, the unbundled loop order is routed to the systems that contain inventory information about loop facilities, as well as connecting facility information. Third, the order is handled by employees with experience and the specialized unbundling training to ensure that timely coordination with the CLEC is accomplished when needed.[35] Fourth, the unbundled loop flow also allows Qwest to provide data regarding the design of the service to the CLEC via the Design Layout Report ("DLR") process. The CLEC is thus able to obtain data that is available to Qwest employees on how the loop is designed and engineered. The actual installation intervals are documented, coordinated installation is available, and flow charts have been developed so that all parties involved understand the process.[36]

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35 As part of Qwest's efforts to continually train its employees, Qwest released a training video that describes the provisioning process and focuses on coordinated installations and testing. This video has been distributed to all network organizations that provision unbundled loops, and is being used to train all employees involved in the coordinated installation process.

36 *See* Exhibit JML-LOOP-5.

a. Basic and Coordinated Installation Options

Once Qwest has received the LSR from the CLEC, the order is processed using the same systems that process orders for Qwest retail service offerings, such as private line service or any designed service. When Qwest provisions an unbundled loop, a central office technician must be dispatched to run jumpers connecting the unbundled loop to the CLEC's facilities as specified on the LSR by the CLEC. Additionally, a field technician may need to be dispatched to provision the loop. The provisioning process as shown in Exhibit-JML-LOOP-5 delineates the tasks performed by Qwest personnel to install an unbundled loop. This flow chart, along with the task descriptions, describes the process that Qwest follows when it provisions unbundled loops.

Installation of Loops to Existing Customers. For an existing end-user, the Basic Installation option is a "lift and lay" procedure.[37] The central office technician "lifts" the loop from its current termination and "lays" it on a new termination connecting to the CLEC.

Installation of Loops with Number Portability. Qwest will coordinate the activities associated with unbundled loops and number portability. The provisioning process is depicted in Exhibit-JML-LOOP-6.

Installation of New Loops. Installation of new unbundled loops requires a dispatch to the end-user premises. The central office technician and field technician

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[37] SGAT § 9.2.2.9.1.1.

complete circuit wiring and execute the required performance tests to ensure the new circuit meets the required parameter limits.[38]

Installation of Loops When No Compatible Facilities Exist. If the CLEC requests an unbundled loop and no compatible facilities exist, then the following process takes place:[39]

> If an engineering job is pending that satisfy the request then Qwest will accept the LSR and inform the CLEC of the ready for service date.
>
> If the LSR is requesting a loop to provide an end user with primary voice grade service that would fall under Qwest's Carrier of Last Resort Obligation (COLR), then Qwest will accept the order and build the new facility.
>
> If the request is for the unbundling of a loop supported by IDLC technology, then Qwest will accept the LSR and process it according to the process defined below.
>
> If the LSR does not fall into one of the above categories, then Qwest will reject the order and inform the CLEC that no compatible facilities exist. The CLEC then has an option to request the facilities according to the Special Construction process, just as a retail Qwest customer would.

The CLECs were notified of this process through the formal Change Management Process. Exhibit-JML-LOOP-7 is a copy of the notification that was

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[38] SGAT § 9.2.2.9.2.3.

[39] SGAT §§ 9.1.2.1.3, 9.1.2.1.3.1, and 9.1.2.1.3.2.

distributed to the CLECs. This process is very similar to Verizon's process that was the FCC recently approved in its order on Verizon's Pennsylvania application.[40]

During the workshops, CLECs challenged the above build position and this issue went to impasse in all jurisdictions. In his recommendation to the Commissions the Multi-State Facilitator stated:

> Requiring Qwest to serve indefinitely and ubiquitously as both a financing arm (by taking investment risk under month-to-month UNE leases to CLECs) and as a construction contractor (by being forced to perform the installations required) is not appropriate. Not only will it not promote the goal [of facilities-based competition], it may well hinder it. If CLECs can transfer the economic risks of new construction to Qwest, there is little reason to expect that they will have an incentive to take facilities risks or develop efficient installation capabilities.[41]

In considering whether checklist item 2 requires Qwest to construct unbundled elements for CLECs where facilities do not exist, the Hearing Commissioner in Colorado also determined that Qwest is not required to construct unbundled elements for CLECs under the Act or FCC rules.[42]

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40 Application of Verizon Pennsylvania Inc., Verizon Long Distance, Verizon Enterprise Solutions, Verizon Global Networks, Inc., and Verizon Select Services Inc. for Authorization to Provide In-Region, InterLATA Services in Pennsylvania, Memorandum Opinion and Order, CC Docket No. 01-138, FCC 01-269, ¶ 61-62 (rel. Sept. 19, 2001) ("Verizon Pennsylvania Order").

41 Multi-State UNE Report at 25.

42 Investigation into U S WEST Communications, Inc.'s Compliance with § 271 (c) of the Telecommunications Act of 1996, Decision No. R01-646, Volume 4A, Impasse Issues Order, Docket No. 96I-197T, at 8-10 (Colo. Aug. 16, 2001).

Installation of Loops Provisioned with IDLC Technology. The FCC requires Qwest to unbundle loops that are provisioned with IDLC technology. However, the FCC also acknowledged in the UNE Remand Order that the unbundling of IDLC is difficult and may even be impossible in some circumstances.[43] Qwest has made a commitment to provide CLECs access to unbundled loops, even when IDLC technology is deployed, whenever technically feasible. Qwest utilizes the engineering decision tree depicted in Exhibit-JML-LOOP-8 to determine the best method to unbundle these loops. In South Dakota approximately 3.4% of the existing lines are served by IDLC technology and only 1.5% are located in areas where the concentration of IDLC is in excess of 75%. As previously mentioned, using the wire center Raw Loop Data tool, CLECs can determine if a community has a high percentage of IDLC. This information allows CLECs to determine up front if they want to market to a specific community that may be served by IDLC. Additionally, Qwest recently enhanced the Raw Loop Data tool in IMA to include spare facility information, including information on segments, to enhance CLECs' ability to determine if there are spare facilities to serve premises served by IDLC.

Facility Assignment. Qwest provisions facilities based on the loop type the CLEC requests. The same assignment process is used for both retail and wholesale.[44] If

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43 UNE Remand Order, ¶ 204 n. 390.

44 SGAT § 9.2.2.3.

45 SGAT §§ 9.2.2.9.1 to 9.2.2.9.7.

compatible facilities are not identified through mechanized means, then Qwest uses an 11-step process that includes looking for a Line and Station transfer or recovering defective pairs to locate compatible facilities. The 11-step process is presented in Exhibit-JML-LOOP-9. This is the same process Qwest uses to assign facilities to itself when it must determine if facilities are available to provide service to its end users.

Installation Options. Qwest's SGAT offers CLECs six installation options for unbundled loops, each of which is available for both existing customer lines and new customer lines.[45] These six options are: (1) basic installation; (2) basic installation with performance testing; (3) basic installation with cooperative testing; (4) coordinated installation; (5) coordinated installation with cooperative testing; and (6) project coordinated installation. Regardless of the installation option chosen, Qwest notifies the CLEC when the installation work is complete. The six options are described in further detail below.

Basic Installation Options. CLECs may select from among three options for basic (*i.e.*, non-coordinated) installation. First, for the basic installation option, the Qwest central office technician and field technician execute basic performance tests.[46] With basic installation with performance testing, Qwest technicians conduct performance tests, and provides the results to the CLEC after the tests are concluded.[47]

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46 *See* SGAT § 9.2.2.9.1.2.

47 SGAT §§ 9.2.2.9.2.1-9.2.2.9.1.3.

Qwest also agrees to e-mail the test results to CLECs within two business days so that CLECs have a written record of the tests Qwest performs. With basic installation with cooperative testing, after the Qwest technicians perform their performance tests, they contact the CLEC with the results, and the CLEC performs its own loop back acceptance test. The CLEC then accepts the loop, and the parties exchange demarcation information.[48] To ensure that CLECs do not pay for testing that is not performed, Qwest under its SGAT waives the non-recurring installation charge if Qwest cannot perform the cooperative test, due to Qwest's fault, at the time the loop is turned over to the CLEC. In August 2001, Qwest implemented its process to provide CLECs with the option of receiving test results by e-mail.

Coordinated Installation. Coordinated installation and testing are often needed by the CLEC and Qwest to have a seamless installation for the end user customer. The coordinated installation process allows the CLEC to designate a specific appointment time on the date when Qwest will begin the installation of an unbundled loop. The CLEC may request installation outside the standard business hours of 8 a.m. to 5 p.m. on business days, but additional charges apply. CLECs most often request a coordinated installation to coordinate work between Qwest and CLEC when the service is associated with an existing working line, although coordinated installation is also

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48 SGAT §§ 9.2.2.9.5.

available for new customer lines. Coordinated installation enables the CLEC and its customer to plan ahead for minimal service interruption.

On the order due date at the appointment time specified by the CLEC, a Qwest employee coordinates activities between the CLEC and Qwest. Qwest calls the CLEC to determine if the CLEC is ready for the service to be transferred. If the CLEC indicates that it is ready, Qwest central office and fieldwork is performed. If the CLEC indicates that it is not ready, Qwest will wait up to 30 minutes from the appointment time. If the CLEC is still not ready, then a new appointment (date and time) is scheduled. If Qwest misses the appointment time by 30 minutes or fails to perform cooperative testing, due to Qwest's fault, Qwest will waive the non-recurring installation charge. Even if Qwest fails to perform testing, Qwest will reschedule the test at no charge to the CLEC if the CLEC still wishes to perform cooperative testing.[49]

Qwest recently established a control center dedicated to coordinated installations. The Qwest CLEC Coordination Center ("QCCC") coordinates all installations that involve coordinated start times. Approximately 70 Qwest employees work at the center, all having completed focused training. Since the establishment of the QCCC, Qwest's performance for providing coordinated installations has improved significantly.

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[49] SGAT §§ 9.2.2.9.3, 9.2.2.9.4.

CLECs may choose from three different coordinated installation options. The first option is coordinated installation with cooperative testing. This option permits the CLEC to request an appointment time as well as joint testing with Qwest. When a CLEC requests a coordinated installation with cooperative testing, Qwest will perform testing with the CLEC to ensure connectivity between a CLEC's collocated equipment and its network demarcation point.[50] The cooperative testing is performed after the Qwest installation and testing. As with basic installation with cooperative testing, Qwest provides CLECs with an option to receive the Qwest test results via e-mail.[51]

The second coordinated installation option is coordinated installation without cooperative testing. If the installation is the conversion of existing service, the CLEC may elect to specify that no dispatch is requested. For an existing customer the conversion process is a "lift and lay" process in the central office. On the due date, at the CLEC-designated appointment time, the Qwest implementor/tester contacts the CLEC to ensure they are ready for the installation. The Qwest technicians complete the installation and work with the Qwest implementor/tester to complete the required performance tests. The CLEC is verbally advised that the installation is complete.[52]

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50 *See* SGAT §§ 9.2.2.9.3.1–9.2.2.9.3.2.

51 *See* SGAT §§ 9.2.2.9.2.3 and 9.2.2.9.5.

52 *See* SGAT §§ 9.2.2.9.4.1–9.2.2.9.4.2.

The third option is the project coordinated installation option.[53] This is a highly coordinated form of coordinated installation. This option permits the CLEC to obtain a coordinated installation for unbundled loops with or without number portability where the CLEC orders unbundled DS-1 capable loops, DS-3 capable loops, or 25 or more DS-0 unbundled loops. Because of the increased coordination between Qwest and the CLEC with a project coordinated installation, Qwest and the CLEC generally need to negotiate the date and time for the project coordinated installation in advance.

Process Flows for Coordinated Installations. When coordinated installations involve existing customers they are often referred to as "Hot Cuts." Exhibit-JML-LOOP-10 displays the process flow of due date activities for "Hot Cuts." Page two of the Exhibit defines the tasks, and page three is a sample of the data collected by Qwest implementers to track the coordinated installation. In addition to coordinated cuts for existing lines, Qwest also performs coordinated installations for lines that were not previously served by Qwest, or, in other words, for "new loops". Exhibit-JML-LOOP-11 is the process flow for new loops, which includes a description of the tasks performed for these types of installations.

b. Process for Conditioning Loops

When a CLEC requests a loop to support DSL services, the CLEC should use one of the available tools to determine in advance whether the requested circuit meets

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53 SGAT § 9.2.2.9.7.

to be conditioned. As discussed above, the tools provide the CLEC with loop make-up information that indicates the type of facility, copper loop or pair gain, and the presence of loads and/or bridged tap.

Qwest provides for loop conditioning to ensure that CLECs can obtain a loop without load coils and bridged tap even if Qwest does not have an "clean" loop available. For example, when CLECs request a non-loaded 2-wire or 4-wire loop or ADSL compatible loop, the CLEC can ask Qwest to condition existing facilities to meet this specification. As discussed above, CLECs indicate on the LSR that they pre-approve conditioning if needed. Qwest will dispatch a technician to "condition" the loop by removing load coils and excess bridged tap, if necessary, in order to provide the CLEC with a non-loaded loop. Once it is determined that conditioning is technically feasible, there are several steps required to remove a load coil or bridged tap. First, an engineer researches the records to determine where the load coils or a bridged tap are located in the field and issues a work order to the construction forces. Next, a construction technician is dispatched to the field to cut away from the load coil cable stub and re-splice the loop together. Exhibit-JML-LOOP-12 is a flow chart that depicts the tasks associated with conditioning a loop. In January 2001, Qwest reduced the standard interval for conditioning *and* installing the requested loop to 15 business days.

3. Installation Performance Measures and Results

Section 251(c)(3) of the Act and FCC decisions establish that Qwest must either (1) provide unbundled elements to CLECs at the same level of quality and timeliness at which Qwest provides analogous services to retail customers, or (2) where there is no

retail analogue, provide unbundled elements at a sufficient level of quality and timeliness as to "offer[ ] an efficient carrier a meaningful opportunity to compete."[54] Qwest, CLECs, and the staffs of the 13 state commissions participating in the ROC process, including the South Dakota Commission staff, have developed extensive performance measurements to measure Qwest's performance in providing unbundled loops to CLECs and in maintaining and repairing unbundled loops for CLECs. Qwest, CLECs, and the state commission staffs established those measures in a collaborative process with the full input of interested CLECs.

The performance measures are formally documented in the PIDs. The PIDs include a definition of the measure, the actual formula used to calculate the measure, and any exclusions.[55] The performance measures for loops primarily fall into the provisioning and maintenance and repair categories. Exhibit JML-LOOP-13 contains the ROC-PID definitions that pertain to provisioning and maintenance of unbundled loops.

On September 25, 2001, the Liberty Consulting Group, an independent third party retained an part of the ROC OSS Test, completed its audit of Qwest's

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54 SBC Texas Order, ¶ 253; 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 Rcd 20599, ¶ 166 (rel. Oct. 13, 1998) ("BellSouth Louisiana II Order").

55 The Affidavit of Michael G. Williams discusses and describes the ROC's performance measures in detail.

performance measures and concluded that "the audited performance measures accurately and reliably report actual Qwest performance."[56]

Unbundled Loop Ordering and Provisioning Performance Measures. The FCC has determined that there is no direct retail analogue for the ordering and provisioning of unbundled loops.[57] As a result, Qwest and CLECs participating in the ROC collaborative agreed that Qwest can satisfy each of the following performance measures if it processes orders and provisions unbundled loops, on average, either at parity with its retail ordering and provisioning process, if a retail analogue exists for a particular loop, or in accordance with agreed-upon benchmarks. Again, like the PIDs themselves, the actual benchmarks for various loops types were subject to extensive discussion in the ROC process, with CLECs having a full and equal voice in the establishment of the benchmarks. Qwest is committed to providing unbundled loops within the required intervals and has established processes discussed in this affidavit to

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56 Final Report on the Audit of Qwest's *Performance Measures* at 2-3 (Sept. 25, 2001). This audit report is attached as Exhibit MGW-PERF-2 to the Affidavit of Michael G. Williams.

57 BellSouth Louisiana II Order, ¶ 198 ("Because the provisioning of unbundled local loops has no retail analogue, [the BOC] must demonstrate that it provides unbundled loops in a manner that offers an efficient carrier a meaningful opportunity to compete").

ensure successful provisioning.[58] The principal installation PIDs for unbundled loops are:

OP-3 – Installation Commitments Met. This measure evaluates the extent to which Qwest installs service by the scheduled due date. The performance benchmark for analog loops is 90%.

OP-4 – Installation Interval. OP-4 focuses on the average time to install service. The performance benchmark for analog loops, non-loaded (2-wire) loops, and ADSL qualified loops is an interval of six days. For all other loop types, the performance standard is parity with a specified analogous retail service.

OP-5 – New Service Installation Quality. This measure evaluates the number of new orders that are trouble free for 30 days following installation. Additionally it focuses on the percentage of new service installations that experienced a trouble report during the period from the installation date to the date the order is posted complete. For all loop types, the performance standard is parity with a specified analogous retail service.

OP-6 – Delay Days. OP-6 evaluates the average number of days that late orders are completed beyond the due date. For all loop types, the performance standard is parity with a specified analogous retail service.

OP-7 – Coordinated "Hot Cut" Intervals. The OP-7 measure focuses on the time involved to disconnect a customer from Qwest retail service and connect it to the CLEC. This is a diagnostic measure.

OP-13 – Coordinated Cuts On Time. OP-13 evaluates the timeliness of coordinated installations (as well as the percent of orders started prior to the scheduled time without the CLEC's approval). The performance benchmark for coordinated cuts completed on time is 95%.

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58 The Affidavit of Michael G. Williams discusses Qwest's performance in detail.

OP-15 – Interval for Pending Orders Delayed Past Due Date. This measure 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 due date, as of the end of the reporting period. This is a diagnostic measure.

Installation Performance Results. The performance results for each of the OP measures are disaggregated by loop type and zones, where Zone 1 represents a higher density.[59] For South Dakota, all loops are located in Zone 2. The performance results discussed below have been aggregated to describe performance on a statewide basis. Exhibit-JML-LOOP-14 displays the actual performance results for South Dakota through August. The reports display both the installation and repair results by loop type.

Over the four month period ending in August Qwest has on average provisioned analog loops by the due date 94% of the time which exceeds the performance benchmark of 90%. Additionally, this compares favorable to the Qwest retail customers experience. For three out of the four months Qwest has provisioned analog loops in less than the six-day benchmark, with average installation interval of 6.3 days, which is slightly above the benchmark of 6 days.

As previously mentioned Qwest tracks the on time performance for coordinated installations, OP-13. In South Dakota, Qwest has delivered coordinated installations on time 100% of the time since April 2001.

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[59] Earlier in the process, the installation intervals were different in high and low density areas. While this disparity in intervals has been eliminated, this performance reporting still reflects this distinction.

In addition to being prompt, Qwest's installation of unbundled loops for CLECs is of consistently high quality. For the four months ending in August 2001, analog loop installations for CLECs have been trouble-free over 99% of the time. The trouble-free rate exceeds Qwest's analogous retail service performance.

4. Maintenance and Repair

Qwest provides maintenance and repair of unbundled loops using a defined maintenance and repair flow.[60] CLECs report repair problems by issuing repair tickets through the Electronic Bonding-Trouble Administration interface or by calling Qwest's repair center. Qwest creates a trouble ticket reflecting the CLEC's trouble isolation results and processes it using the same systems utilized for trouble tickets for Qwest retail services. The trouble ticket is passed to the appropriate groups to analyze, test and fix any Qwest problems that are identified. The repair technician closes the ticket when the CLEC is notified that the trouble is resolved. Qwest will also advise the CLEC if no trouble is found, or if the problem is not in the Qwest network.

Exhibit-JML-LOOP-15 contains a flow chart that delineates the tasks performed by Qwest personnel to maintain and repair unbundled loops. This exhibit also includes a matrix that describes each of the work tasks identified in the flow chart. Qwest follows these steps each time Qwest receives a trouble report from a CLEC.

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60 *See generally* SGAT § 9.2.5.

5. Maintenance and Repair Performance Measures and Results

Unbundled Loop Maintenance and Repair Performance Measures. Unlike loop provisioning, the FCC has determined that there is a retail analogue for the repair and maintenance of unbundled loops.[61] Consistent with FCC requirements, Qwest provides repair and maintenance of unbundled loops in substantially the same time and manner as it provides repair services to itself. As a result, Qwest and CLEC participants in the ROC established performance measures for repair and maintenance based upon parity with Qwest retail. These maintenance and repair measures are described below.

MR-3 – Out of Service Cleared within 24 Hours. This measure evaluates the timeliness of out service repair for 2-wire analog loops.

MR-4 – All Troubles Cleared within 48 Hours. MR-4 focuses on the repair timeliness of all types of trouble cases.

MR-5 – All Troubles Cleared within 4 Hours. This measure evaluates the timeliness of repair for 4-wire non-loaded loops, DS-1 capable, DS-3 capable loops and OCn capable loops.

MR-6 – Mean Time to Restore. MR-6 focuses on how long it takes to restore service.

MR-7 – Repair Repeat Report Rate. This measure focuses on the number of repeated trouble reports for the same loop received within 30 days.

MR-8 – Trouble Rate. MR-8 evaluates the number of troubles as a percentage of the total number of loops in service.

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61 BellSouth Louisiana II Order, ¶ 145 (repair and maintenance of UNEs should be conducted in the same time and manner as repair and maintenance of retail services).

MR-9 – Repair Appointment Met. MR-9 evaluates the extent to which repairs service by the appointment date and time.

Qwest has maintained an admirable maintenance and repair record in South Dakota. Unbundled loops receive quick and effective repairs when necessary. At the outset, however, it should be noted that the overall trouble rate for analog loops installed for CLECs has been extremely low, hovering near or below 1% during the past four months ending in August 2001. In each month, the trouble rate was lower than that for Qwest's own retail services. The South Dakota results are better than the 2% figure that the Commission accepted in approving Verizon's request to enter the long-distance market in New York.[62]

When trouble reports are received, they are cleared rapidly. During the past three months ending in August 2001 in South Dakota, Qwest cleared approximately 100% of "out of service" trouble reports for unbundled analog loops, the most commonly provided unbundled loop, were cleared within 24 hours, and virtually all troubles were cleared within 48 hours. This performance is better than Qwest's success in clearing trouble reports for its own retail customers. Similarly, the mean restoration time that Qwest provides to CLECs for analog loops is generally shorter than that for its own retail customers.

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62 Bell Atlantic New York Order, ¶ 300.

III. QWEST COMPLIES WITH THE FCC SPECTRUM MANAGEMENT RULES.

Spectrum Management is the ability to administer loop plant in such a manner that it enhances the required results in spectrum compatibility. Spectrum compatibility, in general, refers to the ability of loop technology to operate and reside in the same or adjacent binder groups without causing an unacceptable degradation of service from the user's perspective.[63]

There are two industry forums that are working on establishing spectrum standards: the T1E1.4 and the Network Reliability and Interoperability Council ("NRIC"), Focus Group 3. The FCC has charged NRIC specifically with developing a process for spectrum management. NRIC participants have agreed that the loop provider has responsibility to manage spectrum.

On January 5, 2001, NRIC approved the American National Standard T1.417, *American National Standard for Telecommunications - Spectrum Management for Loop Transmission Systems*. Prior to approval, the American National Standards Institute (ANSI) reviewed the standard to ensure that T1.417 met requirements for due process, consensus and other criteria. Exchange Carriers, Inter-exchange Carriers, Manufacturers and General Interest Organizations all participated in the development of

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[63] Deployment of Wireline Services Offering Advanced Telecommunications Capability; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket Nos. 98-147, 96-98, Third Report And Order in CC Docket No. 98-147 Fourth Report And Order in CC Docket No 96-98, CC Docket Nos. 98-147, 96-98, FCC 99-355, 14 FCC Rcd 20912, ¶ 178 (rel. Dec. 9, 1999) ("Line Sharing Order").

the T1.417 Standard. T1.417 established nine Spectrum Management Classes ("SMCs") and three Technology Specific Guidelines ("TSG") classes. The NRIC has recommended the application of these SMCs and TSG classes for spectrum management.

Anticipating T1.417 approval, the industry requested that the Common Language Technical Advisory Group ("TAG") establish Network Channel Interface ("NCI") codes to enable ordering unbundled loops using Spectrum Management Class identification. The Common Language TAG has approved NCI codes corresponding to the twelve T1.417 classes. Exhibit JML-LOOP-16 displays the industry standard SMC NCI codes. Qwest's processes for addressing spectrum issues is set forth in Section 9.2.6 of the SGAT. These provisions comply with the FCC Line Sharing Order.[64] For example, Qwest requires CLECs to provide Qwest with the NC/NCI codes when they order advanced services. CLECs, however, are required to provide this information pursuant to the FCC's Line Sharing Order:

> Some incumbent LECs argue that they require certain information on a requested deployment in order to be able to assess properly the prospects of the deployment significantly degrading the performance of other services. In the *Advanced Services First Report and Order*, we required incumbent LECs to disclose to requesting carriers information with respect to the number of loops using advanced services technology within the binder and type of technology deployed on those loops.

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64 Line Sharing Order, ¶ 204.

* * *

> Consistent with the information disclosure requirements that we applied to incumbent LECs in the *Advanced Services First Report and Order*, we agree that competitive LECs must provide to incumbent LECs information on the type of technology that they seek to deploy, including Spectrum Class information where a competitive LEC asserts that the technology it seeks to deploy fits within the generic PSD mask. We further agree that competitive LECs must provide this information in notifying the incumbent LEC of any proposed change in the advanced services technology that the carrier uses on the loop, so that the incumbent LEC can correct its records and anticipate the effect that the change may have on other services in the same or adjacent binder groups.[65]

Consistent with the Line Sharing Order, Qwest commits to protect and respect the confidentiality of CLEC NC/NCI codes and to use such information solely for spectrum-related purposes, such as providing information to carriers in the event of claims of spectral interference.

CLECs have challenged this position in other 271 workshops, and the issue went to impasse. Based on the FCC requirement and the existing ordering process, the Multi-State Facilitator supported the Qwest position that the CLECs supply Qwest with the NC/NCI codes. The Facilitator stated, however, that Qwest must treat this information as confidential. Qwest agreed, and it has modified SGAT Sections 9.2.6.2.1 and 9.2.6.2.2 to reinforce its commitment to maintain the confidentiality of this information.

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65 Line Sharing Order, ¶ 204 (footnotes omitted).

If a provider's end user experiences interference problems, Qwest will provide binder group information to the CLEC.[66] In the trouble isolation process, the CLEC will test the pairs in the binder group and identify the spectrum class causing the problem. Qwest will then provide the CLEC with names of the providers and the spectrum classes in the effected binder group. Qwest does not "resolve" spectrum disputes between carriers. Rather, the carrier experiencing the disturbance is responsible for contacting other carriers to determine whose service is causing the interference. Likewise, Qwest does not dictate what action must be taken to resolve the disturbance. Once the causing carrier is identified, the interfering carrier (Qwest or CLEC) must bring its facilities into compliance with spectrum standards.

The FCC has identified T1s as known disturbers.[67] Qwest's preferred technology is no longer analog T1 technology. Nevertheless, Qwest has long-standing engineering practices whereby it segregates T1 facilities from other facilities by locating them in the outside of a binder group or, if necessary to avoid interference, in a separate binder group. If a T1 is identified as causing interference, Qwest commits to address the interference as spelled out in SGAT Section 9.2.6.4. Based on the Multi-State Facilitator's recommendation, Qwest revised this provision to clearly state that Qwest will place T1s into binder groups to minimize interference and will replace interfering T1

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[66] *See* SGAT §§ 9.2.6.5-9.2.6.6.

[67] Line Sharing Order, ¶ 214.

facilities with less disturbing technology if the T1s are identified as causing a disturbance.[68] This commitment is fully compliant with FCC guidance on managing T1 facilities.[69]

When carriers deploy a Digital Subscriber Line Access Multiplexer ("DSLAM"), it is possible that the remote deployment will interfere with other carriers' services. The NRIC is currently considering standards for remote deployment of DSLAMs, and the NRIC recommendations are expected to be released in first quarter, 2002. Qwest commits to comply with the NRIC recommendations. In the interim, however, Qwest has committed to minimize any interference from potential remote deployment of Qwest DSLAMs. In the Multi-State proceeding, the Facilitator determined that it was reasonable to wait until NRIC and the FCC issue their determinations before imposing final standards for remote deployment of DSL:

> Rhythms and AT&T have not shown good reason to act in advance of the NRIC report that the FCC expects. The FCC has essentially said that it wants to be informed by that report before it acts. There is certainly no basis for concluding that, on the record before us, we should step in where that angel fears to tread.[70]

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68 Multi-State UNE Report at 58.

69 *See* Line Sharing Order ¶ 218.

70 Multi-State UNE Report at 58.

The Facilitator nevertheless recommended SGAT amendments to address any potential interference from remote deployments in the interim. Qwest agrees to implement this interim process and, therefore, incorporated the Facilitator's recommendation in SGAT Section 9.2.6.9.

Qwest complies with all FCC orders and rules relating to spectrum management. Qwest commits to handle spectrum issues in a manner that provides CLECs the ability to deploy advanced services technology through the use of industry standards, and Qwest has developed appropriate practices with regard to spectrum management. As the FCC makes national determinations of other standards, Qwest will incorporate these changes into the SGAT and into Qwest's processes and procedures.

IV. QWEST COMPLIES WITH FCC NID REQUIREMENTS

Qwest provides nondiscriminatory access to the Network Interface Device ("NID"). Qwest allows requesting CLECs to connect their own loop facilities to on-premises wiring through Qwest's NID or at any other technically feasible point. Pursuant to Section 9.5 of its SGAT, Qwest has a concrete and specific legal obligation to provide CLECs with access to unbundled NIDs.

Access to NIDS. Qwest provides access to NIDs as part of its unbundled loop and subloop offerings. The FCC defines the NID network element as "any means of interconnection of end-user customer premises wiring to the incumbent LEC's

distribution plant, such as a cross connect device used for that purpose."[71] An ILEC is required to "permit a requesting telecommunications carrier to connect its own loop facilities to on-premises wiring through the incumbent LEC's network interface device, or at any other technically feasible point."[72] In the UNE Remand Order, the FCC clarified that when a CLEC receives an unbundled NID from Qwest, that unbundled NID includes "all features, functions, and capabilities of the facilities used to connect the loop distribution plant to the customer premises wiring, regardless of the particular design of the NID mechanism."[73] The FCC intentionally defined the NID element in a broad, flexible, and technology-neutral manner, to accommodate "design variations among the hardware interfaces" and to allow for any future technologies to be included in the definition.[74]

Qwest provides NIDs in full compliance with FCC rulings. In fact, Qwest's SGAT definition of the NID incorporates much of the FCC's language verbatim:

> The Qwest NID is defined as any means of interconnection of on-premises wiring and Qwest's distribution plant, such as cross connect device used for that purpose. Specifically, the NID is a single-line termination device or that portion of a multiple-line termination device required to terminate a single line or circuit at a premises . . . . The NID carries with it all features, functions and

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71 47 C.F.R. § 51.319(b).

72 *Id.*

73 UNE Remand Order, ¶ 233.

74 UNE Remand Order, ¶ 234.

> capabilities of the facilities used to connect the Loop distribution Plant to the customer premises wiring, regardless of the design of the particular NID mechanism.[75]

The SGAT definition includes terminals that are not Demarcation Points. Qwest has also added language requiring all carriers to follow relevant provisions of the National Electric Safety Code and the National Electric Code when accessing NIDs so as to protect CLEC workers, end users, and Qwest property and personnel from foreign voltage.[76]

Only one CLEC, thus far, has questioned Qwest's definition of the NID, and this CLEC has done so in twelve states in which Section 271 workshops have been held. To date, no commission has accepted that CLEC's objections to Qwest's NID definition.

Qwest has a concrete legal obligation to provide CLECs with access to unbundled NIDs; that obligation satisfies all FCC requirements.

NID Connections. Qwest permits CLECs to interconnect at either the protector field or the customer side of the NID, space permitting. Additionally, Qwest permits CLECs to perform their own wiring at the NID.[77] These provisions offer CLECs greater flexibility than that offered by any other BOC that has received Section 271approval.

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75 SGAT § 9.5.1.

76 SGAT § 9.5.2.3 and NESC § 315, and NEC § 800-30.

77 SGAT § 9.5.2.5.

NID and the Demarcation Point. Qwest's definition of the NID includes terminals that are not Demarcation Points. If the NID is not the Demarcation Point, as may be the case in a multi-tenant environment, and the CLEC wishes to access the NID and the subloop, then the CLEC must follow the process to access subloops.[78] Regardless whether the NID is a Demarcation Point, the CLEC can perform diagnostic and other necessary testing at the NID.

Type of NIDs Offered by Qwest. Qwest offers three types of NIDs. A Simple NID is typically found in single family residences or small businesses. A Smart NID provides special testing capabilities from the far end. Finally, the MTE NID is associated with Multi-Tenant environments. The MTE terminal is considered a NID from an ordering and processing perspective when it serves as a demarcation point between Qwest facilities and customer wiring.

No Space Available on the Qwest NID. If space is unavailable on Qwest's NID, the CLEC may install its own NID or ask Qwest to install a stand-alone NID. When a CLEC installs its own NID, the CLEC may connect its NID to the Qwest NID by placing a cross connect between the two.[79] Another option available to CLECs if no space is available on Qwest's NID is to connect to the Qwest loop or inside wire at any other

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78 Access to subloops in addressed in the Affidavit of Karen A. Stewart on Emerging Services. Qwest provides nondiscriminatory access to subloops under Section 9.3 of the SGAT.

79 SGAT § 9.5.2.1.

technically feasible location.[80] CLECs are not permitted to disconnect the Qwest facility from the protector side of the NID because such a disconnect would leave Qwest's distribution facility unprotected, in violation of the National Electric Safety Code and the National Electric Code. A single CLEC disagrees with this requirement and has taken this issue to impasse in all states where 271 workshops have taken place. To date, Qwest's position has prevailed in all states issuing recommendations.[81]

Modular NIDs. CLECs also have the option of ordering a modular NID to replace the current NID to allow easier access for testing or to cooperate in a reconfiguration that is necessary to create a single point of interface.[82] In this case, Qwest will install a new NID and charge the CLEC the applicable time and material charges.

NID Ownership. Qwest retains full ownership of its NID and its associated cables and wires on the central office or protector side of the NID.[83] However, Qwest allows CLECs to use all features and functionality of the Qwest NID, including any protection mechanisms, test capabilities, or other capabilities now existing or as they may exist in

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80 SGAT § 9.5.2.1; *see also* 47 C.F.R. § 319.(b).

81 *E.g.*, Multi-State UNE Report at 74.

82 SGAT § 9.5.3.1.

83 SGAT § 9.5.2.2.

the future.[84] Service wire terminations belonging to Qwest and terminated at the NID must remain in place.

In South Dakota Qwest has provisioned 1,392 NIDs in conjunction with unbundled loops. At this time, no South Dakota CLEC has requested access to a stand-alone NID. However, Qwest stands ready to meet any requests that are made.

Summary. Qwest complies with the NID requirements of Section 271(c)(2)(B)(iv). Qwest provides unbundled NIDs in a nondiscriminatory manner to CLECs in South Dakota. Qwest provides NIDs in a manner that affords CLECs a meaningful opportunity to compete in South Dakota. The Commission should find that Qwest satisfies these aspects of Checklist Item 4.

V. QWEST PROVIDES LINE SPLITTING AND LOOP SPLITTING IN COMPLIANCE WITH THE FCC RULES.

Qwest complies with FCC requirements regarding access to the high frequency portion of the unbundled loop, otherwise commonly known as line sharing, and was the first ILEC in the country to offer this service. In addition, Qwest complies with FCC requirements regarding access to line splitting. These offerings are currently available to CLECs under Qwest's SGAT as well as under individually negotiated interconnection agreements.

Types of Splitting Arrangements. Qwest offers five types of "splitting" arrangements. The following chart identifies the various types of splitting arrangements

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84 SGAT § 9.5.2.1.2.

Type Splitting	Voice/Low End	Data/High End
Resale	Qwest Resale Voice	Qwest Resale DSL
Line Sharing	Qwest Voice	CLEC DSL
Line Splitting	CLEC UNE-P Voice	CLEC DSL or Qwest DSL
Loop Splitting	CLEC Unbundled Loop	CLEC DSL
EEL Splitting	CLEC EEL	CLEC DSL

Line sharing is addressed in the Affidavit of Karen A. Stewart on Emerging Services. Resale of Qwest telecommunications services is addressed in the Affidavit of Lori A. Simpson on Checklist Item 14. This affidavit addresses line, loop and EEL splitting.

Line Splitting. Line splitting occurs when CLECs provide an end user both the voice and data service utilizing an unbundled network element platform ("UNE-P") for voice service.[85] This can be contrasted to "line sharing," which occurs when the ILEC provides the voice service and a CLEC provides the data service.[86] Line splitting permits CLECs to offer advanced data services simultaneously with an existing UNE-P by using the frequency range above the voice band on the copper loop. Qwest made line splitting available to CLECs on July 1, 2001; however, to date, no CLEC in the 14-state Qwest region has ordered line splitting.

Loop Splitting. By contrast, loop splitting is an arrangement in which Qwest plays a minor role. Loop splitting is an arrangement where a CLEC leases an

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85 SBC Texas Order, ¶ 330.

86 SBC Texas Order, ¶ 324.

unbundled loop from Qwest and, by itself or in partnership with a data LEC, provides both voice and data service on the same loop. Exhibit JML-LOOP-17 provides a network diagram of loop splitting. Qwest made loop splitting available to CLECs on August 3, 2001; to date, no CLEC has ordered loop splitting. To Qwest's knowledge, no other ILEC offers loop splitting.

EEL Splitting. EEL splitting enables a CLEC to provide both voice and data over a copper EEL facility. EEL splitting is available via the Special Request Process. To Qwest's knowledge, no other ILEC offers this service. To date, no CLEC has requested EEL Splitting.

Qwest currently provides or stands ready to provide line splitting and loop splitting to CLECs in a timely and nondiscriminatory manner across its region.

A. Qwest Makes Line Splitting Available

The FCC recently clarified that ILECs must offer "line splitting," which means that the ILEC "must permit competing carriers providing voice service using the UNE-platform to either self-provision necessary equipment or partner with a competitive data carrier provide xDSL service on the same line."[87] Line splitting provides a CLEC with

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87 *See* Deployment of Wireline Services Offering Advanced Telecommunications Capability; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Third Report And Order On Reconsideration In CC Docket No. 98-147; Fourth Report And Order On Reconsideration In CC Docket No. 96-98; Third Further Notice Of Proposed Rulemaking In CC Docket No. 98-147; Sixth Further Notice Of Proposed Rulemaking in CC Docket No. 96-98, CC Docket Nos. 98-147, 96-98, FCC 01-26, 16 FCC Rcd 2101, ¶ 16 (rel. Jan. 19, 2001) ("Line Sharing Reconsideration Order").

the opportunity to offer advanced data services simultaneously with an existing UNE-P by using the frequency range above the voice band of the copper loop.[88] Since July 1, 2001, Qwest has been facilitating "line splitting" arrangements under Section 9.21 of the SGAT. Section 9.21 permits competing carriers to provide voice service using the UNE-platform to either self-provision necessary equipment or partner with a competitive data carrier to provide xDSL service on the same line, consistent with the FCC's Line Sharing Reconsideration Order.[89]

Ordering Line Splitting. Qwest provides CLECs with access to line splitting under Section 9.21 of its SGAT. Qwest allows CLECs or DLECs to place POTS splitters, a device to separate the high and low frequencies of the loop, in Qwest's wire centers to provide line splitting.[90] Once POTS splitters are deployed in the central office serving the end user, the CLEC submits a Local Service Request ("LSR") to add line splitting to an existing UNE-P line. The line splitting LSR is based on industry standards promulgated by the Order and Billing Forum, a national industry forum that creates and

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88 *See* SGAT § 9.21.1.

89 Line Sharing Reconsideration Order, ¶ 16.

90 Qwest is not obligated to provide Qwest-owned POTS splitters to a CLEC or DLEC, and currently does not do so. SBC Texas Order, ¶ 327 ("The Commission has never exercised its legislative rulemaking authority under section 251(d)(2) to require incumbent LECs to provide access to the splitter, and the incumbent LECs therefore have no current obligation to make the splitter available."); Line Sharing Reconsideration Order, ¶ 25.

maintains LSR ordering guidelines. The OBF guidelines are the de facto standard for ordering.

Customer of Record. When a CLEC and a DLEC engage in line splitting, Qwest requires the CLEC and DLEC to determine who will be the customer of record.[91] The customer of record can be either the CLEC or the DLEC. Qwest has agreed that the party that is not the customer of record with Qwest can act as the "authorized agent" on behalf of the customer of record as long as the customer of record manages the arrangement.

Conditioning for Line Splitting. The CLEC/DLEC may provide any xDSL services that are compatible with CLEC UNE-P-POTS service.[92] To facilitate line splitting, Qwest performs requested conditioning of shared loops to remove load coils and excess bridged taps. If an end-user customer wishes to change its voice provider and still retain Qwest retail DSL, Qwest will allow a CLEC that provides service over UNE-P to retain the Qwest DSL service, although Qwest is not legally obligated to do so. The FCC clearly stated in its order approving SBC's application to provide interLATA service in Texas that under its rules "the incumbent LEC has no obligation to provide xDSL

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91 For purposes of this section of my affidavit, the term "CLEC" refers to the voice service provider and "DLEC" refers to the advanced service provider. The CLEC and the DLEC may be the same entity.

92 *See* SGAT § 9.21.2.1.3. In the future, additional services may be used by DLEC to the extent those services are deemed acceptable for UNE-P line splitting deployment in accordance with FCC rules. *Id.*

service over this UNE-P carrier loop."[93] The FCC recently confirmed that Qwest has no obligation to provide xDSL service when it is no longer the voice provider.[94]

Provisioning Process. Qwest has also developed a process flow for line splitting. Qwest follows the same process as it does for line sharing, except in the line splitting scenario the voice connection is provided by the CLEC and data transmission is provided by the DLEC. The CLEC and the DLEC may be the same entity.

Installation Interval. The installation interval for UNE-P-POTS with line splitting is based on the number of lines installed at the same end user premises. Just as for line sharing, the standard installation intervals are as follows:

Number of Lines	Installation Interval (No Loop Conditioning Required)	Installation Interval (Loop Conditioning Required)
1 to 8	3 business days	15 business days
9-16	3 business days	ICB
17 –24	3 business days	ICB
25 +	ICB	ICB

Line Splitting Scenarios. In a collaborative process with the CLECs, Qwest has developed several scenarios to define the role of each company. Qwest, the CLEC

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93 SBC Texas Order, ¶ 330.

94 Line Sharing Reconsideration Order, ¶ 16 ("We deny, however, AT&T's request that the Commission clarify that incumbent LECs must continue to provide xDSL services in the event customers choose to obtain voice service from a competing carrier on the same line because we find that the Line Sharing Order contained no such requirement").

voice provider, and the DLEC data provider. Exhibit JML-LOOP-18 depicts these different scenarios.

B. Qwest Makes Loop Splitting Available

Loop Splitting. Line splitting can technically be provisioned using an unbundled loop. In this scenario, referred to as "loop splitting," the CLEC or the DLEC would lease the loop from Qwest and then provide the another carrier with access to the same loop. Alternatively, a single CLEC may provision both the voice and data over the same loop. The CLEC or DLEC would need to insert a POTS splitter into the loop to separate the voice and data traffic. Qwest began making loop splitting available on August 3, 2001, but has received no orders to date.

Loop Splitting Scenarios. In a collaborative process, Qwest and the CLECs also have developed loop splitting scenarios to identify the roles of each company: Qwest, the CLEC and the DLEC. Exhibit JML-LOOP-19 displays the different loop splitting scenarios.

Ordering process. There are currently no industry OSS standards for loop splitting. As a result, the collaborative efforts between Qwest and CLECs in Qwest's industry forum meetings started case testing. Together, Qwest and CLECs developed the loop splitting process.

C. Qwest Makes EEL Splitting Available

EEL Splitting. In other states, CLECs requested that Qwest provide EEL Splitting. An EEL consists of transport between two Qwest central offices, multiplexing and an unbundled loop. The primary purpose of an EEL is to provide CLECs with a

means to provision service without having collocation in the end user's serving wire center. The very nature of DSL service, however, requires that the end user customer be located within approximately 18,000 feet from the central office or DSLAM. Therefore, in an EEL splitting scenario, the two central offices and the customer's premises would all need to be within approximately a three-mile radius to provide service.

Because of this restriction, Qwest did not view EEL splitting as a viable or high demand form of splitting. When Qwest asked CLECs for information on their foreseeable demand for EEL splitting, no CLEC provided information. CLECs have opposed Qwest's provision of this service on a special request basis, arguing that because it is technically feasible to split the EEL at the serving wire center and then provision the DSL service, Qwest should provide EEL splitting as a standard product. If splitting occurs in this manner, however, then it is loop splitting with added unbundled dedicated interoffice transport. Additionally, as Ms. Stewart testifies in her Affidavit on Checklist Item 2, access to unbundled network elements, there are no EELs in service in South Dakota. Qwest is required to offer products to meet current or "reasonably foreseeable" demand for the product.[95] Qwest is not aware of any demand for EEL splitting. Nevertheless, Qwest has agreed to provide CLECs the ability to request EEL

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95 SBC Texas Order, ¶ 98; BellSouth Louisiana II Order, ¶¶ 108, 116, 139.

splitting using the Special Request Process. If demand develops to a point where a standard product offering is warranted, Qwest will establish a standard offering.

Summary. Qwest provides CLECs with the ability to share a UNE-P arrangement for the purposes of providing voice and data. Qwest also has implemented loop splitting. Qwest's SGAT demonstrates that Qwest has a concrete legal obligation to make line and loop splitting available to CLECs. Qwest has developed processes and procedures to provide line and loop splitting, and Qwest stands ready to provide South Dakota CLECs with these services. Qwest will also provide EEL splitting according to the Special Request Process. For these reasons, Qwest provides line splitting and loop splitting in accordance with FCC requirements.

VI. SUMMARY AND CONCLUSION

As demonstrated in this affidavit, Qwest provides CLECs with nondiscriminatory access to unbundled loops, including NIDs and line splitting, in compliance with Sections 251 and 271 of the 1996 Act and the FCC's requirements thereunder. The Commission should find that Qwest satisfies Checklist Item 4 of Section 271 of the Act in South Dakota.

Being first duly sworn upon oath, I, Jean Liston, 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 4th day of October, 2001.

[Jean Liston]

STATE OF WASHINGTON

COUNTY OF KING

Subscribed and sworn to before me this 4th day of October 2001.

Notary Public

Notary Public
State of Washington
JANE M. KOENIG
My Appointment Expires Dec 17, 2003

My Commission Expires:

Dec 17, 2003

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

JEAN M. LISTON

CHECKLIST ITEM 4 – UNBUNDLED LOOPS, NIDs and LINE SPLITTING

October 24, 2001

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QUALIFICATIONS OF JEAN M. LISTON

My name is Jean M. Liston. My business address is 1600 Seventh Avenue, Room 3003, Seattle, WA. 98191. I am a Director, Public Policy and Law, at Qwest Corporation ("Qwest"). I am the 271 Director responsible for Checklist Item 4 – Unbundled Loops. In that position, I am a member of the Qwest Unbundled Loop Process Team and have the responsibility to represent Qwest in formal 271 proceedings which are associated with unbundled loops, including xDSL compatible loops, Network Interface Devices ("NIDs") and line splitting.

My formal education includes a Bachelor of Arts degree in mathematics from Kean College in New Jersey and a Masters of Science in Business from Steven's Institute of Technology in Hoboken, New Jersey.

In 1977, I was hired as a member of the technical staff at Bell Laboratories. In 1981, I accepted a transfer to Pacific Bell Northwest and have worked for Qwest and its predecessor companies (including U S WEST Communications, Inc. and Pacific Bell Northwest) since then. My work has included various staff and line positions in the Network Services organization, in retail marketing, in regulatory product and pricing strategy, and in witness support. In these roles, I have testified before the Wyoming Commission in the areas of Extended Area Service and long distance service.

For the past three years, I have been involved with 271 issues. For two years I was a witness support manager in the areas of resale, public interest and unbundled loops. My experience has allowed me to develop an expertise in several Section 271

checklist items, including unbundled loops. For the past year I have served as the 271 witness for unbundled loops, line splitting, and NIDs. In these roles I have worked closely with the Qwest wholesale organization to develop and implement the procedures set forth in this affidavit. I have testified in the Section 271 workshops and hearings in Colorado, Arizona, Oregon, and Washington, and in the multi-state proceeding involving state commissions from Idaho, Iowa, Montana, New Mexico, North Dakota, Utah and Wyoming. Each of these workshop processes was collaborative, conducted on an open basis with full, active and equal participation by competitive local exchange carriers ("CLECs") and state commission staffs.

Loop Make-Up Information

Background

In early 1999 Qwest began the development process of an IMA/EDI Loop Qualification Tool. The IMA 4.2 Release in October 1999 included the pre-order ADSL Loop Qualification Tool. At the time the tool was released there were approximately 6,000 xDSL loops in service in all 14 states of Qwest territory.

In December1999 Rhythms filed a CICMP user request to upgrade the ADSL Qualification Tool to include additional loop make-up information. The CLEC community prioritized the request as non-critical and the upgrade was scheduled for IMA Release 6.0. Additionally, Qwest agreed to deploy a bulk wire-center raw loop data report in July of 2000.

All of this activity took place prior to the FCC UNE Remand[1] mandating that LECs provide loop make-up information and placing the qualification responsibility on the CLECs. As promised Qwest deployed the wire center tool in July and the IMA raw Loop Data Tool in IMA Release 6.0 in December 2000.

[1] FCC UNE Remand at § 427

In addition IMA also has a pre-order transaction for POTS to Unbundled Loop conversions. Supplementing the tools specifically for unbundled loops, the CLECs have access via IMA/EDI pre-order functions to perform a MegaBit Qualification and an ISDN Qualification. Although these tools were established primarily for resale purposes, the CLECs can use them for additional information.

The Tools

As mentioned there are five electronic tools available to the CLECs, see Exhibit JML-LOOP-2a. I will review each one separately.

ADSL Loop Qualification Tool

- Access via an IMA/EDI pre-order transaction.
- One telephone number or street address per request, Exhibit JML-LOOP-2b is a copy of the IMA request screen.
- The data sources include LFACS and PREMIS.
- The CLECs have the option of qualifying working telephone number or address and can also request a search for multiple lines.
- If the CLECs check "Qualify working telephone numbers", they will receive the loop make-up for the working service. If the CLEC asked for multiple lines then the system will look for lines to the specified address.
- If the CLECs do not check "Qualify working telephone numbers", the system will look for "spare" facilities that qualify for ADSL.
- The qualification process uses ANSI ADSL standards and provides CLECs with a "Y" or "N" indicator to say "yes" the loop qualifies for ADSL or "no" it does not. Exhibit JML-LOOP-2c is a copy of the ADSL Response screen.
- The response screen also provides the following loop make-up: Telephone number or circuit id, if the system is returning spare information it will have a fictitious circuit id, Loop length, bridge tap length, the type of facility- copper or pair gain, the load type and the insertion loss calculated at 196 kilohertz frequency with 135 ohm termination

Wire Center Raw Loop Data Tool

- Access via www.ecom.uswest.com and a digital certificate. Exhibit JML-LOOP-2d is a copy of the product announcement that describes how to obtain the digital certificate and down loaded the wire center information.
- One wire center at a time can be selected from the alphabetized list of CLLI codes.
- The data source is the Loop Qualification database, the same database used to qualify Qwest retail customers for DSL services.
- The CLECs have access to working lines and non-working telephone numbers.
- The data is in an ASCII text file that is comma delimited and can be downloaded into the CLEC's database or files.
- The loop make-up information includes: Wire Center CLLI Code, Cable Name, Pair Name, Terminal Address, MLT Distance, Segment (F1, F2), Sub Segment (1 of F1), Segment Length, Segment Gauge, Bridge Tap length by segment, Bridge Tap Offset Distance, Load Coil Type, and Pair Gain Type.

IMA Raw Loop Data Tool

- Access via a pre-order IMA/EDI transaction.
- Three query options are available: telephone number, assigned address or unassigned address
- Up to 24 Telephone numbers or 1 Assigned or Unassigned address can be requested at one time.
- If an address is chosen IMA will show raw loop data for up to 24 circuits that are associated with that address, working or non-working. Exhibit JML-LOOP-2e is a copy of the Telephone number, the Address, and the Unassigned Address screen requests.
- The data source is the Loop Qualification database, the same dabase used for Qwest DSL qualification.
- The CLECs have access to working telephone numbers and spare facilities.
    - Exhibit JML-LOOP-2f is a copy of the response screens. The RLD tool provides the CLECs with the following loop make-up information: Wire Center CLLI Code, Cable Name, Pair Name, Terminal Address, MLT Distance, Segment (F1, F2), Sub Segment (1 of F1), Segment Length, Segment Gauge, Bridge Tap length by segment, Bridge Tap Offset Distance, Load Coil Type, number of loads and Pair Gain Type.

Exhibit JML-LOOP-2g is a chart that displays the differences in the three unbundled loop tools. As previously mentioned there are two additional IMA tools: the MegaBit Qualification and ISDN Qualification pre-order transactions.

Convert POTS to Unbundled Loop

- Access via an IMA /EDI pre-order transaction.
- Requires address
- The data source is LFACS and PREMIS
- The response screen indicates if the facilities are served on Copper or Pair Gain and the "loading" of the facility. Exhibit JML-LOOP-2h is a copy of the response screen.

MegaBit Qualification

- Access via an IMA /EDI pre-order transaction.
- Requires address or telephone number.
- The data source is Loop Qualification database.
- The response screen provides a "Y" or "N", yes or no, for MegaBit and MegaBit Select. If a "N(o)" response is returned a short explanation is provided such as does not qualify: pair gain. Exhibit JML-LOOP-2i is a copy of the response screen.
- This tool mirrors the Qwest retail tool for MegaBit qualifications. The CLECs receive the same messages as the Qwest retail channel receives.

ISDN Qualification

- Access via an IMA /EDI pre-order transaction.
- Request by address.
- CLEC has the ability to ask for multiple lines.
- This tool looks for available ISDN facilities.
- The response screen will display the number of facilities found. If ISDN capable facilities were found the Description field will indicate qualified facilities found.

including information regarding pair gain, if applicable. Exhibit JML- LOOP-2 is a copy of the response screen.

Loop Make-up and Qualification Tools

IMA/EDI Pre-order Tools	M[1]	Q[2]	IMA Rel
ADSL Loop Qualification	X	X	4.2
Raw Loop Data Tool (RLD)	X		6.0
Convert POTS to UB Loop	*		
MegaBit Qualification	*	X	5.0
ISDN Qualification		X	6.0

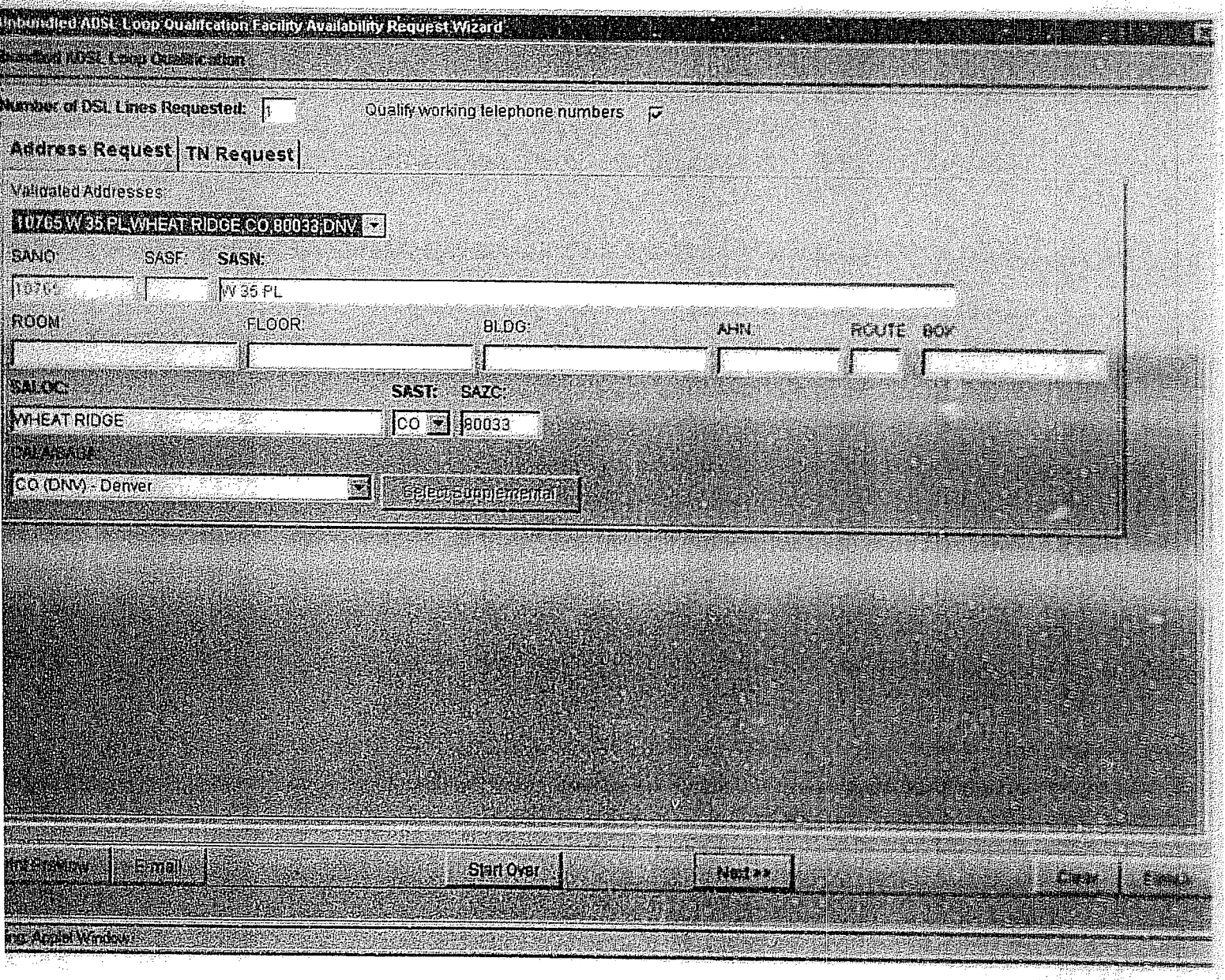
Web-based – ecom	M	Q	Date
Wire Center Raw Loop Data	X		7/00

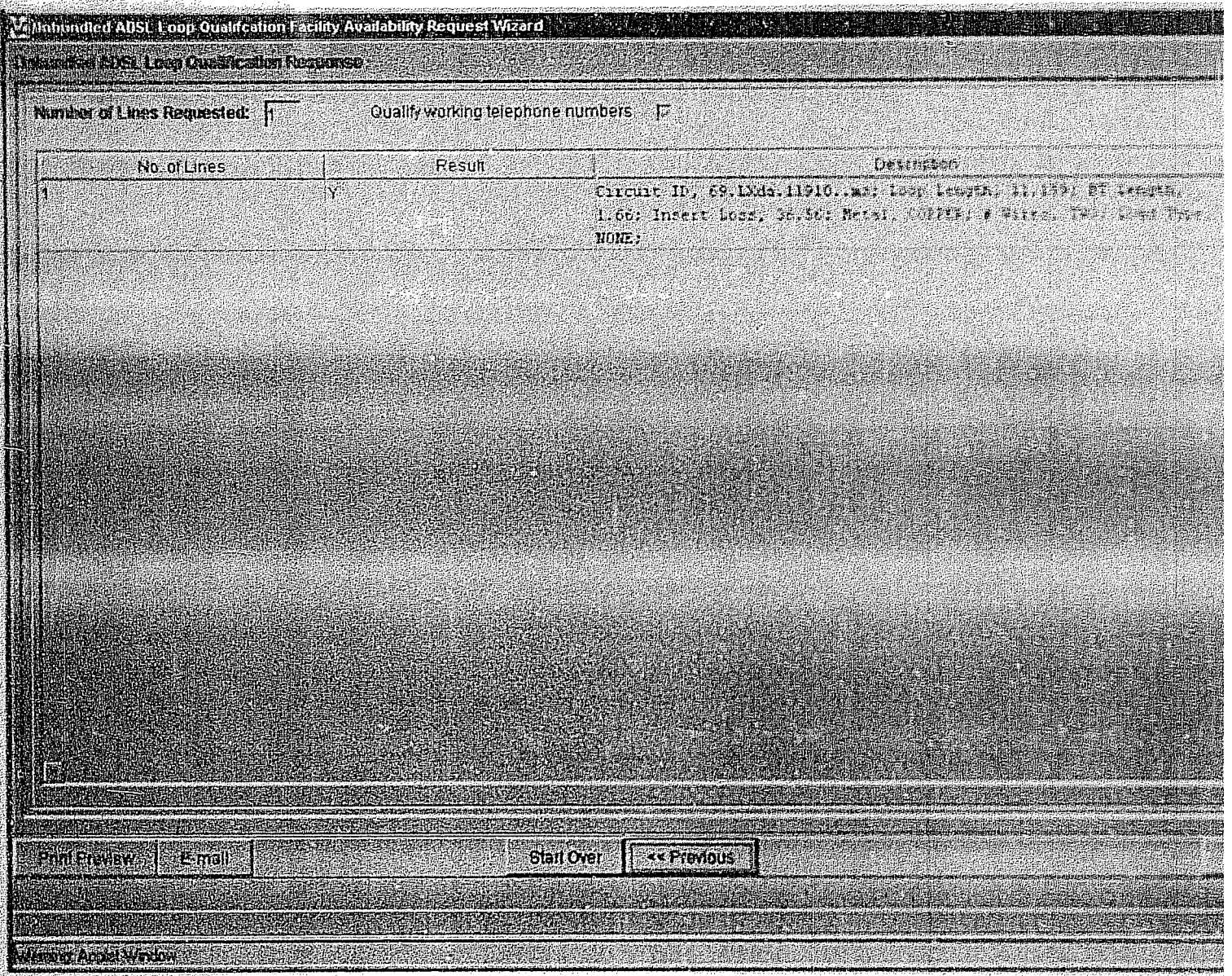
* Provides limited information.

---

[1] M = Loop Make-up

[2] Q= Qualification


Unbundled ADSL Loop Qualification Facility Availability Request Wizard
Unbundled ADSL Loop Qualification
Number of DSL Lines Requested:
1
Qualify working telephone numbers
Address Request
TN Request
Validated Addresses:
10765 W 35 PL,WHEAT RIDGE,CO,80033,DNV
SANO:
SASF:
SASN:
10765
W 35 PL
ROOM:
FLOOR:
BLDG:
AHN:
ROUTE:
BOX:
SALOC:
SAST:
SAZC:
WHEAT RIDGE
CO
80033
DNV/ASAGE:
CO (DNV) - Denver
Select Supplemental
Start Over
Next >>


Unbundled ADSL Loop Qualification Facility Availability Request Wizard
Unbundled ADSL Loop Qualification Response
Number of Lines Requested: 1
Qualify working telephone numbers
No. of Lines
Result
Description
1
Y
Circuit ID, 69.LXda.11710..ma; Loop Length, 11,159; BT Length,
1.66; Insert Loss, 36.56; Metal, Cable; # Wire, Two; Load Type,
NONE;
Print Preview
E-mail
Start Over
<< Previous
Main Application Window

SUBJECT: Raw Loop Data (RLD) Tool

Target Audience: CLEC

Qwest is please to announce the availability of Raw Loop Data (RLD). Following are the specifics regarding this data and it's availability to you.

PRODUCT DEFINITION
The RLD tool provides data in bulk format to the Co-Providers about loop make-up characteristics at the wire center level. The data includes CLLI code, load coil, bridged tap, wire gauge, cable and pair make-up, and similar information on a loop-by-loop basis.

A web-site maintained by Qwest is available where Co-Providers may access the RLD tool. To gain access to the web-site, Co-Providers must obtain a digital certificate associated with the RLD process from Qwest. The RLD tool is presented in an ASCII text file and can be downloaded to an Excel format or database built by the Co-Provider. Once you have obtained the digital certificate the RLD data will be available through the following web-site: http://ecom.uswest.com.

Data available via the RLD tool will be loaded/refreshed every month on a wire center basis. There will be approximately 60-wire centers loaded/refreshed each business day with a 20-business day cycle to load/refresh the data for all of Qwest's wire centers.

All information referenced will be provided as is, with any errors and omissions that exist in Qwest's records. Co-Providers may access the RLD tool 7 days a week, 24 hours a day, and is available immediately to Co-Providers as they become eligible with a digital certificate.

Qwest will provide the following data via the RLD tool:

DATA FIELDS:
- Telephone Number
- Wire Center CLLI Code
- Cable Name
- Pair Name
- Terminal Address
- Segment (e.g. F1, F2, etc.)
- Sub Segment (e.g. segment 1 of F1)
- Segment Length
- Gauge
- Bridge-Tap Length
- Length Units
- Bridge-Tap Offset Distance
- Load Coil Type
- Pair Gain
- Composition of loop
- MLT Distance
- House Number
- Street
- Unit
- Floor
- Building
- Community (e.g., City)
- State Code

RAW DATA EXAMPLE:

The RLD tool contains the following data entries. If a specific data item is not available or does not pertain to a particular loop, then the field entry will be blank. For instance, if the loop only consists of F1 and F2, then the entry fields that correspond to F3 through F9 would be empty. Commas separate field entries and an empty field is designated by no spaces or entries.

FILE_CREATION_DATE,WIRE_CENTER_CLLI,TELEPHONE_NUMBER,F1_CABLE_NAME,F2_CABLE_NAME,F3_CABLE_NAME,F4_CABLE_NAME,F5_CABLE_NAME,F6_CABLE_NAME,F7_CABLE_NAME,F8_CABLE_NAME,F9_CABLE_NAME,F1_PAIR_NUMBER,F2_PAIR_NUMBER,F3_PAIR_NUMBER,F4_PAIR_NUMBER,F5_PAIR_NUMBER,F6_PAIR_NUMBER,F7_PAIR_NUMBER,F8_PAIR_NUMBER,F9_PAIR_NUMBER,F1_TERMINAL_ID,F2_TERMINAL_ID,F3_TERMINAL_ID,F4_TERMINAL_ID,F5_TERMINAL_ID,F6_TERMINAL_ID,F7_TERMINAL_ID,F8_TERMINAL_ID,F9_TERMINAL_ID,F1_MAKE_UP_DESC,F2_MAKE_UP_DESC,F3_MAKE_UP_DESC,F4_MAKE_UP_DESC,F5_MAKE_UP_DESC,F6_MAKE_UP_DESC,F7_MAKE_UP_DESC,F8_MAKE_UP_DESC,F9_MAKE_UP_DESC,F1_BRIDGE_TAP_OFFSET_DESC,F2_BRIDGE_TAP_OFFSET_DESC,F3_BRIDGE_TAP_OFFSET_DESC,F4_BRIDGE_TAP_OFFSET_DESC,F5_BRIDGE_TAP_OFFSET_DESC,F6_BRIDGE_TAP_OFFSET_DESC,F7_BRIDGE_TAP_OFFSET_DESC,F8_BRIDGE_TAP_OFFSET_DESC,F9_BRIDGE_TAP_OFFSET_DESC,F1_LOAD_COIL_TYPE,F2_LOAD_COIL_TYPE,F3_LOAD_COIL_TYPE,F4_LOAD_COIL_TYPE,F5_LOAD_COIL_TYPE,F6_LOAD_COIL_TYPE,F7_LOAD_COIL_TYPE,F8_LOAD_COIL_TYPE,F9_LOAD_COIL_TYPE,F1_PAIR_GAIN_TYPE,F2_PAIR_GAIN_TYPE,F3_PAIR_GAIN_TYPE,F4_PAIR_GAIN_TYPE,F5_PAIR_GAIN_TYPE,F6_PAIR_GAIN_TYPE,F7_PAIR_GAIN_TYPE,F8_PAIR_GAIN_TYPE,F9_PAIR_GAIN_TYPE,MLT_DISTANCE,HOUSE_NUMBER,STREET_NAME,UNIT,FLOOR,BUILDING,COMMUNITY,STATE_CODE

The loop make-up txt file would appear as follows, the commas separate the fields:

- 06-19-2000,CHNDAZMA,,25,1330P,,,,,,,,1086,773,,,,,,X 1330 W PALO VERDE DR,F 1841 W ALAMO DR,,,,,,,24NL 23.810kf ,24NL 7.016kf,,,,,,,,,,,,,,,,H88,,,,,,,,,NO_PG,NO_PG,,,,,,34800,1846,W ALAMO DR,,,,
- 06-19-2000,CHNDAZMA,,25,1330P,,,,,,,,1086,773,,,,,,X 1330 W PALO VERDE DR,F 1841 W ALAMO DR,,,,,,,,24NL 7.016kf,,,,,,,,,,,,,,,,H88,,,,,,,,,NO_PG,NO_PG,,,,,,34800,1846,W ALAMO DR,,,,,
- 06-19-2000,CHNDAZMA,,IPG1,1960D,,,,,,,1825,355,,,,,,X 1960 N DOBSON RD,2019 W LEMON TREE PL 1174,,,,,,,,26NL 0.760kf 19NL 0.020kf ,26NL0.165kf 24NL 0.802kf,,,,,,,,,,,,,,,,,,,,,,,,ISLC96,NO_PG,,,,,,,,2019,W LEMON TREE PL,1174,,,,

Data from the RLD tool can be downloaded into an Excel spreadsheet or a database provided by the CO Provider. The format of the text files will remain constant.

ACCESSING THE RLD TOOL FOR LOOP MAKE-UP INFORMATION

The following is the process Co-Providers must follow to gain access to the web-site where the RLD tool resides.

1. To access the bulk wire center loop make-up data, the Co-Provider must have a digital certificate. A digital certificate is required for each Co-Provider employee that will be requesting the loop make-up data. If a Co-Provider employee does not currently have a digital certificate, they can obtain one by requesting an id from their Account Manager.

2. The Co-Provider must provide their Account Manager with the names and telephone numbers of their employees who will be accessing the loop make-up files. The employees' e-mail address is optional.

3. The Account Manager must establish the necessary permissions for the Co-Provider to access the loop make-up files.

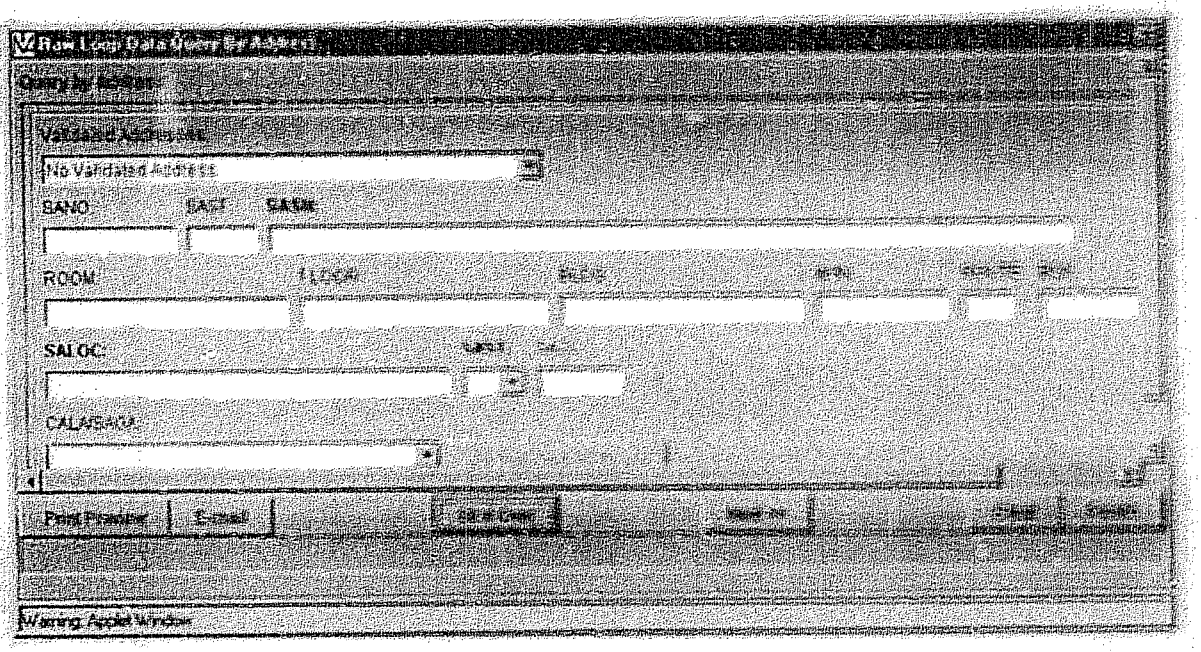
4. Once the permissions are established, the Co-Provider employees can access the loop make-up data by accessing http://ecom.uswest.com and then clicking on the " Get a Certificate" link. (NOTE: When the Co-Provider employee does subsequent log on, they will choose the "I Have a Certificate" link.) This will display all of the sites available to that Co-Provider employee including the Raw Loop Data, "rld", site.

5. Click on the Raw Loop Data site and a list of all the Qwest wire centers in alphabetical order by CLLI will be returned.

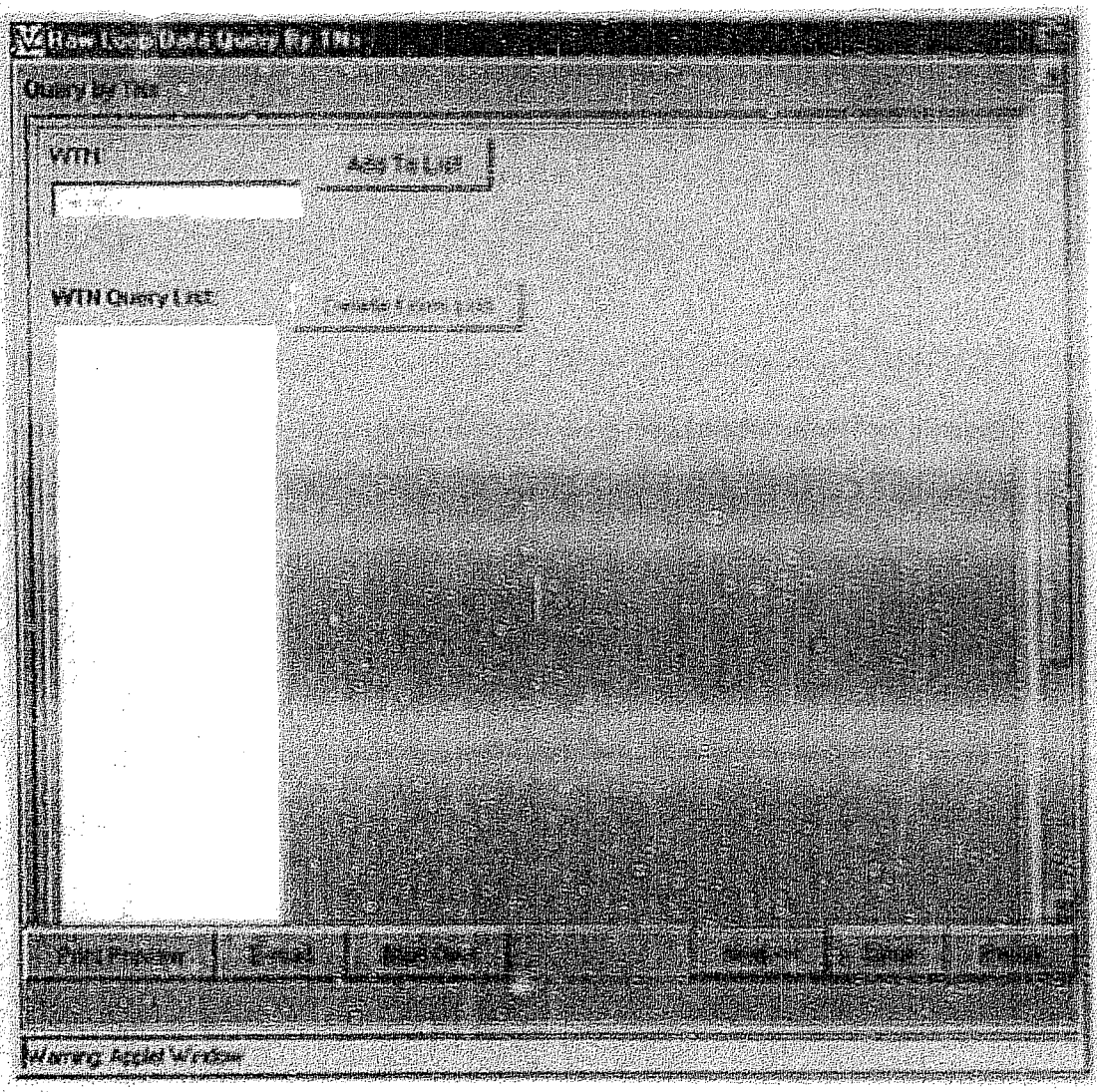
6. Click on the desired CLLI and the raw data file for that wire center will be returned.

7. The file is an ASCII text file that can be downloaded by "cut" and "paste" commands. The Co-Providers can download and save the files according to their preferences.

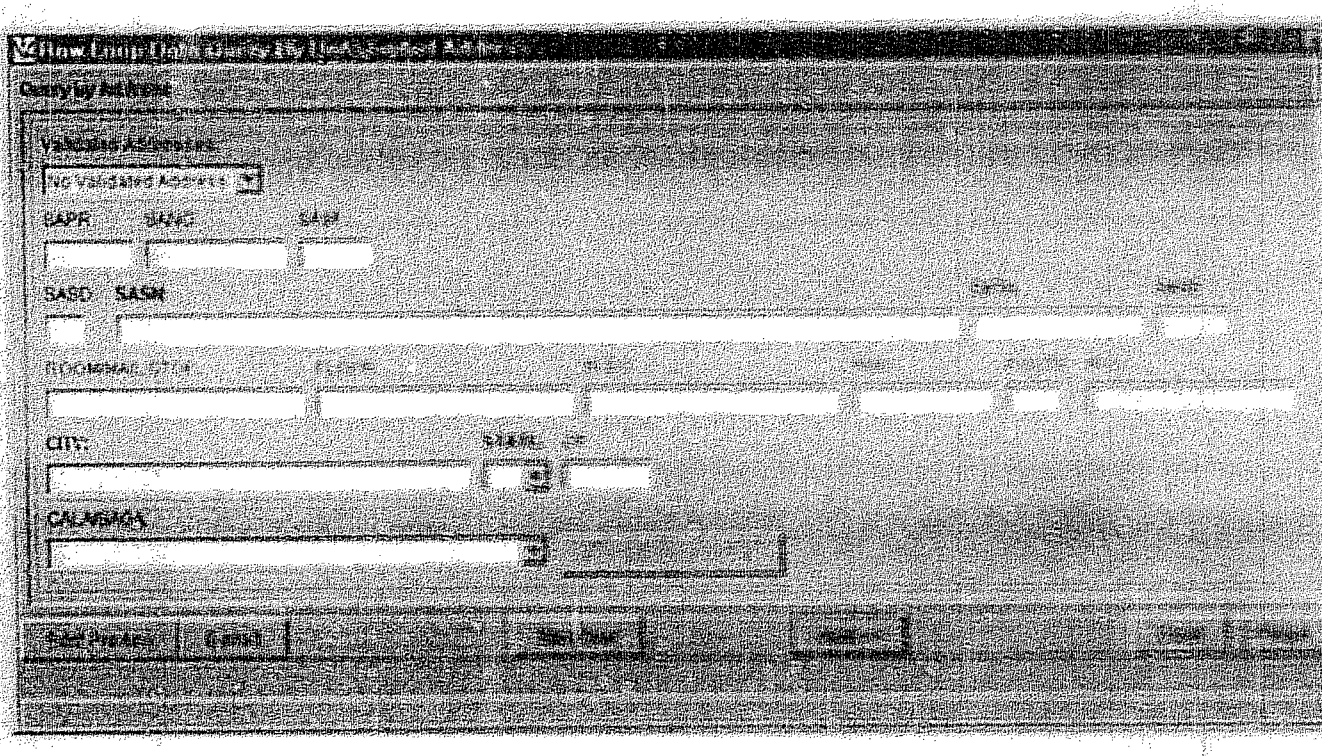
Raw Loop Data Query By Address



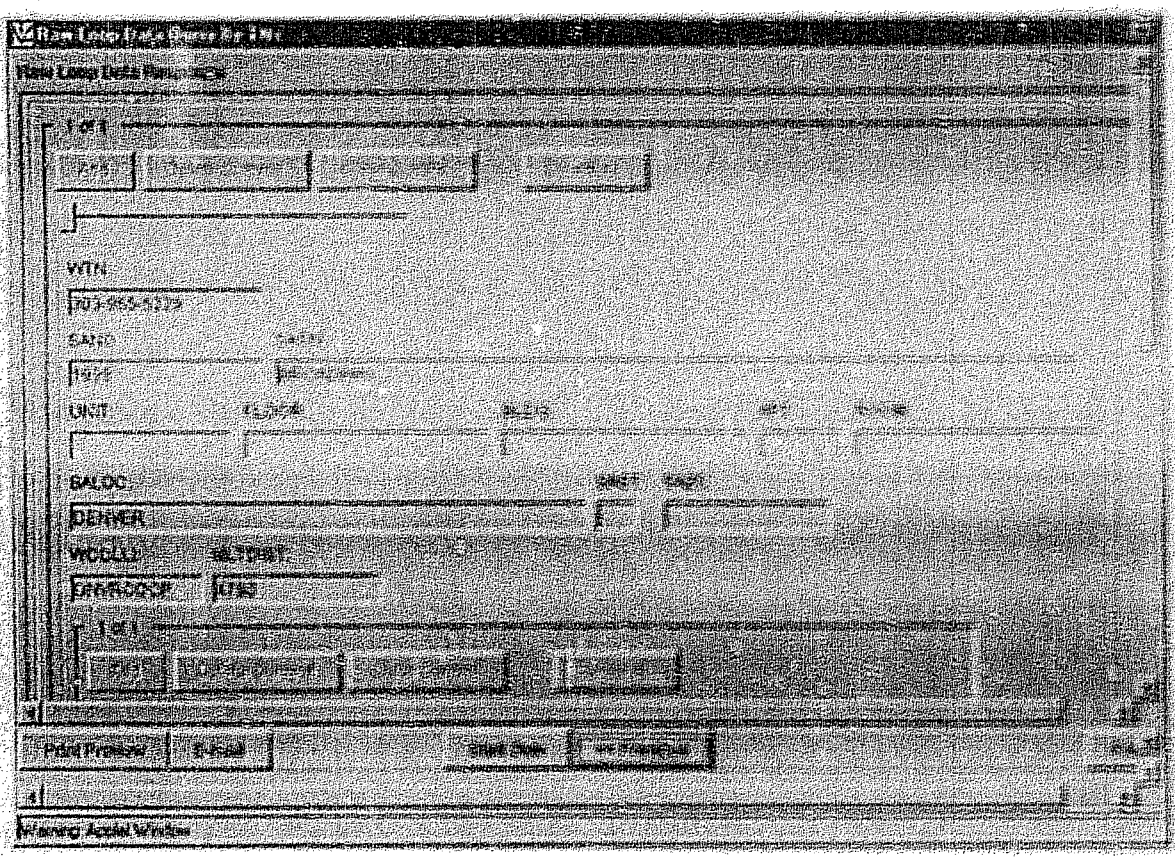
Raw Loop Data Query By Telephone Number



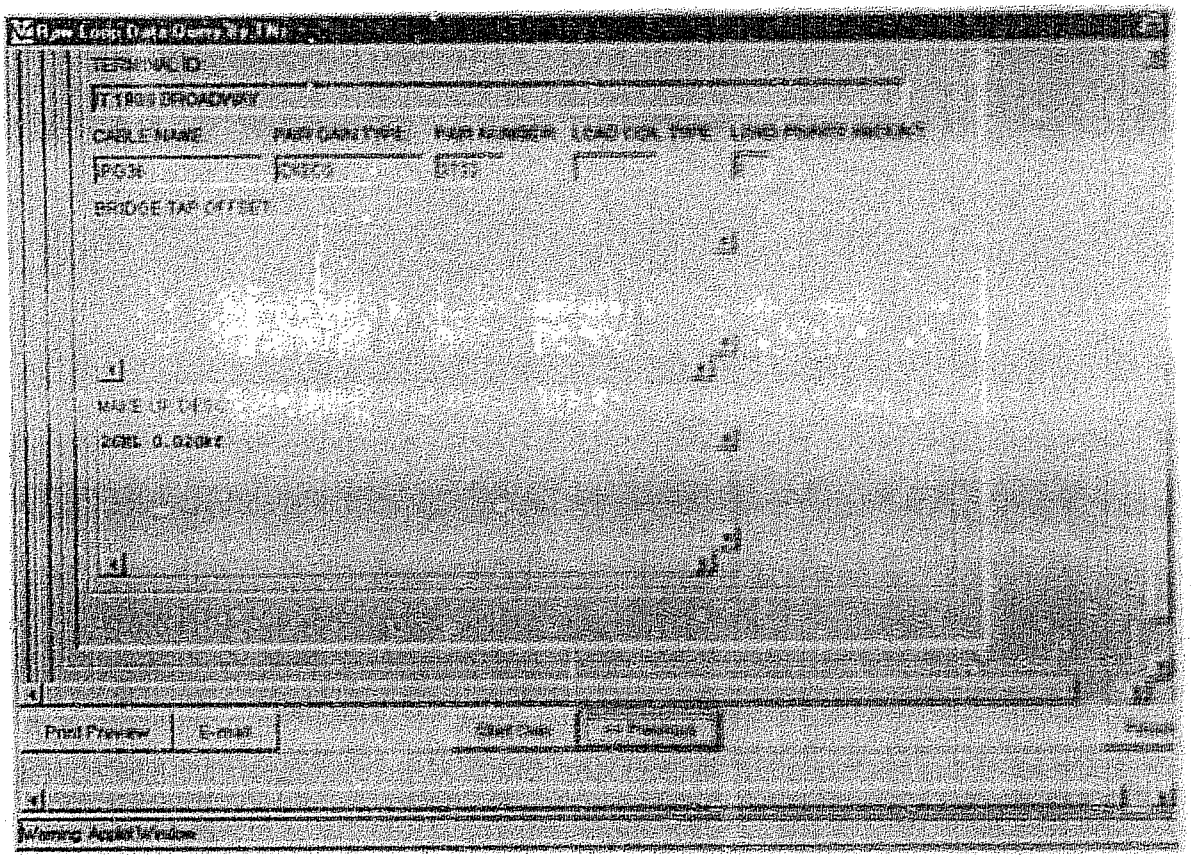
Raw Loop Data Query By Unassigned Address



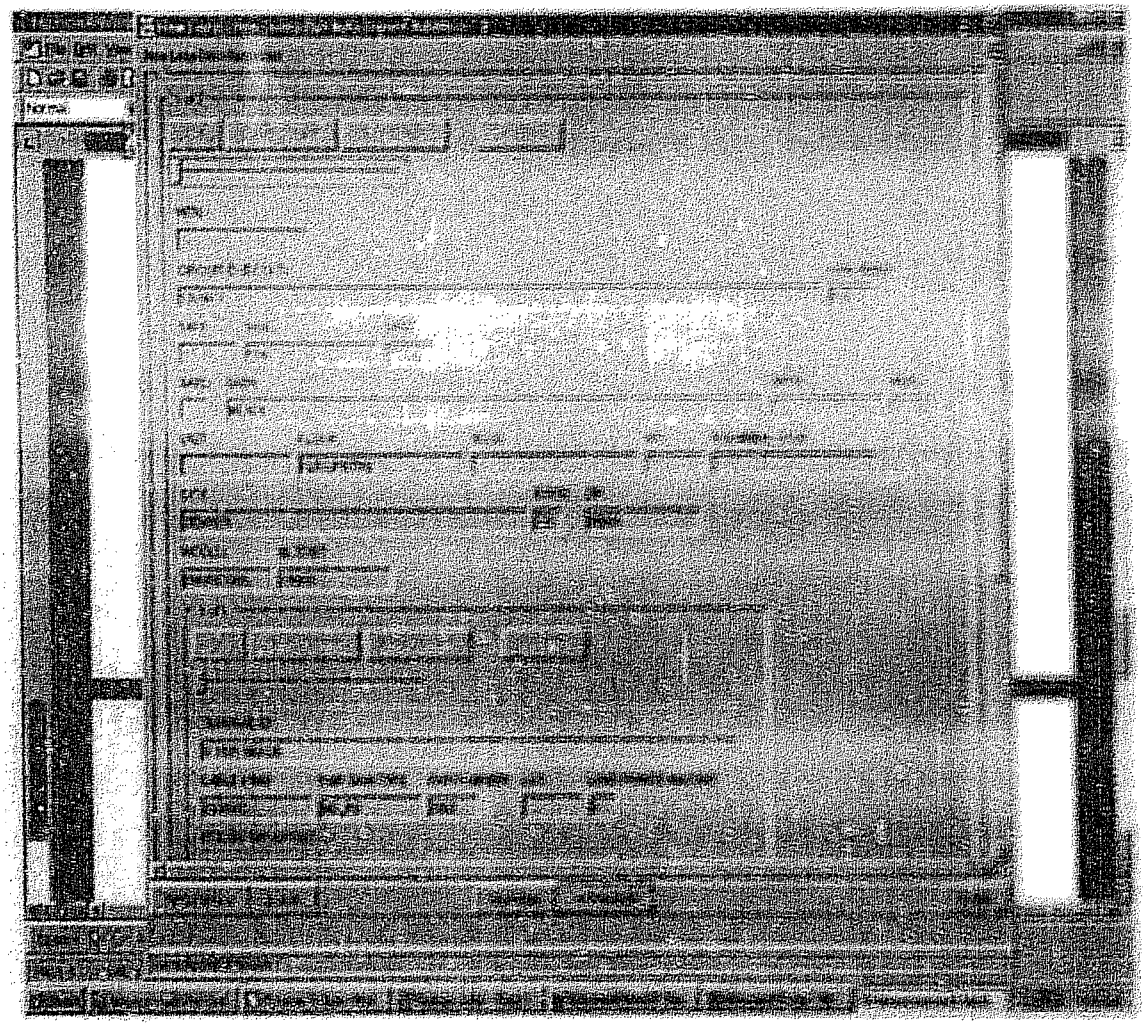
Loop Raw Data Response Screens



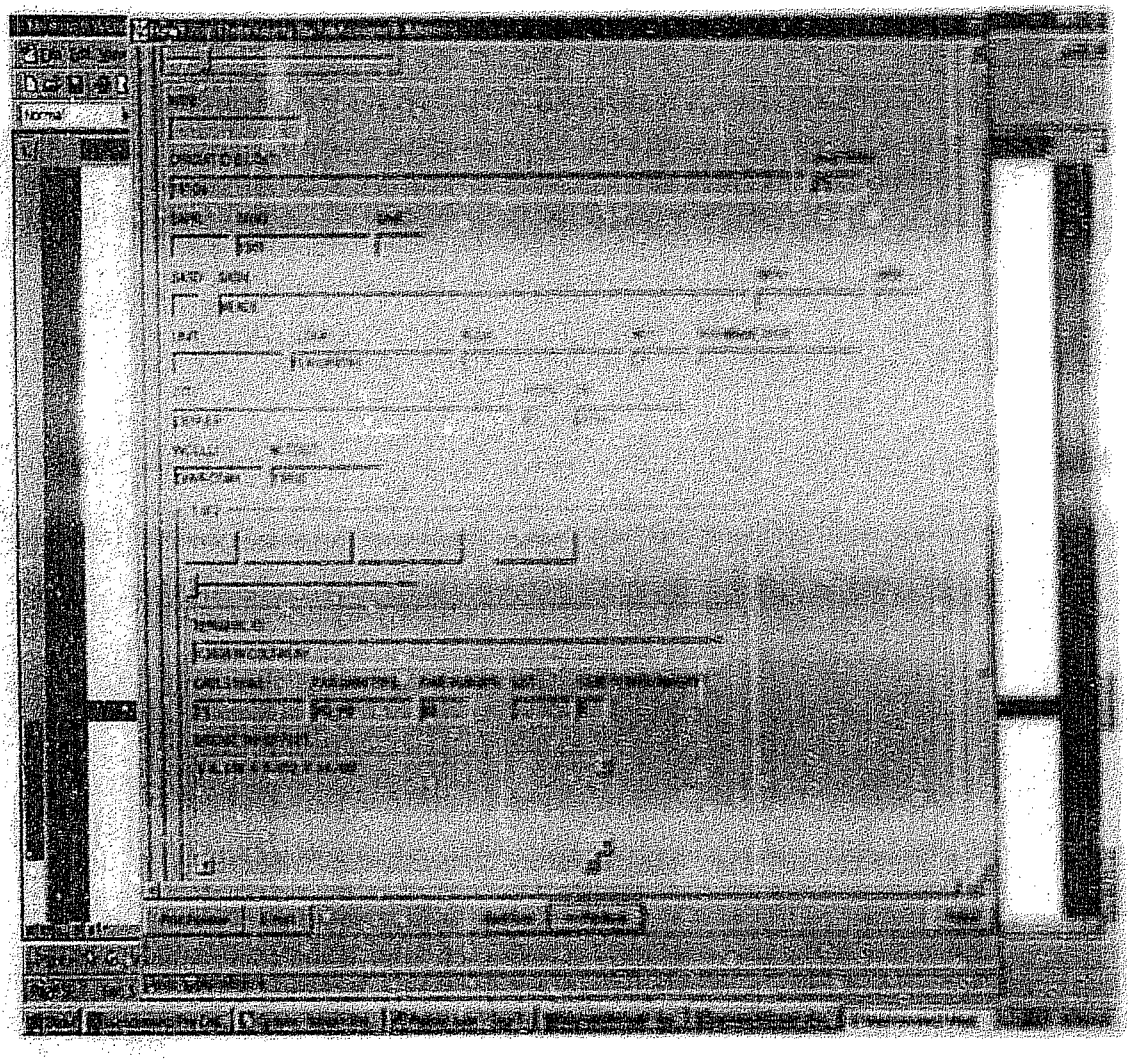
Loop Raw Data Response Screens



Raw Loop Data Unassigned By Address Response Screen



Raw Loop Data Unassigned By Address Response Screen



Loop Make-Up Tools

	RAW LOOP DATA TOOL By TN / ADDRS	RAW LOOP DATA TOOL By Wire Center	ADSL LOOP QUAL TOOL By TN / ADDRS
TOOL SOURCE	Via IMA	Via secure Web Site	Via IMA
DATA Source	Loop Qual Database	Loop Qual Database	Loop Qual Database
Date Made Available	December 2000 IMA Release 6.0	July 2000	October 2000 IMA Release 6.0
Data Available	Includes existing service	Includes existing service	Includes existing POI and spare facilities
Request Type	Up to 24 TNs or 1 address per request	Application Wire Center	1 TN or address per request
Loop Make-Up			
	Telephone Number	Telephone Number	Telephone Number or CFA ID
	Wire Center CLLI Code	Wire Center CLLI Code	
	Cable Name	Cable Name	
	Pair Name	Pair Name	
	Terminal Address	Terminal Address	Line Number or Circuit ID
	MLT Distance and segment lengths	MLT Distance and segment lengths	Loop Length in kilofeet
	Composition of Loop	Composition of Loop	Gauge or Pure Loop
	Load Coil Type	Load Coil Type	Has Load Coil
	Pair Gain Type	Pair Gain Type	
	Segment (F1, F2)	Segment (F1, F2)	
	Sub Segment (1 of F1)	Sub Segment (1 of F1)	
	Segment Length	Segment Length	
	Segment Gauge	Segment Gauge	
	Bridge Tap Length by segment	Bridge Tap Length	Bridge Tap Length in kilofeet
	Bridge Tap Offset Distance	Bridge Tap Offset Distance	Is Section Loop

Convert POTS to Unbundled Loop Request

Loop Characteristic: D - Does not matter

Address Request

Validated Addresses:

**14545 SE 56TH,
BELLEVUE
WA,98006,BLVU**

SAPR:	SANO:	SASF:
	14545	

SASD:	SASN:	SATH:	SAFC:
SE	56TH		

ROOM:	FLOOR:	BLDG:	APT:	SUITE:	SLOT:

SALOC:	SASP:	SAZC:
BELLEVUE	WA	98006

CALA/SAGA:

WA (BLVU) - Bellevue and NW Washington

TN Request

Telephone No.: 425-643-1526

Zip Code: 98006

CALA/SAGA: WA (BLVU) - Bellevue and NW Washington

Circuit ID Request

Circuit ID:

Local Service Office: 425641

Zip Code: 98006

CALA/SAGA: WA (BLVU) - Bellevue and NW Washington

Convert POTS to Unbundled Loop Response

Number Of Lines: 2

Circuit Id	Served On	Loading	Can be Moved to
425 373-1872	COPPER	LOADED	No Move Required
425 643-1526	COPPER	NONE	No Move Required

MegaBit Facilities Request

TN: 425-643-1526

Validated Addresses:

14545 SE 56TH, BELLEVUE
WA,98006,BLVU

SAPR: SANO: SASF:

14545

SASD: SASN: SATH: SASS:

SE 56TH

ROOM: FLOOR: BLDG: AHN: ROUTE: MON:

SALOC: SAST: SAZC:

BELLEVUE WA 98006

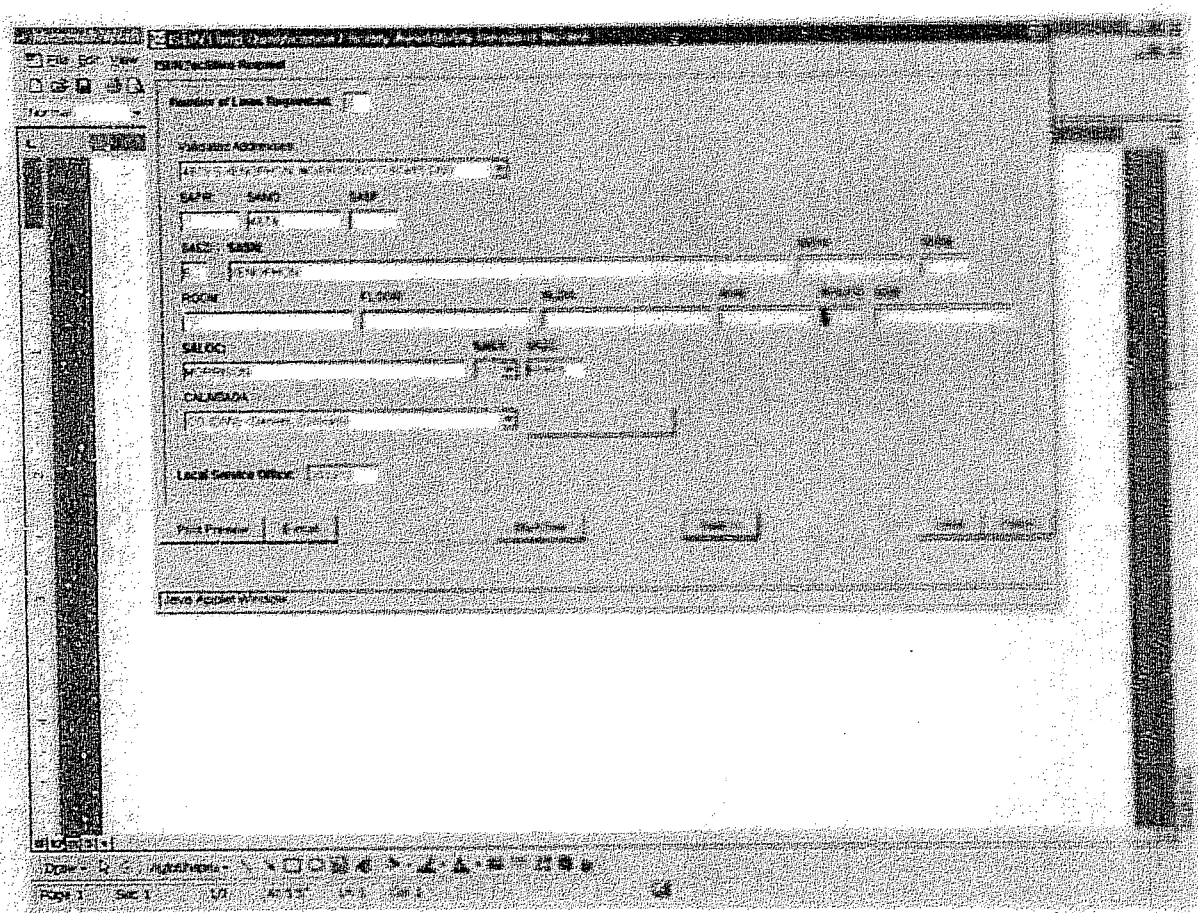
CALA/SAGA:

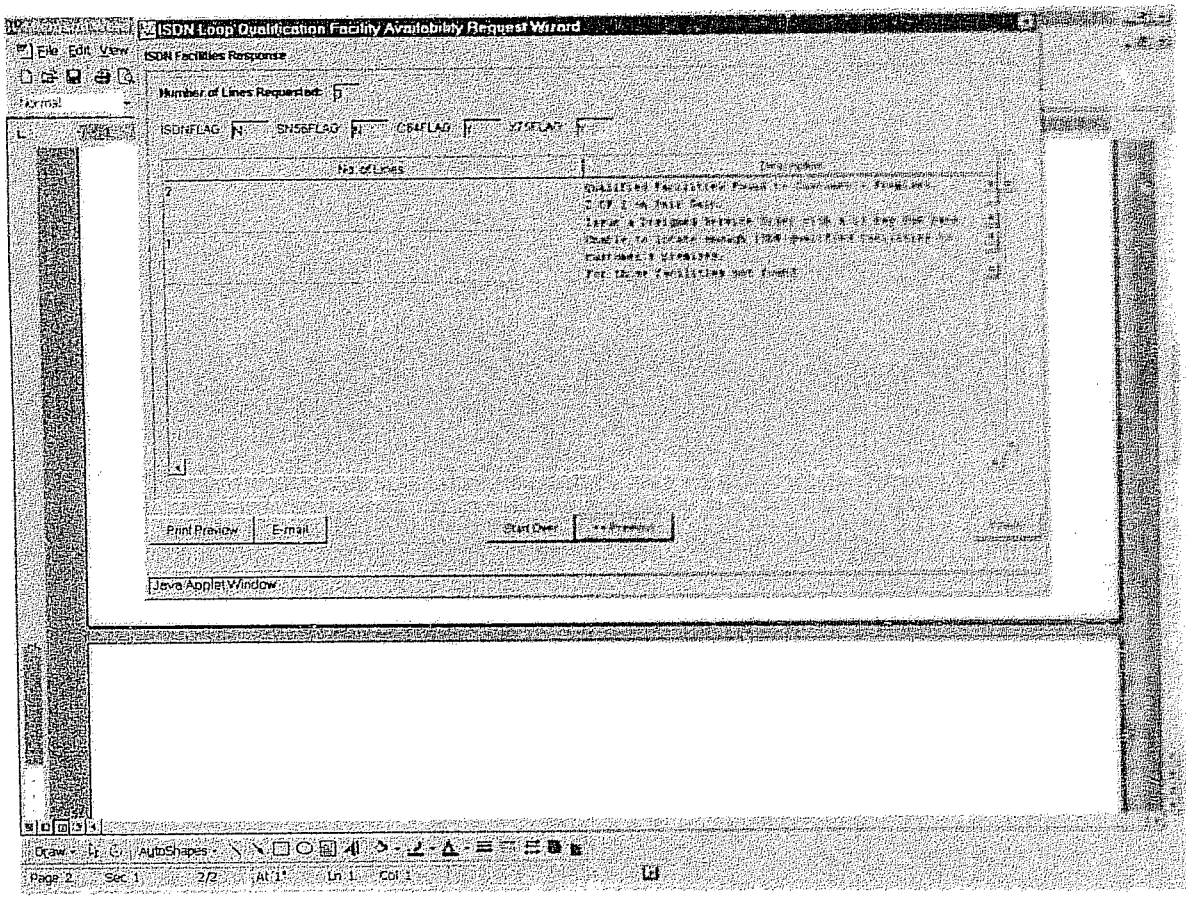
WA (BLVU) - Bellevue and NW Washington

MegaBit Facility Response

TN: 425-643-1526

qualified	megaBitType	MegaBitServices	Reason
N	MegaBit		Loop does not qualify for MegaBit Service; insertion loss is too high.
N	MegaBit Select		Loop does not qualify for MegaBit Service; insertion loss is too high.




ISDN Loop Qualification Facility Availability Request Wizard
File Edit View
ISDN Facilities Response
Number of Lines Requested: 5
ISDNFLAG
SNSSFLAG
CBAFLAG
No of Lines
Print Preview
E-mail
Start Over
Java Applet Window
Draw
AutoShapes
Page 2
Sec 1
2/2
At 1"
Ln 1
Col 1

The Regional Oversight Comm...tee (ROC) 3rd Party Test

Qwest
OSS Evaluation Project
Master Test Plan

Final Release

Version 3.1

Submitted by:

kpmg ***Consulting***

November 17, 2000

17. Final report

12.7 Loop Qualification Process "Parity by Design" Evaluation

In addition to the above elements of this POP Functionality test, KPMG Consulting will perform an evaluation of the Loop Qualification process Qwest provides to wholesale customers compared to the Loop Qualification process it provides to its own retail customers to determine if parity exists in the design, implementation and use thereof. This evaluation will examine the wholesale and retail end-to-end processes, the results of the same queries made to the two processes, and all additional avenues of follow-up or recourse available to either wholesale or retail operations or both. This evaluation should answer the following questions:

- Does a wholesale loop qualification transaction result in the same information as a retail transaction for the same loop?
- Does the loop qualification information come from the same database (directly or indirectly) with the same frequency of update?
- Are the wholesale responses returned in accordance with benchmarks set?
- Are any differences in the sub-processes or remedial options available in the retail loop qualification process versus the wholesale process?

12.8 POP Manual Order Processing Evaluation

12.8.1 Description

The POP Manual Order Processing Evaluation is a comprehensive review of the methods and procedures used to handle orders that have been manually submitted or require manual intervention by Qwest during order processing. Operational analysis techniques will be used to conduct this test. This test will include a review of the procedures in place to plan for and manage projected growth in order processing.

12.8.2 Objective

The objective of this test is to validate the processes and procedures used to support manual submission of orders for service and to ensure that these procedures are being uniformly followed by Qwest's personnel across the three regions.

ROC PID Working Version 1.0 Dated February 16, 2000
Reflects Qwest's initial position regarding the appropriate performance standard based on type of loop.

OP-3 – OP-6:

Analog Loop	**Parity with retail Res and Bus POTS with dispatch**
Non-loaded Loop (2-wire)	**Parity with retail ISDN BRI (designed)**
Non-loaded Loop (4-wire)	Parity with retail DS1 (designed)
DS1-capable Loop	Parity with retail DS1 (designed)
ISDN-capable Loop	Parity with retail ISDN BRI (designed)
ADSL-qualified Loop	**Parity with retail Megabit (non-designed) with dispatch**

ROC PID Working Version 1.3 Dated July 5, 2000
Reflects ROC TAG agreed to (as specified in the summary document and not disputed by parties) change to a benchmark for OP-3 and OP-4 for 3 types of loops.

OP-3:

Analog Loop	**90%**
Non-loaded Loop (2-wire)	**90%**
Non-loaded Loop (4-wire)	Parity with retail DS1 (designed)
DS1-capable Loop	Parity with retail DS1 (designed)
ISDN-capable Loop	Parity with retail ISDN BRI (designed)
ADSL-qualified Loop	**90%**

OP-4:

Analog Loop	**High Density 6 days Low Density 7 days**
Non-loaded Loop (2-wire)	**High Density 6 days Low Density 7 days**
Non-loaded Loop (4-wire)	Parity with retail DS1 (designed)
DS1-capable Loop	Parity with retail DS1 (designed)
ISDN-capable Loop	Parity with retail ISDN BRI (designed)
ADSL-qualified Loop	**High Density 6 days Low Density 7 days**

ROC PID Working Version 2.1B Dated January 15, 2001
Reflects Qwest agreed to elimination of density (zone) distinction in benchmark for 3 types of loops.

OP-4:

Analog Loop	**6 days**
Non-loaded Loop (2-wire)	**6 days**
Non-loaded Loop (4-wire)	Parity with retail DS1 (designed)
DS1-capable Loop	Parity with retail DS1 (designed)
ISDN-capable Loop	Parity with retail ISDN BRI (designed)
ADSL-qualified Loop	**6 days**

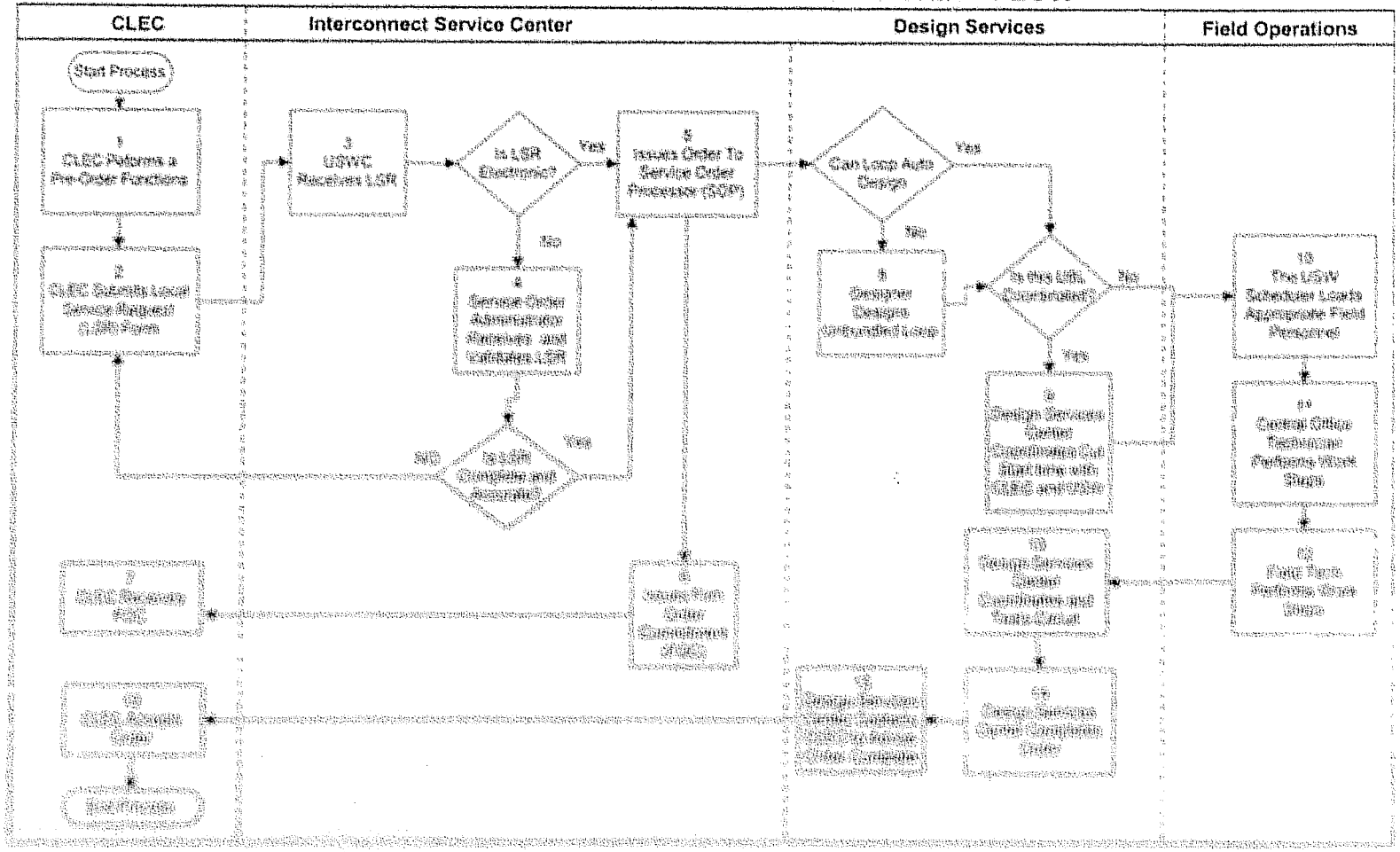
ROC PID Working Version 2.2 Dated February 9, 2001
No changes to OP-3 – OP-6 for unbundled loops.

CONTINUATION

[1]

Scan ~ _____ ~ # Pages [___]

UNBUNDLED LOOP PROVISIONING FLOW



CONTINUATION

[2]

Unbundled Local Loop Provisioning Task List

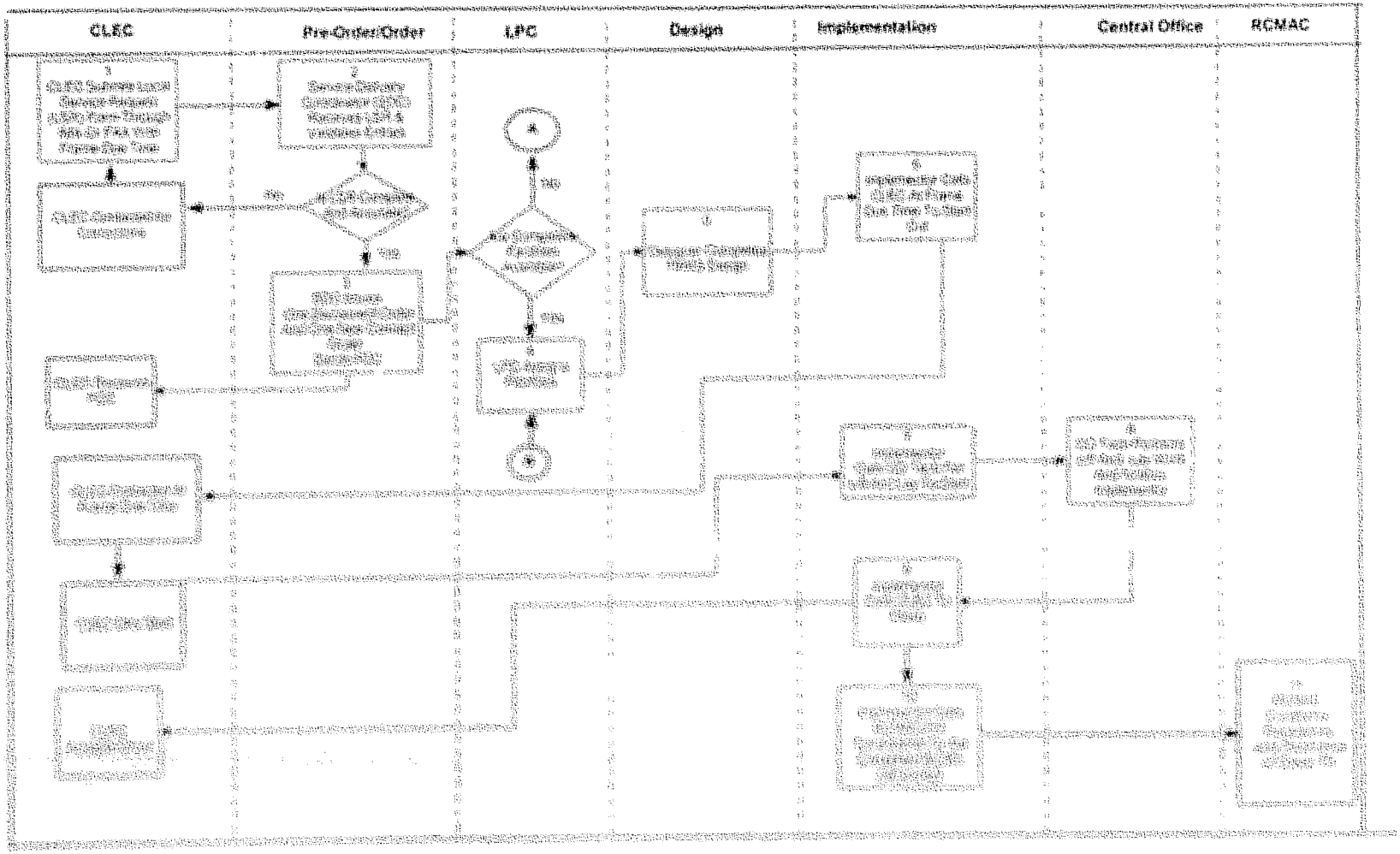
Assoc. Task #	Process
	2-Wire & 4-Wire Voice Grade Analog
1	CLEC performs pre-order prep functions. The results will assist the CLEC in determining the most cost effective purchase that will meet their specific needs.
2	Local Service Request (LSR) form submitted to U S WEST by means of EDI, TAG or GUI.
3 and 4	If faxed, Service Order Administrator (SOA) receives LSR and processes manually or electronically. Processing includes checking CLEC authorization, Letter of Authorization (LOA), Summary Billing Number, CLEC Service Point, Network Channel (NC) and Network Channel Interface (NCI) codes, CLEC line side internal and facilities. If sent via IMA or EDI, the LSR is screened to see if it can be mechanically sent to the service order processor (SOP).
5	The Service Order Administrator issues the Service Order via the U S WEST Service Order Processing system. Then the service order is sent to the appropriate work groups including the Design Service Center.
6	The Service Order Administrator issues the Firm Order Confirmation (FOC) and faxes it to the CLEC. TAG or EDI will send the FOC to the CLEC when the LSR is processed electronically.
7	CLEC receives FOC.
8	On the Record Order Issue Date (ROD), the circuit design is created based on the Service Order request. The design document or Work Document provides the central office and field technicians with the information necessary to wire the circuit.
9	For coordinated cuts the U S WEST design service center coordinates the cut with the CLEC and U S WEST technicians. This step does not take place for non-coordinated cuts.
10	Provisioning work request received in Network Field Operations.
11	On the Design Verified and Assigned (DVA) the central office technician wires the circuit according to the Work Document specifications.
12	On the Plant Test Date (PTD) the field work at the wire center is performed. Facilities are tested from the CLEC to the wire center is performed in conjunction with the central office technician.
13	For coordinated cuts the field technician calls the design center. The pre-provisioning test is run from the CLEC customer's location. Then the design center calls the central office and the CLEC. The design service center confirms that the CLEC is ready. The CLEC has the option of testing prior to cut over. The required tests are performed and the test results are recorded. If the CLEC has purchased coordinated testing, then the test results are forwarded to the CLEC.
14	The design center completes the order.
15	CLEC notified via phone call to accept service.
16	CLEC accepts the circuit.

CONTINUATION

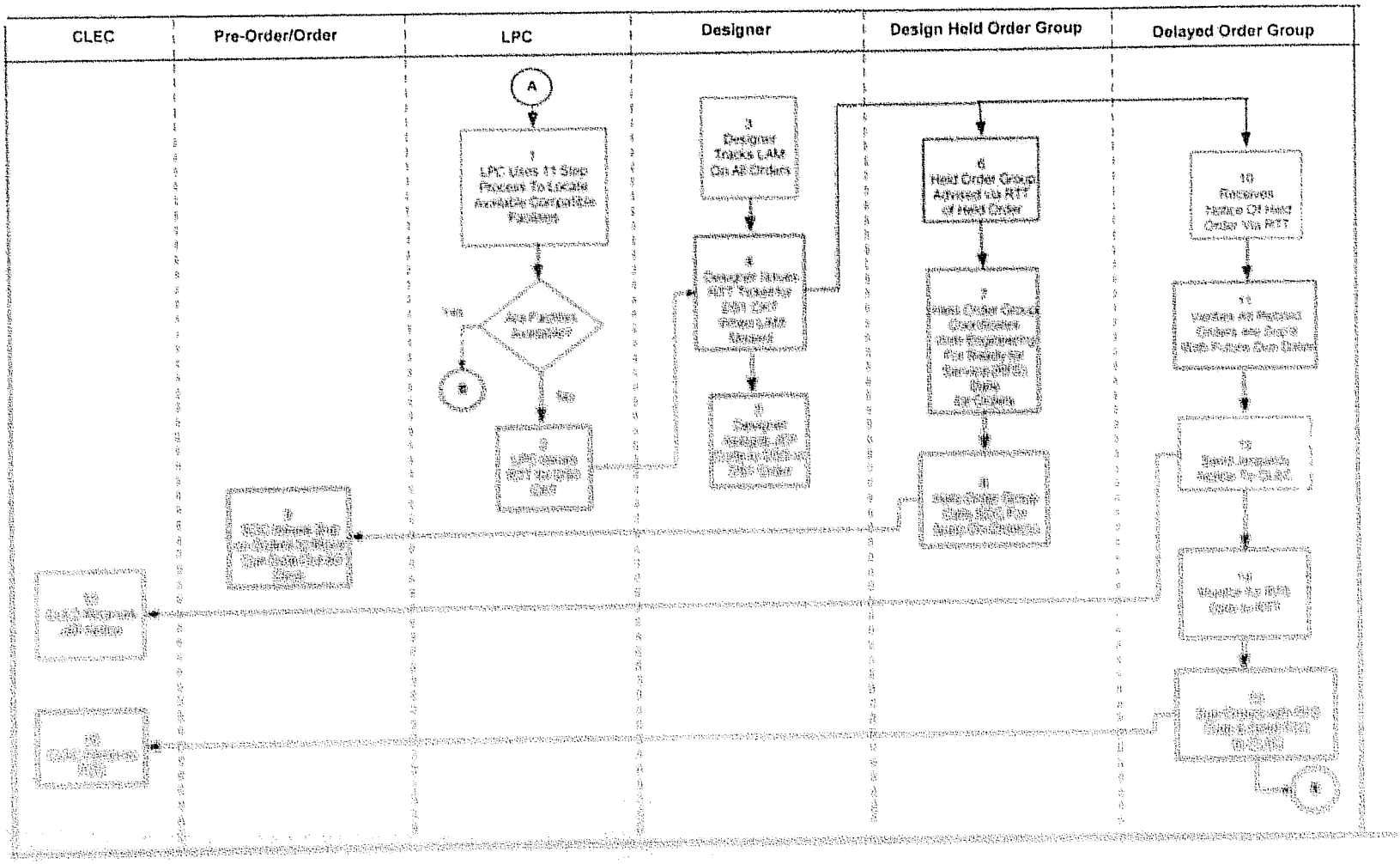
[3]

Scan ~ _____ ~ # Pages [___]

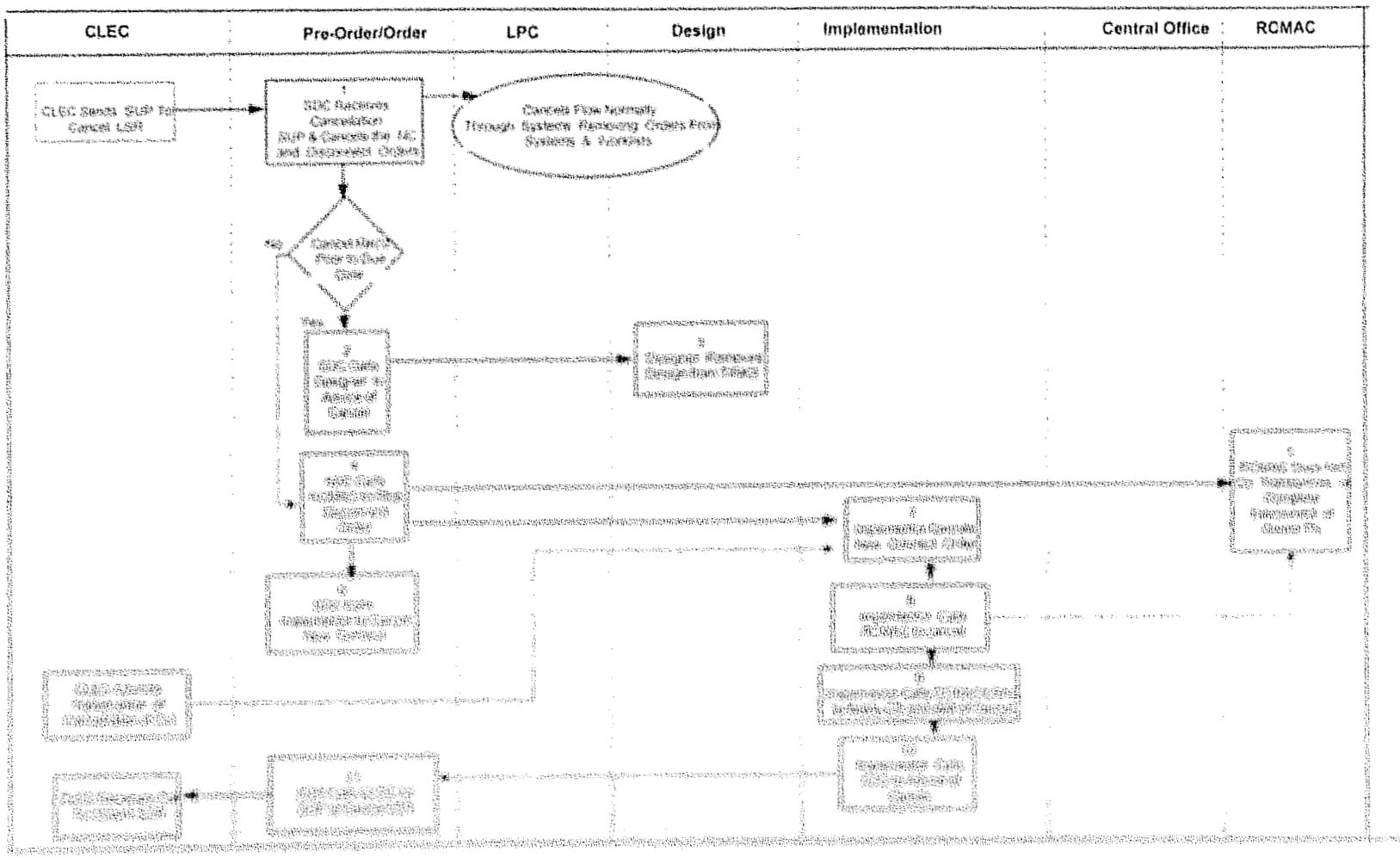
Coordinated Cut with Local Number Portability (chart 1)



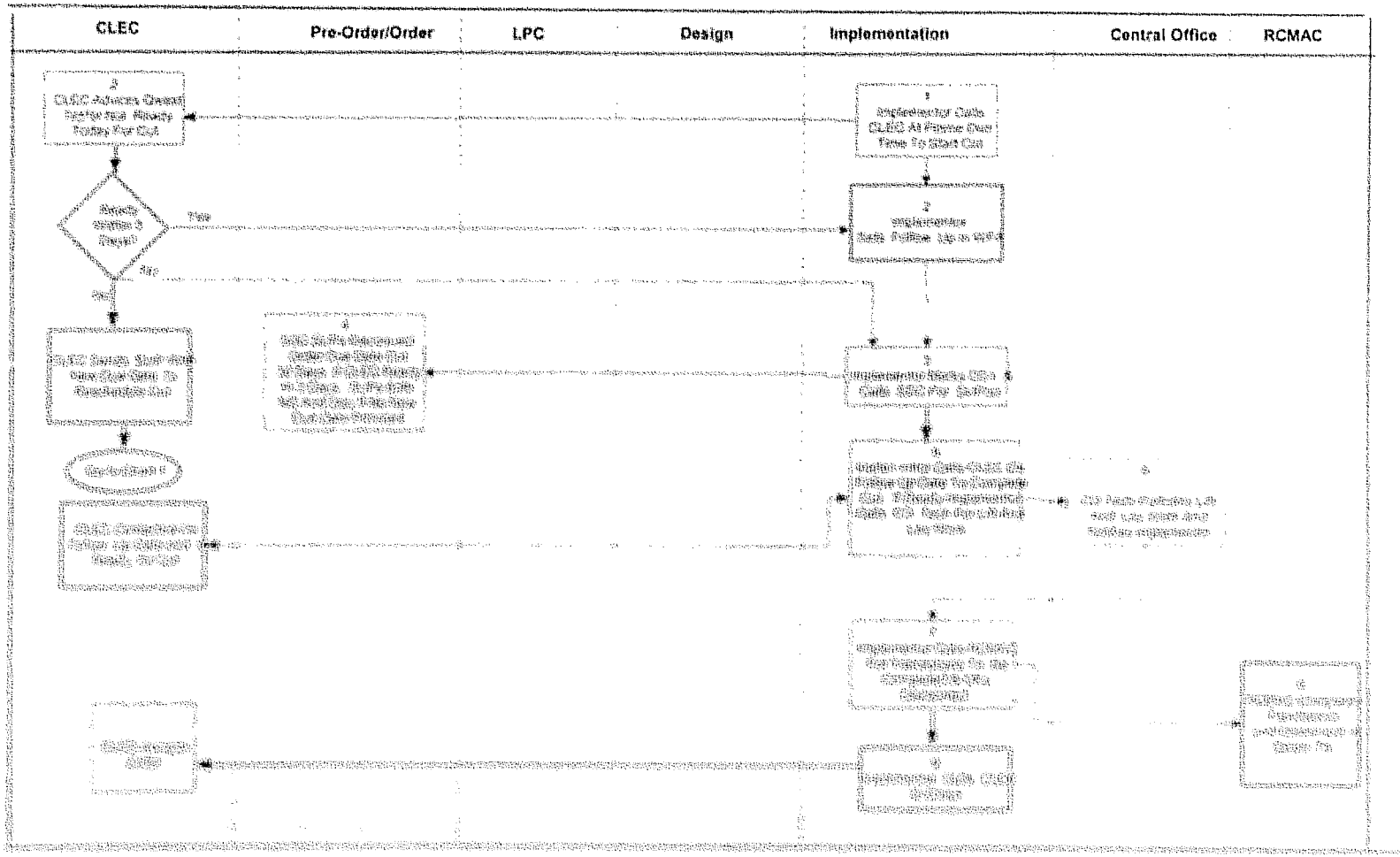
Coordinated Cut with Local Number Portability (chart 2)



CLEC Cancellation of Coordinated Cut with LNP



CLEC Not Ready On Due Date of Coordinated Cut with LNP



CONTINUATION

[4]

S

Pgs [ ]

Wholesale Product Development Process — **Release Notification Form**

Qwest Release Notification Form

Log # 5467145 **Status:** New – To be Industry Reviewed

Submitted By: Cindy Buckmaster – UBL Group Lead Date Submitted: 3/2/01
Contact Information: e-mail: cbuckma@qwest.com, phone: 303-575-2304
Name, title, email, phone #

Title of Notification:
QWEST POSITION STATEMENT ON BUILD REQUIREMENTS FOR UNBUNDLED LOOPS

Area of Release Notification: Please check mark ✓ as appropriate and fill out the appropriate section below
☐ System X Product X Process

Communicated To: Date Communicated: 3/2/01
Please check mark ✓ as appropriate
X Co-Provider Industry Team
X Public
☐ IMA EDI current users or with an agreed upon project work plan
☐ IMA GUI current and potential new users
☐ IMA CO Customer Interface Company

Type of Notification: Please check mark ✓ as appropriate
☐ Target Release Date
☐ Target Release Life Cycle
☐ Co-Provider Change Request Options for a Release
☐ Release Baseline Candidates with Descriptions
☐ Draft Developer Worksheets
X Disclosure Document
☐ Recertification Notices
☐ New Product
☐ Product Enhancement
☐ Other
Please describe
☐ Disclosure Document Addendum
☐ Training Schedule
☐ Release Notes Description
☐ Release Notes
☐ Post Release Notes Description
☐ Post Release Notes
☐ System Available Dates
☐ Product Retirement

Description of Notification: (e.g., mode/method of receipt and types of delivery)

Effective:
May 1, 2001

Introduction:
In an effort to provide more clarity around Qwest's position concerning construction of facilities for Wholesale, Qwest is pleased to offer the construction of facilities to meet your DS0 Voice Grade Unbundled Loop requests, pending certain conditions. This document is intended to provide the necessary information to make it easier to do business with us.

Network Build Position for the Unbundled Loop (UBL) Product:

When the CLEC submits a request for an UBL, the request will follow the normal assignment process for assignable facilities that fit the criteria necessary for the service requested.

At times, it is necessary to perform additional work, on existing copper facilities, to make facilities available to fill the request. If cable capacity is available, Qwest will complete rearrangement facility work in order to effect complete facilities to the customer premises. This work includes but is not limited: placement of a drop, addition of a Network Interface Device, addition of Cards to an existing Subscriber Loop Carrier Systems at the Central Office and Remote Terminal, addition of Central Office Tie Pairs, and addition of Field Cross Jumpers. This process will not include the splicing of dark fiber. This work may require additional time to make the facility ready to complete an order.

Available Facilities:

All Services: If available facilities (facilities that fit the parameters required by the service requested on the order) are identified, the order will be provisioned. The order will be completed on the requested Due Date but no sooner than the standard interval for the service requested.

If available facilities are not readily identified through the normal assignment process, but facilities can be made ready by the requested due date, (i.e. LST cuts). The order will be completed on the requested Due Date but no sooner than the standard interval for the service requested.

If the facilities require additional time to make ready, as described above, Qwest will use the process defined Delayed Order Section below.

If there are no facilities available that fit the criteria necessary for the service requested, the order will fall to the following process.

No Available Facilities:

All Services: Qwest will follow the steps identified in the Available Facilities section above to determine if there are available facilities (facilities that fit the parameters required by the service requested). As mentioned, Qwest will follow the normal assignment process to find potential facilities that may not currently be readily available (including additional load coil and bridge tap removal) if necessary.

During the normal assignment process, if no available facilities (facilities that fit the parameters required by the service requested) are identified for the service requested, Qwest will look for existing Engineering Job Orders that could fill the request in the future. See information in the Delayed Order, Qwest Delays Section below.

If the assignment process identifies no planned Engineering Job Order, requests will fall to the following process.

No Available Facilities/No Planned Engineering Job:

DS0 – Analog (Voice Grade): When the CLEC submits a request for a DS0 – Analog (Voice Grade) only UBL, and that loop is considered Primary Service (as defined in the Qualifying Requests Section below) the normal assignment process will be followed in it's entirety. If no facilities can be found, and there is No Planned Engineering Job, an Engineering Job Order will be initiated to ensure the delivery of primary service to that end-user.

As soon as it is determined that facilities are not available, the CLEC will receive a Jeopardy Notice identifying that Facilities are not available. The CLEC may choose to cancel their order at this point with no Cancellation Charges.

Qualifying Requests: Qwest will construct facilities for UBL that are in alignment with its Eligible Telecommunications Carrier (ETC) obligation to provide basic local exchange service in the retail markets. This means that Qwest will construct facilities to satisfy the primary DS0 - Analog (voice grade) lines for UBL as Qwest constructs these facilities for it's own end-users.

The Primary services identified above are specific to the set number of lines per address. Address is defined as the specific Unit (Loc).

When the CLEC submits a request for a DS0 – Analog (Voice Grade) only UBL, and that loop is considered Secondary Service (as defined in the Qualifying Requests Section above) the normal assignment process will be followed in it's entirety. If no facilities can be found, and there is No Planned Engineering Job, the LSR will be rejeced (the CLEC will receive a Reject Notice) and the Order will be cancelled. The CLEC now has the opportunity to request construction by filing the proper request through their Account Team.

DS0 DSL Services/DS0 ISDN Services/DS1/DS3 requests: When the CLEC submits a request for a DSL, ISDN, DS1 or DS3 service, the normal assignment process will be followed in its entirety. If no facilities can be found, and there is No Planned Engineering Job, the LSR will be rejected (the CLEC will receive a Reject Notice) and the Order will be cancelled. The CLEC now has the opportunity to request construction by filing the proper request through their Account Team.

Delayed Orders:

Qwest Delays: In some cases, in order to modify facilities to make them ready for assignment, the CLEC request must be Delayed. The Delayed status of a job allows mechanical flow to the departments responsible for the additional work necessary and route the job to the correct work groups. Addition of incremental elements includes but is not limited to: placement of a drop, addition of a Network Interface Device (NID), Card existing Subscriber Loop Carrier (SLC) Systems at the Central Office and Remote Terminal, addition of Central Office Tie Pairs, Field Cross Jumpers. This position will not include the splicing of dark fiber.

Qwest will initiate a Delay when attempting to resolve a facility issue to free or modify facilities to satisfy an order. Delay time varies depending on the specific work group(s) involved.

If the facilities require additional time to make ready, the CLEC will receive a Jeopardy Notice stating that the order will be delayed until the facilities can be readied for service. Once the facilities are readied, Qwest will notify the CLEC of the new Due Date when the service will be completed. The CLEC may choose to cancel their order at this point with no Cancellation Charges. On the assigned Due Date, or on the later Requested Due Date received on a complete and accurate SUP, the service will be completed.

Qwest will initiate a Delay when attempting to Complete an Engineering Job to modify or constuct the facilities requested by the CLEC.

If an Engineering Job currently exists, Qwest will include the facilities necessary in the CLEC's request in that Engineering job. When this happens, the CLEC will receive a Jeopardy Notice.

- If an Engineering Job has already been completed, within 72 hours the CLEC will be contacted with a new due date.
- If an Engineering Job is currently under development, the CLEC will be notified of the new Due Date at the completion of the Engineering work.

Qwest will initiate a delay to develop the necessary Engineering Job to construct facilities for Primary DS0 – Analog (Voice Grade) service (or as required by State Ruling). As soon as an Engineering Job is completed and a Ready For Service (RFS) Date is determined, Qwest will notify the CLEC of the new Due Date when the service will be completed. On the assigned Due Date, or on the later Requested Due Date received on a complete and accurate SUP, the service will be completed.

Existing Requests in Qwest Delayed Status: Within 30 business days, Qwest will begin reviewing requests currently in the Qwest delayed status. Each request will be individually reviewed to determine if there are available facilities (facilities that fit the parameters required by the service requested). This review process will include all of the steps previously identified in this document.

- If facilities are identified, Qwest will notify the CLEC of the new Due Date.
- If it is determined that there are no available facilities (facilities that fit the parameters required by the service requested) and no planned Engineering Job Orders that will satisfy this request, the LSR will be rejected (the CLEC will receive a Reject Notice) and the Service Order will be cancelled. The CLEC now has the opportunity to request construction by filing the proper request through their Account Team.

CLEC Delays: If a CLEC is unable to accept an UBL as originally specified on the Requested Due Date, the CLEC may request that the Order be Delayed. When a CLEC initiates a Delay for any reason, a 30 business day clock will begin. Within the 30 day period, the CLEC will receive an e-mail or fax notice stating "This is to advise you that PON _____ has not been completed due to customer reasons. We will hold this order for 30 days from (add 29 business days to the date the order was held for CLEC reasons). If billing is not accepted and begins within this 30 day period, the order must be cancelled." The CLEC will have the time identified to accept billing on the circuit or the LSR will be rejected (the CLEC will receive a Reject Notice) and the Service Order will be cancelled. Qwest cannot accept a SUP beyond the first 30 business days for an existing order.

If tests show that the circuit meets the requirements of the service requested by the CLEC and the CLEC will not accept the circuit, the dispute must be resolved between the Qwest tester and the CLEC within the 30 business day period. To resolve the dispute, the CLEC would issue a SUP to re-schedule testing. The notification process defined in the paragraph above will apply. If a SUP is not received within the 30 business day period, the LSR will be rejected (the CLEC will receive a Reject Notice) and the Service Order will be cancelled.

The CLEC can release the request by submitting a SUP to the order with a future Due Date . Qwest will apply the new Due Date to the order and will allow the order to flow. Qwest cannot accept a SUP beyond the first 30 business days for an existing order.

If the CLEC fails to release the request prior to the 30 business day interval, on the 31st day, the LSR will be rejected (the CLEC will receive a Reject Notice) and the Service Order will be cancelled.

Existing Requests in the CLEC Delay Status: Within 30 business days, Qwest will begin reviewing requests currently in CLEC delay status. The notification process defined above will apply. If the request is not addressed by the CLEC the LSR will be rejected (the CLEC will receive a Reject Notice) and the Service Order will be cancelled.

Additional Information (e.g., web sites)

System Release Notification Section

Interfaces Impacted: Please check mark ✓ as appropriate

☐ CEMR	☐ IMA EDI	☐ MEDIACC	☐ TELIS
☐ EXACT	☐ IMA GUI	☐ Product Database	☐ Wholesale Billing Interfaces
☐ IMET	☐ Other		

Please describe

Product Release Notification Section

Products Impacted: Please check mark ✓ all that apply (If "Other" please describe further)

☐ **LIS Interconnection**	☐ **Collocation**	X **UNE**	☐ **Ancillary**	☐ **Resale**
☐ DET	☐ Physical	☐ Switching	☐ AIN	
☐ Tandem Trans./TST	☐ Virtual	☐ Transport (incl. EUDIT)	☐ DA	
☐ DTT/ Dedicated Transport	☐ Adjacent	X Loop	☐ Operation Services	
☐ Tandem Switching	☐ ICDF Collo.	☐ UNE – P	☐ INP/LNP	
☐ Local Switching	☐ Other _____	☐ EEL (UNE-C)	☐ Other _____	
☐ Other _____		☐ UDF		
		☐ Other _____		

Process Release Notification Section

Area Impacted: Please check mark ✓ all that apply

☐ Pre-Ordering
X Ordering
☐ Billing
☐ Repair ☐ Other _____
Please Describe

Products Impacted: Please check mark ✓ as appropriate and list specific products within product group, if applicable

☐ Centrex	_____	☐ Resale	_____
☐ Collocation	_____	☐ SS7	_____
☐ EEL (UNE-C)	_____	☐ Switched Services	_____
☐ Enterprise Data Services	_____	☐ UDIT	_____
☐ LIDB	_____	X Unbundled Loop	_____
☐ LIS	_____	☐ UNE-P	_____
☐ LNP	_____	☐ Wireless	_____
☐ Private Line	_____	☐ Other	_____
Please describe	Please describe		Please describe

This Section to be Completed by Qwest CICMP Manager

Status, Evaluation and Implementation Comments:

3/27/01 – RN received from Cindy Buckmaster
3/28/01 – Status changed to New – To be Validated
3/28/01 – Status changed to New – To be Industry Reviewed and sent to CICMP Team

Docket TC 01-___
Qwest Corporation
Exhibits to the Affidavit of Jean M. Liston
Checklist Item 4 – Unbundled Loop, NIDs and Line Splitting
Cover Sheet for Exhibit JML-Loop-8
October 24, 2001

Legend for IDLC Flow

Solution provisioning intervals:

1) UBL circuit cards – 5 days
   LST – 5 days

2) LST – 5 days

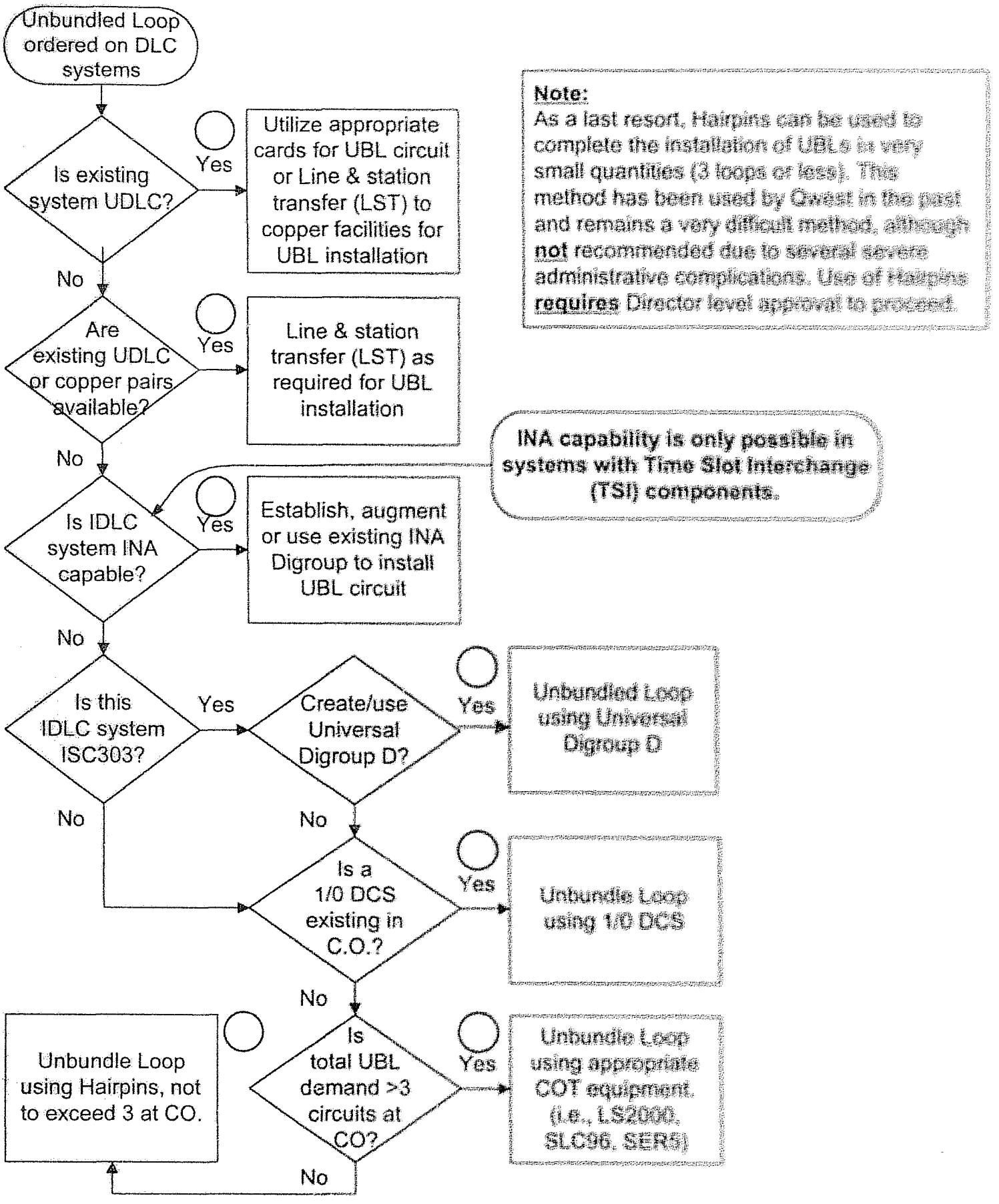
3) INA Digroup (D4 Channel Bank, dedicated DS1) – 5 days if span capacity

4) Order COT – 90 days – 120 days

5) 1/0 DCS (Adtran BR110) - 90 days – 120 days

6) LS 2000, SLC 96, Series 5 - 90 days – 120 days

7) Hairpin – 15 days after approval


Unbundled Loop ordered on DLC systems
Is existing system UDLC?
Yes
Utilize appropriate cards for UBL circuit or Line & station transfer (LST) to copper facilities for UBL installation
No
Are existing UDLC or copper pairs available?
Yes
Line & station transfer (LST) as required for UBL installation
No
Is IDLC system INA capable?
Yes
Establish, augment or use existing INA Digroup to install UBL circuit
No
Is this IDLC system ISC303?
Yes
Create/use Universal Digroup D?
Yes
Unbundled Loop using Universal Digroup D
No
No
Is a 1/0 DCS existing in C.O.?
Yes
Unbundle Loop using 1/0 DCS
No
Is total UBL demand >3 circuits at CO?
Yes
Unbundle Loop using appropriate COT equipment. (i.e., LS2000, SLC96, SER5)
No
Unbundle Loop using Hairpins, not to exceed 3 at CO.
Note:
As a last resort, Hairpins can be used to complete the installation of UBLs in very small quantities (3 loops or less). This method has been used by Qwest in the past and remains a very difficult method, although not recommended due to several severe administrative complications. Use of Hairpins requires Director level approval to proceed.
INA capability is only possible in systems with Time Slot Interchange (TSI) components.
Note:
Manufacture Discontinued (MD) COT equipment should be obtained from Reuse

11 Step Process

1. PERFORM ASG SO TRANSACTION

   - On the Assignment Service Order (ASG SO) screen, populate the Nxxx with 1. This process will let the system try to reassign the order including Line Station Transfer (LST). This will re-execute the order within LFACS in an attempt to assign compatible facilities that recently became available.

2. REVIEW THE RMA

   - Determine Service Type and any line quality (LQTY) requirements. This will acquaint the Assignor with the specific requirements of the service request.
   - Review the terminal ACP's, LST's attempted, and TEA remarks. This will acquaint the Assignor with limitations set within the LFACS database that could possibly be overridden to relieve facilities.
   - If the Service Order request is for a 56/64 Kps, see Total Reach DSS Process (Not available for Unbundled Loops) URL: http://rock.uswc.uswest.com/CTDoc/CTDoc_4356.html

3. INVESTIGATE THE RANGE OF FACILITIES

   - Look for the presence of PC Counts, Fill Counts, Physical or Admin Capacity limits. This will acquaint the Assignor with limitations set within the LFACS database that could possibly be changed to relieve facilities.
   - Investigate assignment and cross connect Restrictions. This will acquaint the Assignor with limitations set within the LFACS database that could possibly be changed to relieve facilities.
   - Perform an inquiry OEC report LST increasing the number of LST steps to a maximum of 2.
   - Look for cuts (LST's) to clear copper pairs or non-loaded pairs for your order. If a POTS customer is working on a "Conditioned pair", move the POTS customer from the "conditioned pair" to other facilities. The "conditioned pair" will then be assigned to the service request.

4. RUN HOMT RPT

   - Investigate any spare/CT/CF/PCF pairs for status problems. This will discover pairs that may be statused incorrectly within LFACS.
   - If there is working service and Soft Dial Tone (SDT) at the same address, issue a SDT disconnect and assign the service order.
   - Remove any Primary and Secondary commits (other than at an ENCAP) and assign the order. Primary and Secondary commit statuses will not allow the pairs to be used at other addresses. By removing the Primary/Secondary commit status we can allow the pairs to be assigned to another address.
   - Investigate all SDT loops. If any appear at an address with working service - issue SDT disconnect. The SDT facilities can then be used for the Service Request.

- Investigate any defective pairs status "Working". If the cable pairs are not "working" remove the defective status and use the pair for the Service Request.
- Investigate validity of all restricted pairs. If the restrictions are no longer valid, use the pair for the Service Request.
- Check current status of all past due orders and take appropriate action. Service order completion/cancellations sometimes fails to process correctly. This will identify potential spare facilities.
- Run the pending order query (RPT PDL RGORD) against TEA and check current status of all pending orders. Service order completion/cancellations sometimes fails to process correctly. This will identify potential spare facilities.
- Use OEC Chart to determine possible Pair Gain Card changes. (Existing Pair Gain Line Terminal status may not be compatible for the service request. If possible change the Pair Gain Card to a compatible status).

5. INVESTIGATE THE FACILITY ADDRESSES

- Investigate all Facility Addresses (perform an INQ Term transaction) for pairs that may have a status preventing it from being assigned.
- Also investigate similar street addresses - (perform an INQ Term transaction) may have different directional or street names that are bogus that could release facilities.

6. INVESTIGATE MULTIPLE TERMINAL SITUATIONS

- Run Report ACR - check for "A and B" Terminals. (This will identify situations where cable counts appear in more than one terminal. If they "multiple", investigate the possibility of doing a LST to free up a cable pair within service requested terminal).
- Perform Step 4 for all multiple terminals.
- Investigate LST candidates that are not assignable by auto flow of the system. (If the ACP setting for LSTs is set below "3", Perform the RPT LST with a setting of "3" to identify assignable LSTs).

7 LOOK FOR SOFT DIAL TONE BREAKS

- Use SDT aging policy.

8. CHECK FOR DEPLOYABILITY OF CENTRAL OFFICE UDC

- Is office equipped with UDC and are Spares available (See UDC Guidelines).
- If the line on the order is an ADL, check Main line for UDC Compatibility.

9. CHECK FOR PAIR GAIN UDC DEPLOYMENT

- When encountering a F2 problem SLC96, DISC*S, SLC5, SLC2T, UISC, 96SLS, 96ISC, or 96DIS UDC's may be deployed on IPG or PG. You must have consecutive odd and even channels available.

- When encountering a F1 problem SLC96, SLC5,or SLC2T UDC's may be deployed on PG or PG. Look at the HOMT Report for a Defective even Channel. This should only be used when the terminal has less than 5% Defective Pairs per the HOMT Public Report. See SLC UDC Guidelines.

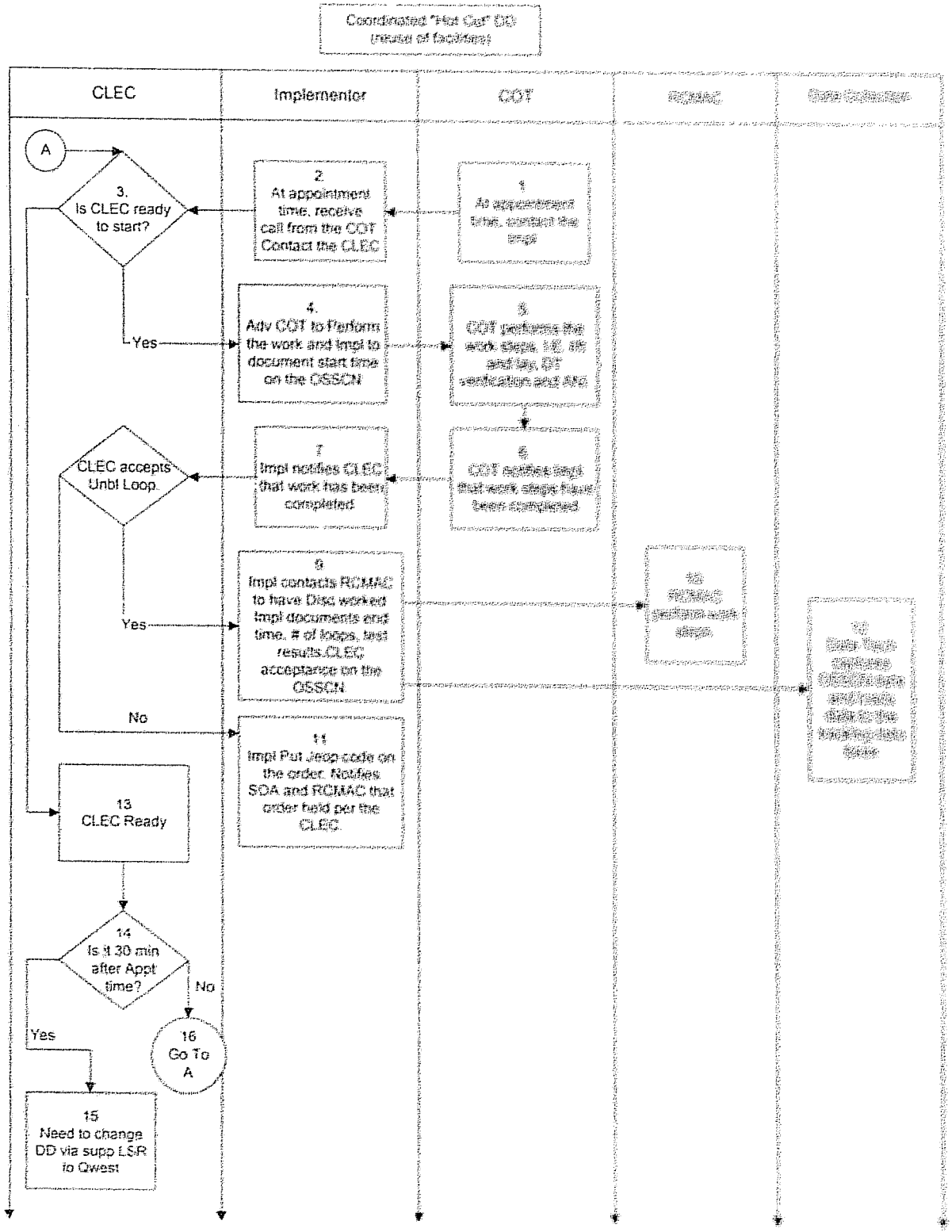
10. CLEAR DEFECTIVE PAIRS

- For F1 issues: If the terminal has 5% or greater Defective Pairs per the HOMT Public Report: Set Held and follow local practices for WFA/DO and Defective Pair resource. If so, status the RTT Ticket DPR_TO_LNO with appropriate notes.
- For Fn issues: Follow local practices/agreements as to what will be a WFA/DO package. If so, status the RTT Ticket DPR_TO_LNO with appropriate notes.

11. TERMINAL ENLARGEMENT – Distribution Terminal Only

- If the terminal has less than 5% Defective Pairs per the HOMT Public Report: Determine if the Terminal Enlargement process can be used. If so, status the RTT Ticket REF_FS with appropriate notes. (This process should be used only for POTS service requests.

Note: Wired Out of Limits will be performed at the discretion of the Engineer.


Coordinated "Hot Cut" OSS
(need at bottom)
CLEC
Implementor
COT
RCMAC
Data Collection
A
3.
Is CLEC ready to start?
2
At appointment time, receive call from the COT Contact the CLEC
1
At appointment time, contact the Impl
Yes
4.
Adv COT to Perform the work and Impl to document start time on the OSSCN
5
COT performs the work steps, M&P, and test, DT verification and Acc
7
Impl notifies CLEC that work has been completed
6
COT notifies Impl that work steps have been completed
CLEC accepts Unbl Loop
Yes
9
Impl contacts RCMAC to have Disc worked Impl documents end time, # of loops, test results,CLEC acceptance on the OSSCN
10
RCMAC performs work steps
11
Data Collection performs data collection and sends data to the Performance Data
No
11
Impl Put Jeop code on the order. Notifies SOA and RCMAC that order held per the CLEC.
13
CLEC Ready
14
Is it 30 min after Appt time?
No
Yes
16
Go To A
15
Need to change DD via supp LSR to Qwest

Coordinated Hot Cut Reuse Process Task List

Task #	Activity
1	At the requested appointment time the Qwest central office technician (COT) contacts the Qwest implementor to indicate readiness to start the cut.
2	The Implementor contacts the CLEC to determine readiness.
3	Is the CLEC ready to begin the cut?
4	Implementor advises the COT to start the cut and documents the start time of the cut.
5	The COT performs the central office wiring and appropriate tests. The COT documents the start time of the "lift" and the end of the "lay" process.
6	The COT notifies the implementor that the work is complete and provides the implementor with the "lift" and "lay" time and the test results.
7	The implementor documents the stop time of the cut and notifies the CLEC that the work is complete.
8	The CLEC accepts the loop, asks for additional work or refuses to accept the loop.
9	Once CLEC accepts the loop, implementor contacts RCMAC and documents the cut information manually on the form and electronically on the OSS-CO connection below.
10	RCMAC completes any necessary work.
11	CLEC refuses to accept the loop, so the implementor enters a jeopardy code on the order and notifies the Service Order Administrator (SOA) and the RCMAC that the order will not be completed due to customer reasons.
12	CLEC gets ready.
13	CLEC needs to determine if more than 30 minutes has passed since the scheduled appointment time.
14	If more than 30 minutes has passed the CLEC needs to contact Qwest and schedule a new appointment.
15	If less than 30, then call Qwest to start the cut . . . go to step 3 and start the process.

OSSCN COORDINATED ORDER

QWEST TESTER=_____TODAY'S DATE=_____

ORDER NUMBER=_____ CAC=_____

COORDINATED REUSE=___ DUE DATE=_____ APPT=_____

START=_____ STOP=_____ LIFT=_____ LAY/TST OK=____ LINES=__
(REGION TIME MILITARY)

RCMAC NAME=_____ D ORDER=_____ TME=_____

MISSED COMMITEMENT (Y/N)=____ EARLY INSTALL APPROVED (Y/N)=____

VP EXPEDITE (Y/N)=____ DELAY DUE TO CLEC (Y/N)=___ REASON FOR CLEC DELAY=__

***REASON FOR DELAY (1)NO ANSWER (2) PON (3) REQUEST (4) OTHER

CLEC TSTR NAME 1ST CALL=_____ TN=_____

CLEC TSTR NAME NOTIFIED BY=_____ TN=_____

COT NAME=_____ TN=_____ TAGGED (Y/N)____

CHECKED DT & ANI (Y/N)____DMARC_____

1CRVC ANI TEST ONLY: TN CALLED _____CLEC NAME=_____

Record Test Results per Product Manually And apply to the electronic OSSCN

COORDINATED NEW_____ DUE DATE=_____ APPT=____

START=_____ STOP=_____ EARLY INSTL APPRVD (Y/N)____
(REGION TIME MILITARY)

VP EXPEDITE (Y/N)=____MISSED COMMITMENT (Y/N)=____ DUE TO CLEC (Y/N)=____

REASON FOR CLEC DELAY=____REASON FOR DELAY (1)NO ANSWER (2) PON (3) REQUEST (4) OTHER

CLEC NAME 1ST CALL=_____ TN=_____

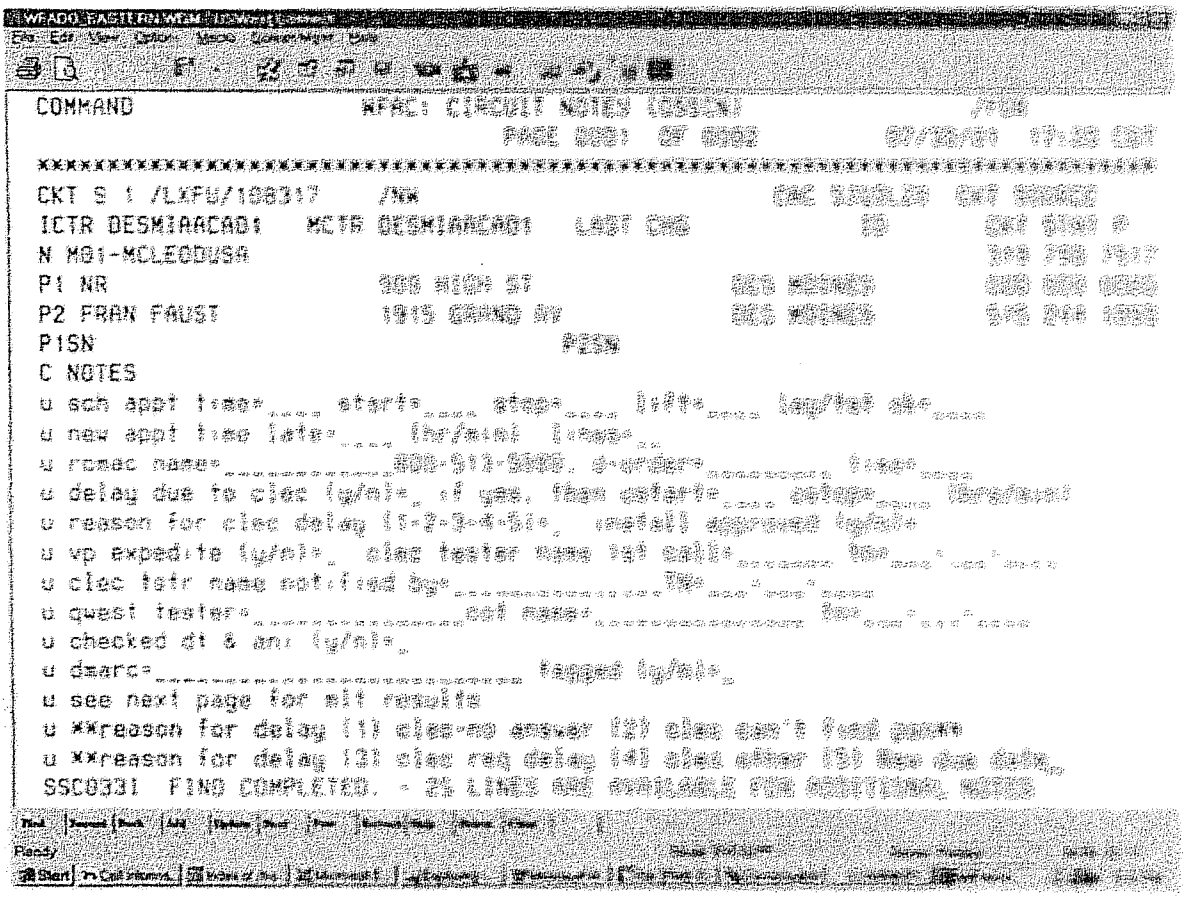
CLEC TSTR NAME NOTIFIED BY=_____

OUTSIDE TECH=_____ OCD=_____ PON=_____

DMARC=_____ TAGGED (Y/N)_____

Record Test Results per Product Manually And apply to the electronic OSSCN

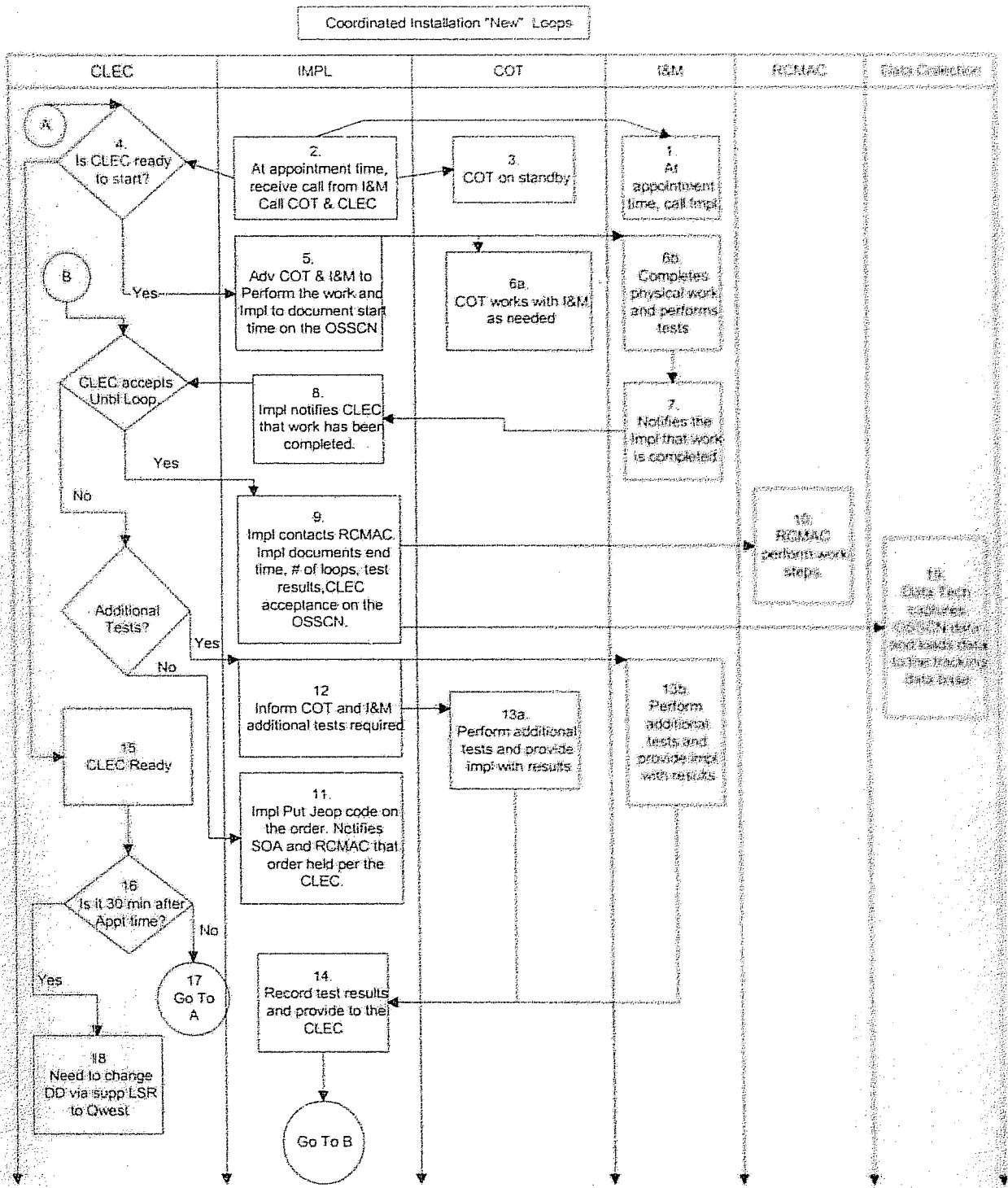
Example of OSSCN Screen



OSSCN Key Information
* Denotes required fields

Data Field	Description
Start*	The time you called the CLEC and received approval to begin the cut. Time must include region and input in military time.
Stop*	Notification to CLEC that Qwest work is complete, including any required testing. Time must include region and input in military time.
Lift*	The time that the Qwest work began; when the jumper was "lifted" from the CO frame. Time must include region and input in military time.
Lay/tst ok*	The time that the Qwest work "lay" was completed, including any required testing. Time must include region and input in military time.
Lines*	The number of lines that were worked (same PON).
RCMAC Name*	Name of the Qwest RCMAC employee that you spoke to. If the cut is a CLEC to CLEC migration, enter "MIG" in this field.
D-Order	The D-order that was worked by the RCMAC. If the cut is a CLEC to CLEC migration, this field should be left blank.
Time	The Time that the RCMAC was called to work the D-order. If the cut is a CLEC to CLEC migration, this field should be left blank.
Delay due to CLEC*	If the CLEC caused the coordinated cut to start by 30 minutes after the appointment time. This requires a positive entry of Y or N.
If Yes, CStart	The time the CLEC stopped the Coordinated Cut from moving forward. Cstart times for multiple CLEC delays should be separated by a comma.
CStop	The time the CLEC approved the Cut to move forward. Cstop times for multiple CLEC delays should be separated by a comma.
Reason for CLEC delay	The reason that the CLEC caused the delay (use code 1, 2, 3, 4, or 5) 1. CLEC no answer, 2. CLEC can't find PON, 3. CLEC requested delay, 4. CLEC other, 5. Complete date is after the objective date and the reason is a C jeopardy Reasons for multiple CLEC delays should be separated with a comma.
Early Install Approved*	Qwest started the cut before the Coordinated time with CLEC approval. Starting the cut even one minute prior to the appointment time requires CLEC approval. This requires a positive entry of Y or N.
VP Expedite*	Was there a VP Expedite associated with this order? This requires a positive entry of Y or N.
CLEC Tester* Name (1st call)*	The name of the CLEC tester that you first contacted for approval to start the cut.
TN*	Telephone Number of the CLEC tester that you contacted
CLEC Tester Name Notified*	The Name of the CLEC tester that you notified that the Qwest work is complete
TN*	Telephone Number of the CLEC tester that you contacted
Qwest Tester*	The name of the Qwest Coordinator that worked on the order
COT Name*	The name of the Qwest Central Office Technician (COT) that worked the order
TN	The telephone number of the Qwest COT that worked the order
Checked DT & ANI	Verifies that the COT checked for Dial Tone and performed the ANI before & after the cut, this requires a positive entry of Y or N.
DMARC	This identifies where the NID is located at the End Users premise.
Tagged	Verifies that the I & M technician labeled the NID with the appropriate information. This requires a positive entry of Y or N.
MLT Results	Verifies that the MLT was complete.

NOTE: Add order numbers & CAC at bottom of OSSCN Paper form for each order on PON


Coordinated Installation "New" Loops
CLEC
IMPL
COT
I&M
RCMAC
Data Collection
A
4. Is CLEC ready to start?
2. At appointment time, receive call from I&M Call COT & CLEC
3. COT on standby
1. At appointment time, call Impl
B
Yes
5. Adv COT & I&M to Perform the work and Impl to document start time on the OSSCN
6a. COT works with I&M as needed
6b. Completes physical work and performs tests
CLEC accepts Unbl Loop
8. Impl notifies CLEC that work has been completed.
7. Notifies the Impl that work is completed
Yes
No
9. Impl contacts RCMAC. Impl documents end time, # of loops, test results,CLEC acceptance on the OSSCN.
10. RCMAC perform work steps
Additional Tests?
Yes
No
12 Inform COT and I&M additional tests required
13a. Perform additional tests and provide impl with results
13b. Perform additional tests and provide impl with results
15 CLEC Ready
11. Impl Put Jeop code on the order. Notifies SOA and RCMAC that order held per the CLEC.
16 Is it 30 min after Appt time?
No
Yes
17 Go To A
14. Record test results and provide to the CLEC
18 Need to change DD via supp LSR to Qwest
Go To B

Coordinated Installation New Loops Process
Task List

Task #	Activity
1	At the requested appointment time the Qwest Installation Technician (I&M) contacts the Qwest implementor to indicate readiness to start the cut.
2	The Implementor contacts the Central Office Technician (COT) and the CLEC to determine readiness.
3	COT on standby alert for testing
4	Is the CLEC ready to begin the cut?
5	Implementor tells I&M t and COT to start and documents the start time on the OSS-CN screen.
6a	COT performs any tests requested by I&M
6b	I&M completes the wiring at the end user location and performs required tests.
7	The I&M notifies the implementor that the work is complete and provides the test results.
8	The implementor documents the stop time and notifies the CLEC that the work is complete.
9	Once CLEC accepts the loop, implementor contacts RCMAC and documents the cut information on the OSS-CN screen
10	RCMAC completes any necessary work.
11	CLEC refuses to accept the loop, so a jeopardy code is entered on the order and the Service Order Administrator (SOA) and the RCMAC are notified hat the order will not be completed.
12	CLEC wants additional tests so Implementor notifies COT and I&M.
13a	COT participates as needed in additional tests.
13b	I&M participates as needed in additional tests and provides implementor with the results.
14	Implementor provides results and ensures CLEC has test results
15	CLEC gets ready for the installation
16	CLEC needs to determine if more than 30 minutes has passed since the scheduled appointment time.
17	If less than 30 minutes than the CLEC notifies the implementor that they are ready.
18	If more than 30 minutes has passed the CLEC needs to contact Qwest and schedule a new appointment.
19	The data technician records the data from the OSS CN screen into the tracking database.

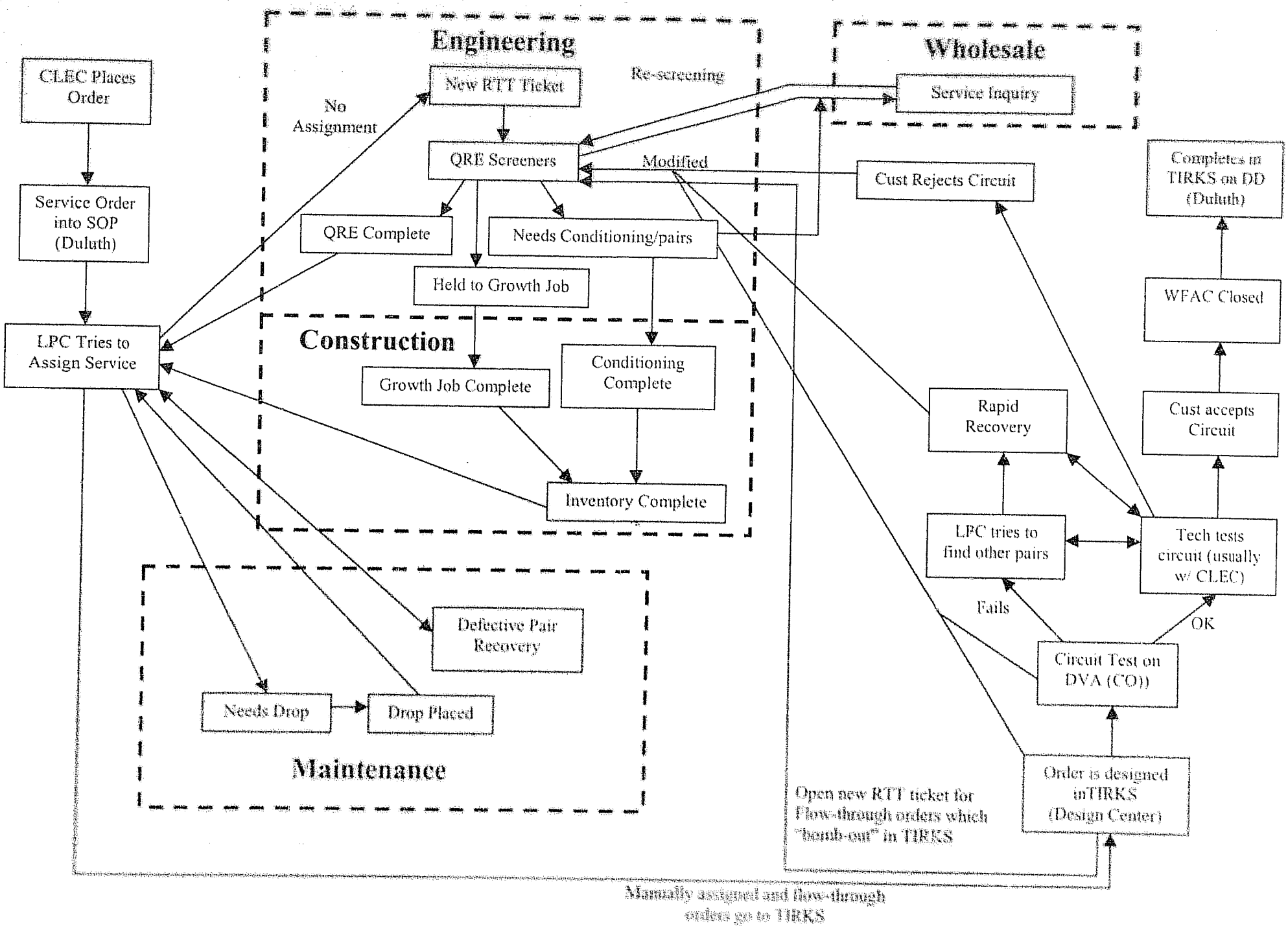
Docket TC 01-__
Qwest Corporation
Exhibits to the Affidavit of Jean M. Liston
Checklist Item 4 – Unbundled Loop, NIDs and Line Splitting
Cover Sheet for Exhibit JML-LOOP-12
October 24, 2001

CONTINUATION

[5]

Scan ~ _____ ~ # Pages [___]

Unbundled Loop Conditioning Process Flow



CONTINUATION

[6]

Docket TC 01-__
Qwest Corporation
Exhibits to the Affidavit of Jean M. Liston
Checklist Item 4 – Unbundled Loop, NIDs and Line Splitting
Cover Sheet for Exhibit JML-LOOP-13
October 24, 2001

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 "I" 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	**Disaggregation Reporting:** Statewide level. • 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:
[(Total Orders completed in the reporting period on or before the Applicable Due Date) / (Total Orders Completed in the Reporting Period)] x 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.

OP – 3 Installation Commitments Met (continued)

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
• E/I 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:	Notes:

OP - 3 Installation Commitments Met (continued)

Available	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 3]

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 product/services listed in Product Reporting under "MSA-Type Disaggregation" will be reported according to orders involving:
  - 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:
  - OP-4D In Interval Zone 1 areas; and
  - OP-4E In Interval Zone 2 areas.

Formula:
∑[(Order Completion Date) – (Order Application Date) – (Time interval between the Original Due Date and the Applicable Date) – (Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date)] / Total Number of Orders Completed in the reporting period

Exclusion: 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.

OP-4 – Installation Interval (continued)

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.

OP-4 – Installation Interval (continued)

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)	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

OP-4 – Installation Interval (continued)

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 "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.
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-5 – New Service Installation Quality

Purpose:
Evaluates quality of ordering and installation of services, focusing on the percentage of average monthly new order installations that were free of trouble reports for thirty (30) calendar days following installation, including the percentage of new service installations that experienced a trouble report on the installation date after the order is reported as work complete by the technician.

Description:
OP-5 Measures the monthly average percentage of new installations that are free of trouble reports within 30 calendar days of initial installation.

- New installation orders used in calculating this performance indicator (appearing in the numerator and the denominator of the OP-5 formula shown below) are all inward orders for the current and previous reporting periods, including Change (C-type) orders for additional lines. Change order types for additional lines consist of all C orders with "I" and "T" action coded line USOCs, including changes to existing lines, such as conversions, number changes, PIC changes and class of service changes. (The average monthly number of new installation orders calculated in the denominator of the formula shown below will be rounded up to the nearest integer whole number.)
- All trouble reports (for both out-of-service and service-affecting conditions) closed within the reporting period, which were received within thirty (30) days of the original installation of service, including on the day the order is installed are measured (for use in the numerator of the formula shown below), subject to exclusions shown below.
- Because the trouble reports in the numerator of this measurement are reported on a per-line basis and therefore may exceed the number of orders it is possible for the numerator, and thus the reported result, to be negative. Accordingly, a lower limit of zero will be applied to the numerator of this measurement, reflecting that there cannot be a negative number of "new service installations."
- Includes both out of service and service affecting trouble reports, subject to exclusions shown below.

Reporting Period: One month (for trouble reports); Average of prior and current reporting month (for new installation activity)	**Unit of Measure:** Percent
Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results	**Disaggregation Reporting:** Statewide level

Formula:
[((Number of New Installation Orders completed in the [prior + current months]/2*) - (Total Number of New Installation-related Trouble Reports closed in the reporting period within 30 Calendar Days of Order Completion, including on the day the order is installed)) / (Number of New Installation Orders completed in the [prior + current months]/2*)] x 100

* The value of the two-month average New Installation Orders completed is rounded up to an integer value.

Exclusions:

- Trouble reports coded as follows (applies to the trouble reports subtracted from the New Installation Orders in the numerator of OP-5):
  - 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 (Workforce Administration) data, trouble reports coded to trouble codes for Carrier Action (IEC) and Customer Provided Equipment (CPE)
- Subsequent trouble reports of any trouble on the installed service before the original trouble report is closed.
- Information tickets generated for internal Qwest system/network monitoring purposes.

OP-5 – New Service Installation Quality (Continued)

- Trouble reports on the day of installation before the installation work is reported by the technician/installer as complete.
- Disconnect, From (another form of disconnect) and Record order types.
- Records involving official company services.
- Records with invalid due dates, application dates, or start dates.
- Records with invalid completion, 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	Parity with retail service
Centrex 21	Parity with retail service
PBX Trunks	Parity with retail service
Basic ISDN	Parity with retail service
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
• Unbundled Network Element – Platform (UNE-P) (POTS)	Parity with like retail service
• Shared Loop/Line Sharing	Diagnostic
• 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 Lines
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 with dispatch
Non-loaded Loop (2-wire)	Parity with retail ISDN BRI
Non-loaded Loop (4-wire)	Parity with retail DS1
DS1-capable Loop	Parity with retail DS1
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 services (aggregate)
Dark Fiber – Loop	Diagnostic
• E911/911 Trunks	Parity with retail E911/911 Trunks
• Enhanced Extended Links (EELs)	Diagnostic
Availability: Available:	**Notes:**

OP-5 – New Service Installation Quality (Continued)

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/closed 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/closed 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 "T" 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]

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 involving:
  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 = ∑[(Actual Completion Date of late order for non-facility reasons) – (Applicable Due Date of late order) – (Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date)] / (Total Number of Late Orders for non-facility reasons completed in the reporting period)

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

OP-6 – Delayed Days (continued)

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 completion dates.
- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

OP-6 – Delayed Days (continued)

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)	Parity with retail Res and Bus POTS with dispatch
• 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 retail service 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 Line Services above DS1 level
Dark fiber – IOF	Diagnostic
• Unbundled Loops:	
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

OP-6 – Delayed Days (continued)

• 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 ordinarily 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, for 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 new intervals that are added, 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-7 – Coordinated "Hot Cut" Interval – Unbundled Loop

Purpose: Evaluates the duration of completing coordinated "hot cuts" of unbundled loops, based on the time actually involved in disconnecting the loop from the Qwest network and connecting/testing the loop.	
Description: Measures the average time to complete coordinated "hot cuts" for unbundled loops, based on intervals beginning with the "lift" time and ending with the completion time of Qwest's applicable tests for the loop. • Includes all coordinated hot cuts of unbundled loops that are completed/closed during the reporting period, subject to exclusions specified below. • "Hot cut" refers to moving the service of existing customers from Qwest's switch/trunks to the CLEC's equipment, via unbundled loops, that will serve the customers. • "Lift" time is defined as when Qwest disconnects the existing loop. • "Completion time" is defined as when Qwest completes the applicable tests after connecting the loop to the CLEC.	
Reporting Period: One month	**Unit of Measure:** Hours and Minutes
Reporting Comparisons: CLEC aggregate and individual CLEC results	**Disaggregation Reporting:** Statewide level
Formula: Σ[Completion time – Lift time] / (Total Number of unbundled loops with coordinated cutovers completed in the reporting period)	
Exclusions: • Time intervals associated with CLEC-caused delays. • Records missing data essential to the calculation of the measurement per the PID. • Invalid start/stop dates/times or invalid scheduled dates/times.	
Product Reporting: Coordinated Unbundled Loops – Reported separately for: • Analog Loops • All other Loop Types	**Standard:** Diagnostic (Right of OP-13 Coordinated Cuts On Time)
Availability: Available	**Notes:**

OP-13 – Coordinated Cuts On Time – Unbundled Loop

Purpose:
Evaluates the percentage of coordinated cuts of unbundled loops that are completed on time, focusing on cuts completed within one hour of the committed order due time and the percent that were started without CLEC approval.

Description:

- Includes all LSRs for coordinated cuts of unbundled loops that are completed/closed during the reporting period, subject to exclusions specified below
- OP-13A – Measures the percentage of LSRs (CLEC orders) for all coordinated cuts of unbundled loops that are started and completed on time. For coordinated loop cuts to be counted as "on time" in this measurement, the CLEC must agree to the start time, and Qwest must (1) receive verbal CLEC approval before starting the cut or lifting the loop, (2) complete the physical work and appropriate tests, (3) complete the Qwest portion of any associated LNP orders and (4) call the CLEC with completion information, all within one hour of the time interval defined by the committed order due time.
- OP-13B – Measures the percentage of all LSRs for coordinated cuts of unbundled loops that are actually started without CLEC approval.
- "Scheduled start time" is defined as the confirmed appointment time (as stated on the FOC), or a newly negotiated appointment time.
- The "committed order due time" is based on the number and type of loops involved in the cut and is calculated by adding the applicable time interval from the following list to the scheduled start time:
  - Analog unbundled loops:

1 to 16 lines:	1 Hour
17 to 24 lines:	2 Hours
25+ lines:	Project*

  - All other unbundled loops:

1 to 5 lines:	1 Hour
6 to 8 lines:	2 Hours
9 to 11 lines:	3 Hours
12 to 24 lines:	4 Hours
25+ lines:	Project*

  *For Projects scheduled due dates and scheduled start times will be negotiated between CLEC and Qwest, but no committed order due time is established. Therefore, projects are not included in OP-13A (see exclusion below).
- "Stop" time is defined as when Qwest notifies the CLEC that the Qwest physical work and the appropriate tests have been successfully accomplished, including the Qwest portion of any coordinated LNP orders.
- Time intervals following the scheduled start time or during the cutover process associated with customer-caused delays are subtracted from the actual cutover duration.
- Where Qwest's records of completed coordinated cut transactions are missing evidence of CLEC approval of the cutover, the cut will be counted as a miss under both OP-13A and OP-13B.

Reporting Period: One month	**Unit of Measure:** Percent
Reporting Comparisons: CLEC aggregate and individual CLEC results	**Disaggregation Reporting:** Statewide level Results for this measurement will be reported according to: OP-13A Cuts Completed On Time OP-13B Cuts Started Without CLEC Approval

OP-13 – Coordinated Cuts On Time – Unbundled Loop (continued)

Formula:

- OP-13A = (Count of LSRs for Coordinated Unbundled Loop cuts completed "On Time") / (Total Number of LSRs for Coordinated Unbundled Loop Cuts completed in the reporting period) x 100
- OP-13B = (Count of LSRs for Coordinated Unbundled Loop cuts whose actual start time occurs without CLEC approval) / (Total Number of LSRs for Coordinated Unbundled Loop Cuts completed in the reporting period) x 100

Exclusions:

Applicable to OP-13A:

- Loop cuts that involve CLEC-requested non-standard methods/types, processes, or timelines.

OP-13A & OP-13B

- Records with invalid completion dates.
- Records missing data essential to the calculation of the measurement per the PID which are not otherwise designated to be "counted as a miss".
- Invalid start/stop dates/times or invalid scheduled date/times.
- Projects involving 25 or more lines.

Product Reporting: Coordinated Unbundled Loops – Reported separately for:	**Standard:**
• Analog Loops • All Other Loops	**OP-13A:** 95 Percent or more **OP-13B:** Diagnostic
Availability:	**Notes:**
Available	1. In results from Aug 00 to Dec 00 orders with CLEC caused delays are excluded. Beginning with Jan 01 results, only CLEC caused delay time is excluded from the measure.

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 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 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 beyond due date
Reporting Comparisons: CLEC aggregate, individual CLEC, Qwest retail	**Disaggregation Reporting:** State/ID level

Formula:
OP-15A = ∑[(Last Day of Reporting Period) – (Applicable Due Date of Late Pending Order) -(Time intervals associated with customer-initiated due date changes or delays occurring after the Applicable Due Date)] / (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.

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

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)
Centex 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:	Notes:
Available	1. 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.

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

	2. Prior to Aug 01 results the specified Change order types (i.e., with "7" & "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.

MR-3 – Out of Service Cleared within 24 Hours

Purpose:
Evaluates timeliness of repair for specified services, focusing on trouble reports where the out-of-service trouble reports were cleared within the standard estimate for specified services (i.e., 24 hours for out-of-service conditions).

Description:
Measures the percentage of out of service trouble reports, involving specified services, that are cleared within 24 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 that is out-of-service (i.e., unable to place or receive calls), subject to exclusions specified below.
- Time measured is from date and time of receipt to date and time trouble is indicated as 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 product/services listed in Product Reporting under "MSA-Type Disaggregation" will be disaggregated and reported according to trouble reports involving: MR-3A Dispatches within MSAs; MR-3B Dispatches outside MSAs; and MR-3C No dispatches. • Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to trouble reports involving: MR-3D In Interval Zone 1 areas; and MR-3E In Interval Zone 2 areas.

Formula:
(Number of Out of Service Trouble Reports closed in the reporting period that are cleared within 24 hours) / (Total Number of Out of Service Trouble Reports closed in the reporting period) x 100

Explanation: Percentage is obtained by dividing the total number of OOS reports cleared within 24 hours by the total number of OOS reports closed during the measurement period.

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.
- 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.

MR-3 – Out of Service Cleared within 24 Hours (Continued)

- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

MR-3 – Out of Service Cleared within 24 Hours (Continued)

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 appropriate retail service
• Shared Loop/Line Sharing	Parity with RES and BUS POTS
• 2-Wire Loop Unbundling	Diagnostic
Zone-type Disaggregation -	
• Resale	
Qwest DSL	Parity with retail service
• Unbundled Loops:	
Analog Loop	Parity with retail Res and Bus POTS
Non-loaded Loop (2 wire)	Parity with retail ISDN-BRI
ISDN-capable Loop	Parity with ISDN-BRI
ADSL-qualified Loop	Parity with retail Qwest DSL
Availability: • Available(except as noted below) • Under Development: Retail comparable for Shared Loop/Line Sharing - TBD	**Notes:**

MR-4 – All Troubles Cleared within 48 hours

Purpose:
Evaluates timeliness of repair for specified services, focusing on trouble reports of all types (both out of service and service affecting) and on the number of such trouble reports cleared within the standard estimate for specified services (i.e., 48 hours for service-affecting conditions).

Description:
Measures the percentage of trouble reports, for specified services, that are cleared within 48 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 indicated as 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 product/services listed in Product Reporting under "MSA-Type Disaggregation" will be disaggregated and reported according to trouble reports involving: MR-4A Dispatches within MSAs; MR-4B Dispatches outside MSAs; and MR-4C No dispatches. • Results for products/services listed in Product Reporting under "Zone-type Disaggregation" will be disaggregated according to trouble reports involving: MR-4D In Interval Zone 1 areas; and MR-4E In Interval Zone 2 areas

Formula:
[(Total Trouble Reports closed in the reporting period that are cleared within 48 hours) / (Total Trouble Reports closed in the reporting period)] x 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.
- 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.

MR-3 – Out of Service Cleared within 24 Hours (Continued)

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 appropriate 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
• Unbundled Loops:	
Analog Loop	Parity with retail Res and Bus POTS
Non-loaded Loop (2 wire)	Parity with retail ISDN-BRI
ISDN-capable Loop	Parity with retail ISDN-BRI
ADSL-qualified Loop	Parity with retail Qwest DSL
Availability: • Available (except as noted below) • Under Development: Retail comparable for Shared Loop/Line Sharing - TBD	**Notes:**

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:
[(Number of Trouble Reports closed in the reporting period that are cleared within 4 hours) / (Total Trouble Reports closed in the reporting period)] x 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.

MR-5 – All Troubles Cleared within 4 hours (continued)

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 (aggregate)	Parity with retail service
Frame Relay	Parity with retail service
• UIS 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)
• E911/911 Trunks	Parity with retail E911/911 Trunks
• Enhanced Extended Links (EELs)	Diagnostic
Availability: Available	**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.

- 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. • 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:
Σ[(Date & Time Trouble Report Cleared) – (Date & Time Trouble Report Opened)] / (Total number of Trouble Reports closed in the reporting period)

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.
- 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.

MR-6 – Mean Time to Restore (Continued)

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:** 1. 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

Reporting Comparisons: CLEC aggregate, individual CLEC and Qwest Retail results	**Disaggregation Reporting:** Statewide level. • 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. • 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.

Formula:
([(Total repeated trouble reports closed within the reporting period that were received within 30 calendar days of when the preceding initial trouble report closed) / (Total number of Trouble Reports Closed in the reporting period)] x 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 (0); Non-Telco Plant (1); 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 (NED) 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.

MR-7 – Repair Repeat Report Rate (Continued)

- Records with invalid product codes.
- Records missing data essential to the calculation of the measurement per the PID.

MR-7 – Repair Repeat Report Rate (Continued)

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: Available	**Notes:**

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.

- 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:
[(Total number of trouble reports closed in the reporting period involving the specified service grouping) / (Total number of the specified services that are in service in the reporting period)] x 100

Exclusions:

- Trouble reports 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);
  - 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.

MR-8 – Trouble Rate (continued)

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: • Available (except as noted below) • Under Development: – Retail comparable for Shared Loop/Line Sharing - TBD	**Notes:** 1. Prior to Mar 01 data Centrex and Centrex 21 results were reported combined under the Centrex heading. 2. Prior to Mar 01 data Resale Basic and Primary ISDN results were reported combined under the Resale ISDN POTS heading.

MR-9 – Repair Appointments Met

Purpose:
Evaluates the extent to which Qwest repairs services for Customers by the appointment date and time.

Description:
Measures the percentage of trouble reports for which the appointment date and time is met.

- Includes all trouble reports 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 indicated as 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 services will be disaggregated and reported according to trouble reports involving: MR-9A Dispatches within MSAs; MR-9B Dispatches outside MSAs; and MR-9C No dispatches.

Formula:
[(Total Trouble Reports Cleared by appointment date and time) / (Total Trouble Reports Closed in the Reporting Period)] x 100

Exclusions:

- Trouble reports 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);
- 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.

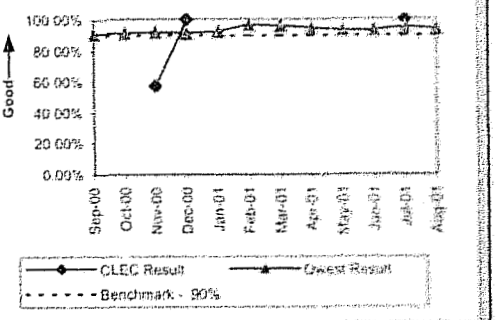
Product Reporting:	**Standard:** Parity
Resale: Residential single line service Business single line service Centrex PBX Trunks Basic ISDN Unbundled Elements – Platform (UNE-P) (POTS)	
Availability: Available	**Notes:**

Docket TC 01-__
Qwest Corporation
Exhibits to the Affidavit of Jean M. Liston
Checklist Item 4 – Unbundled Loop, NIDs and Line Splitting
Cover Sheet for Exhibit JML-LOOP-14
October 24, 2001

Checklist #4 - Unbundled Loop - Analog Installation

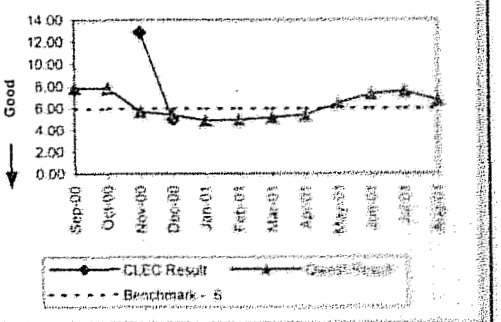
Installation Commitments Met (Percent) (OP-3)-- Interval Zone One

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				698	767	91.00%		
Oct-00				779	853	91.32%		
Nov-00	4	7	57.14%	688	750	91.73%	3.72	1.26
Dec-00	4	4	100.00%	593	651	91.09%	-0.62	-1.36
Jan-01				659	716	92.04%		
Feb-01				584	605	96.53%		
Mar-01				733	765	95.82%		
Apr-01				635	672	94.49%		
May-01				792	853	92.85%		
Jun-01				664	713	93.13%		
Jul-01	1	1	100.00%	722	758	95.25%	-0.22	-1.14
Aug-01				807	861	93.73%		



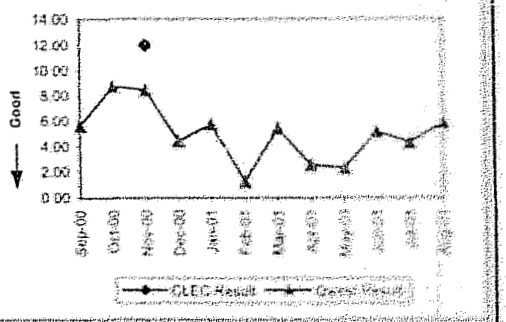
Installation Interval (Average Days) (OP-4)-- Interval Zone One

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				6028	767	7.86		
Oct-00				6681	852	7.84		
Nov-00	90	7	12.86	4271	750	5.69	2.03	0.24
Dec-00	20	4	5.00	3511	650	5.40	-0.11	-1.06
Jan-01				3499	716	4.89		
Feb-01				3003	604	4.97		
Mar-01				3952	764	5.17		
Apr-01				3614	672	5.38		
May-01				5485	853	6.43		
Jun-01				5183	713	7.27		
Jul-01				5926	790	7.50		
Aug-01				6043	898	6.73		



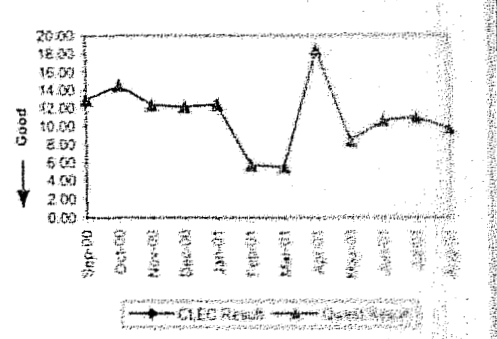
Delayed Days for Non-Facility Reasons (Average Days) (OP-6A)-- Interval Zone One

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				135	24	5.62		
Oct-00				175	20	8.75		
Nov-00	36	3	12.00	101	12	8.42	0.71	-0.57
Dec-00				71	16	4.44		
Jan-01				109	19	5.74		
Feb-01				9	7	1.29		
Mar-01				65	12	5.42		
Apr-01				18	7	2.57		
May-01				60	26	2.31		
Jun-01				119	23	5.17		
Jul-01				181	42	4.31		
Aug-01				327	56	5.84		



Delayed Days for Facility Reasons (Average Days) (OP-6B)-- Interval Zone One

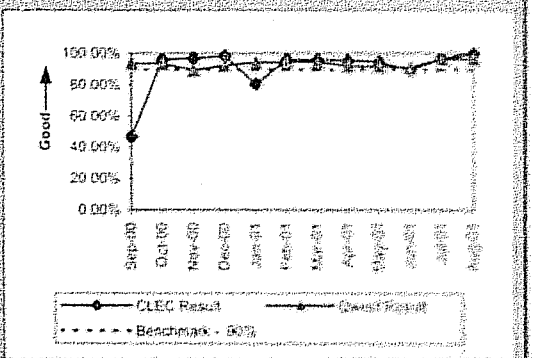
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				585	45	13.00		
Oct-00				785	54	14.54		
Nov-00				619	50	12.38		
Dec-00				511	42	12.17		
Jan-01				473	38	12.45		
Feb-01				80	14	5.71		
Mar-01				110	20	5.50		
Apr-01				553	30	18.43		
May-01				293	35	8.37		
Jun-01				276	26	10.62		
Jul-01				286	26	11.00		
Aug-01				341	35	9.74		



Checklist #4 - Unbundled Loop - Analog Installation

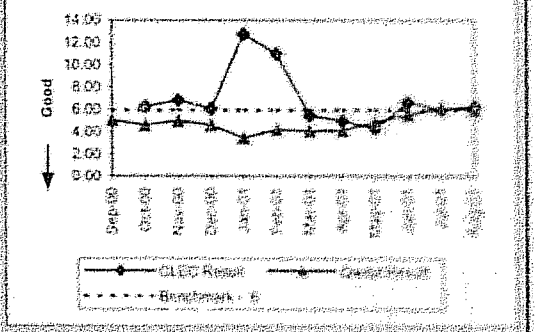
Installation Commitments Met (Percent) (OP-3)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00	35	75	46.67%	661	707	93.49%	3.72	1.26
Oct-00	164	171	95.91%	592	633	93.52%	-1.12	-1.69
Nov-00	185	191	96.86%	506	568	89.44%	-2.89	-2.76
Dec-00	58	60	96.33%	425	459	92.59%	-1.6	-1.97
Jan-01	25	31	80.65%	474	502	94.42%	6.33	2.85
Feb-01	75	78	96.15%	382	404	94.55%	-0.57	-1.35
Mar-01	121	126	96.03%	400	423	94.56%	-0.64	-1.39
Apr-01	21	22	95.45%	473	514	92.02%	-0.58	-1.35
May-01	18	19	94.74%	581	633	91.79%	-0.46	-1.28
Jun-01	69	77	89.61%	536	588	91.16%	0.4	-0.76
Jul-01	83	86	96.51%	699	723	96.68%	0.02	-0.99
Aug-01	49	49	100.00%	866	898	96.44%	-1.31	-1.8



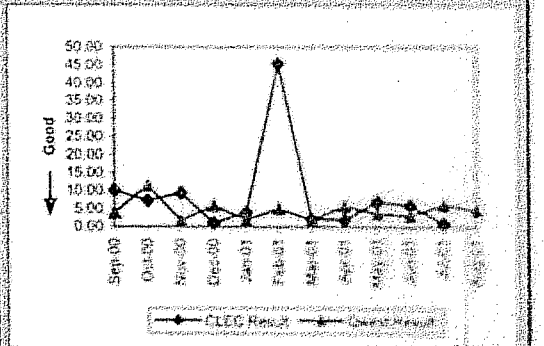
Installation Interval (Average Days) (OP-4)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				3598	707	5.09		
Oct-00	421	67	6.28	2931	633	4.63	1.67	0.02
Nov-00	581	85	6.84	2845	568	5.01	1.62	-0.02
Dec-00	73	12	6.08	2122	459	4.62	0.58	-0.65
Jan-01	126	10	12.80	1750	502	3.49	3.72	1.26
Feb-01	276	25	11.04	1718	404	4.25	3.72	1.26
Mar-01	11	2	5.50	1733	423	4.10	0.82	-0.5
Apr-01	10	2	5.00	2133	514	4.15	0.81	-0.51
May-01	13	3	4.33	3099	633	4.90	-0.13	-1.06
Jun-01	246	37	6.65	3263	588	5.55	0.79	-0.52
Jul-01	174	29	6.00	4564	738	6.18	-0.13	-1.08
Aug-01	182	29	6.28	5553	925	6.00	0.27	-0.83



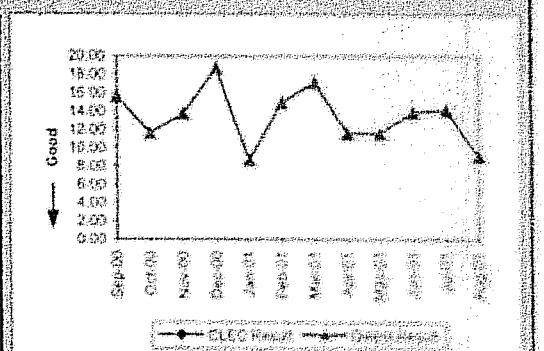
Delayed Days for Non-Facility Reasons (Average Days) (OP-6A)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00	401	40	10.02	28	7	4.00	3.72	1.26
Oct-00	51	7	7.29	92	8	11.50	-0.4	-1.24
Nov-00	56	6	9.33	13	8	1.62	3.72	1.26
Dec-00	1	1	1.00	59	10	5.90	-0.58	-1.35
Jan-01	24	6	4.00	13	7	1.86	3.09	0.88
Feb-01	136	3	45.33	56	11	5.09	3.09	0.88
Mar-01	11	5	2.20	15	8	1.88	0.03	-0.98
Apr-01	2	1	2.00	52	9	5.78	-0.28	-1.17
May-01	7	1	7.00	69	19	3.63	1.1	-0.33
Jun-01	48	8	6.00	41	13	3.15	2.88	0.75
Jul-01	3	3	1.00	173	28	6.18	-0.75	-1.46
Aug-01				208	44	4.73		



Delayed Days for Facility Reasons (Average Days) (OP-6B)-- Interval Zone Two

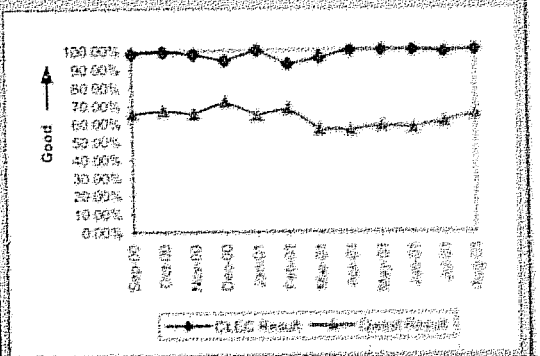
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				611	39	15.67		
Oct-00				385	33	11.67		
Nov-00				717	52	13.79		
Dec-00				449	24	18.71		
Jan-01				183	21	8.71		
Feb-01				165	11	15.00		
Mar-01				258	15	17.20		
Apr-01				374	32	11.69		
May-01				383	33	11.61		
Jun-01				546	39	14.00		
Jul-01				156	11	14.18		
Aug-01				138	15	9.20		



Checklist #4 - Unbundled Loop - Analog Installation

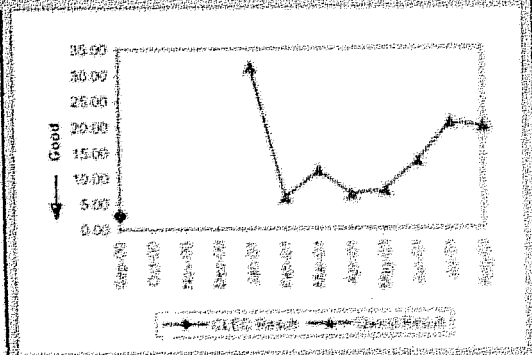
New Service Installation Quality (Percent) (OP-5)-- Interval Zone One and Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00	180	183	98.36%	1175	1788	65.72%	-8.86	-6.39
Oct-00	128	129	99.22%	1096	1629	67.28%	-7.44	-5.53
Nov-00	187	191	97.91%	1012	1544	65.54%	-8.88	-6.4
Dec-00	124	131	94.66%	959	1327	72.27%	-5.46	-4.32
Jan-01	48	48	100.00%	815	1260	64.68%	-5.02	-4.05
Feb-01	51	55	92.73%	820	1196	68.56%	-3.77	-3.29
Mar-01	98	102	96.08%	668	1177	56.75%	-7.69	-5.66
Apr-01	74	74	100.00%	721	1278	56.42%	-7.35	-5.47
May-01	21	21	100.00%	854	1458	58.57%	-3.83	-3.33
Jun-01	48	48	100.00%	893	1552	57.54%	-5.86	-4.56
Jul-01	81	82	98.78%	911	1495	60.94%	-6.84	-5.16
Aug-01	68	68	100.00%	1097	1676	65.45%	-5.87	-4.57



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

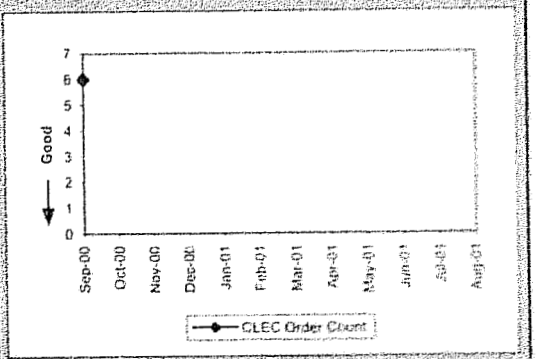
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00	88	32	2.75					
Oct-00								
Nov-00								
Dec-00								
Jan-01				63	2	31.50		
Feb-01				93	15	6.20		
Mar-01				272	24	11.33		
Apr-01				182	27	6.74		
May-01				271	36	7.53		
Jun-01				663	50	13.26		
Jul-01				702	34	20.65		
Aug-01				1413	71	19.90		



Checklist #4 - Unbundled Loop - Analog Installation

Count of Pending Orders Delayed for Facilities Reasons Unbundled Loop Analog (OP-15B)

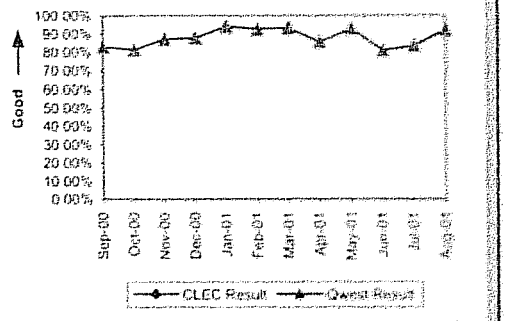
Date	CLEC Order Count
Sep-00	6
Oct-00	
Nov-00	
Dec-00	
Jan-01	
Feb-01	
Mar-01	
Apr-01	
May-01	
Jun-01	
Jul-01	
Aug-01	



Checklist #4 - Unbundled Loop - Analog Repair

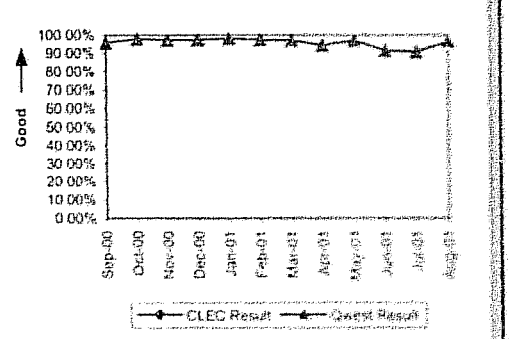
Out of Service Cleared within 24 hours (Percent) (MR-3)-- Interval Zone One

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				847	1019	83.12%		
Oct-00				837	1029	81.34%		
Nov-00				868	996	87.15%		
Dec-00				544	619	87.88%		
Jan-01				829	879	94.31%		
Feb-01				676	729	92.73%		
Mar-01				849	909	93.40%		
Apr-01				1052	1228	85.67%		
May-01				1091	1174	92.93%		
Jun-01				1201	1482	81.04%		
Jul-01				1096	1315	83.35%		
Aug-01				997	1080	92.31%		



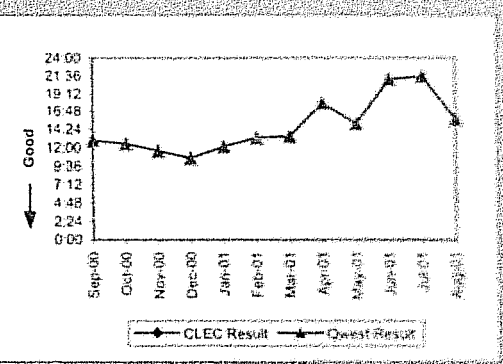
All Trouble Cleared within 48 hours (Percent) (MR-4)-- Interval Zone One

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				2249	2345	95.91%		
Oct-00				2111	2156	97.91%		
Nov-00				1706	1754	97.26%		
Dec-00				1258	1292	97.37%		
Jan-01				1276	1301	98.08%		
Feb-01				1081	1109	97.48%		
Mar-01				1481	1526	97.05%		
Apr-01				1706	1808	94.36%		
May-01				1686	1736	97.12%		
Jun-01				1995	2179	91.56%		
Jul-01				1711	1886	90.72%		
Aug-01				1559	1618	96.35%		



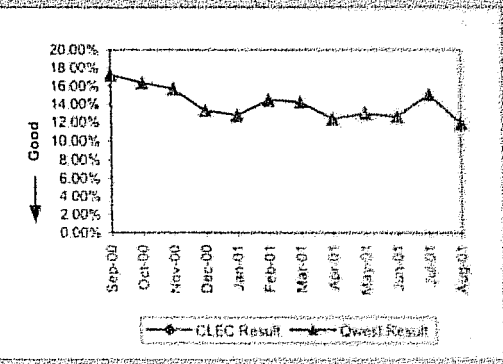
Mean Time to Restore (Hours:Minutes) (MR-6)-- Interval Zone One

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				30476:26	2345	13:00		
Oct-00				26990:53	2156	12:31		
Nov-00				20248:20	1754	11:33		
Dec-00				13764:07	1292	10:39		
Jan-01				15759:58	1301	12:07		
Feb-01				14709:34	1109	13:16		
Mar-01				20505:29	1526	13:26		
Apr-01				32385:12	1808	17:55		
May-01				26294:16	1736	15:09		
Jun-01				46033:15	2179	21:08		
Jul-01				40665:34	1886	21:34		
Aug-01				25525:52	1618	15:47		



Repair Repeat Report Rate (Percent) (MR-7)-- Interval Zone One

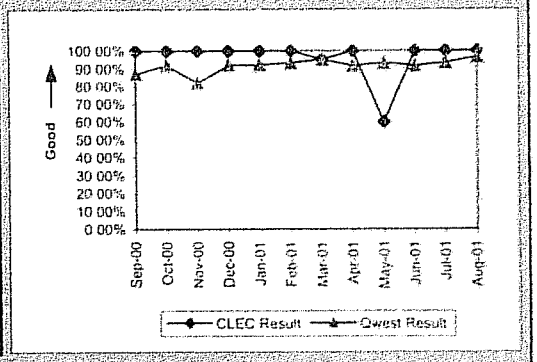
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				404	2345	17.23%		
Oct-00				357	2183	16.35%		
Nov-00				280	1782	15.71%		
Dec-00				175	1313	13.33%		
Jan-01				169	1323	12.77%		
Feb-01				164	1132	14.49%		
Mar-01				222	1558	14.25%		
Apr-01				228	1839	12.40%		
May-01				229	1765	12.97%		
Jun-01				282	2230	12.65%		
Jul-01				294	1946	15.11%		
Aug-01				197	1654	11.91%		



Checklist #4 - Unbundled Loop - Analog Repair

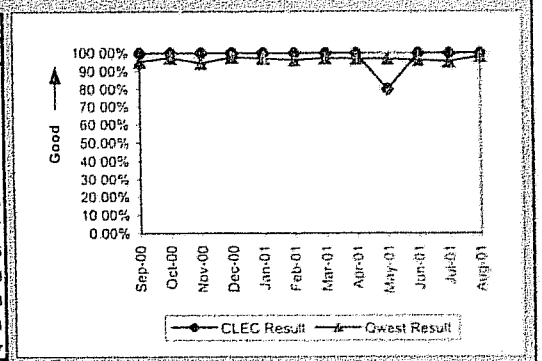
[illegible] Cleared within 24 hours (Percent) (MR-3)-- Interval Zone Two

[illegible]	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
[illegible]	6	6	100.00%	821	944	86.97%	-0.95	-1.57
[illegible]	5	5	100.00%	747	811	92.11%	-0.65	-1.4
[illegible]	6	6	100.00%	835	1018	82.02%	-1.14	-1.7
[illegible]	7	7	100.00%	687	747	91.97%	-0.78	-1.47
[illegible]	2	2	100.00%	729	791	92.16%	-0.41	-1.25
[illegible]	14	14	100.00%	556	595	93.29%	-0.99	-1.6
[illegible]	22	21	95.24%	843	886	95.15%	-0.02	-1.01
[illegible]	10	10	100.00%	1010	1102	91.65%	-0.95	-1.58
[illegible]	5	5	80.00%	952	1020	93.33%	7.94	3.83
[illegible]	10	10	100.00%	1010	1101	91.73%	-1.3	-1.79
[illegible]	11	11	100.00%	1034	1106	93.49%	-0.87	-1.53
[illegible]	4	4	100.00%	967	1002	96.51%	-0.38	-1.23



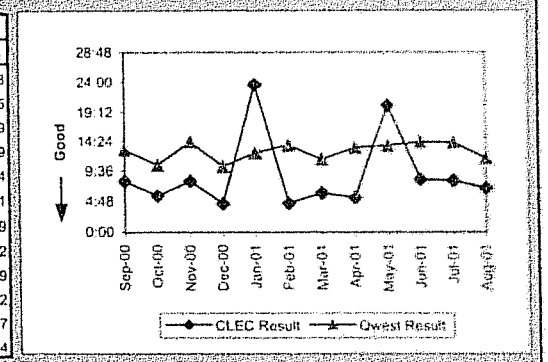
All Trks Rtns Cleared within 48 hours (Percent) (MR-4)-- Interval Zone Two

[illegible]	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
[illegible]	6	6	100.00%	1718	1801	95.39%	-0.54	-1.33
[illegible]	5	5	100.00%	1533	1573	97.46%	-0.36	-1.22
[illegible]	6	6	100.00%	1590	1684	94.42%	-0.59	-1.36
[illegible]	7	7	100.00%	1264	1292	97.83%	-0.39	-1.24
[illegible]	2	2	100.00%	1086	1118	97.14%	-0.24	-1.15
[illegible]	14	14	100.00%	854	888	96.17%	-0.74	-1.45
[illegible]	21	21	100.00%	1260	1296	97.22%	-0.77	-1.47
[illegible]	10	10	100.00%	1490	1539	96.82%	-0.57	-1.35
[illegible]	4	5	80.00%	1394	1440	96.81%	7.94	3.83
[illegible]	10	10	100.00%	1467	1526	96.13%	-0.87	-1.53
[illegible]	11	11	100.00%	1477	1549	95.35%	-0.73	-1.44
[illegible]	4	4	100.00%	1418	1446	98.06%	-0.28	-1.17



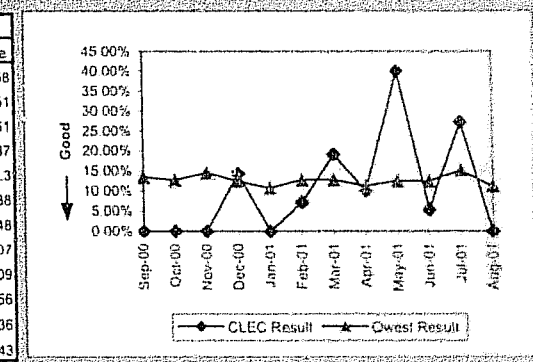
Mean Time to Restore (Hours:Minutes) (MR-6)-- Interval Zone Two

[illegible]	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
[illegible]	44:21	6	8:00	23519:05	1801	13:04	-0.62	-1.38
[illegible]	58:41	5	5:41	16601:26	1573	10:33	-0.81	-1.5
[illegible]	48:04	6	8:01	24132:06	1684	14:20	-0.8	-1.49
[illegible]	31:12	7	4:27	13366:34	1292	10:21	-1.14	-1.69
[illegible]	47:19	2	23:40	14057:16	1118	12:34	1.42	-0.14
[illegible]	62:35	14	4:28	12262:01	888	13:49	-1.66	-2.01
[illegible]	126:11	21	6:09	14916:11	1296	11:31	-1.96	-2.19
[illegible]	53:57	10	5:24	20629:14	1539	13:24	-1.68	-2.02
[illegible]	101:32	5	20:18	19761:51	1440	13:43	1.01	-0.39
[illegible]	156:41	19	8:15	21865:00	1526	14:20	-1.64	-2
[illegible]	88:26	11	8:08	22089:59	1549	14:16	-1.27	-1.77
[illegible]	97:39	4	6:54	16957:17	1446	11:44	-0.65	-1.4



Repair Repeat Report Rate (Percent) (MR-7)-- Interval Zone Two

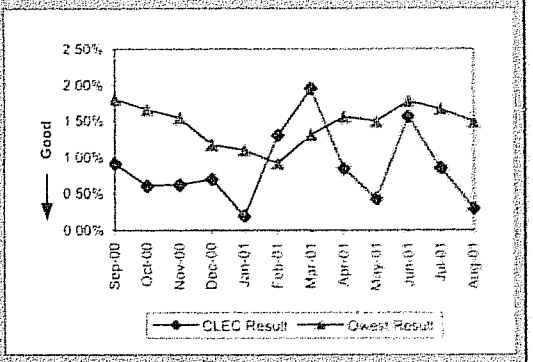
[illegible]	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
[illegible]	0	6	0.00%	241	1801	13.38%	-0.96	-1.58
[illegible]	0	5	0.00%	201	1598	12.58%	-0.85	-1.51
[illegible]	0	6	0.00%	248	1711	14.49%	-1.01	-1.61
[illegible]	1	7	14.29%	163	1316	12.39%	0.22	-0.87
[illegible]	0	2	0.00%	121	1131	10.70%	-0.49	-1.3
[illegible]	1	14	7.14%	114	898	12.69%	-0.62	-1.38
[illegible]	4	21	19.05%	166	1312	12.65%	0.86	-0.48
[illegible]	1	10	10.00%	175	1561	11.21%	-0.12	-1.07
[illegible]	2	5	40.00%	182	1461	12.46%	1.5	-0.09
[illegible]	1	10	5.26%	191	1557	12.27%	-0.92	-1.56
[illegible]	3	11	27.27%	238	1575	15.11%	1.05	-0.36
[illegible]	0	4	0.00%	163	1464	11.13%	-0.71	-1.43



Checklist #4 - Unbundled Loop - Analog Repair

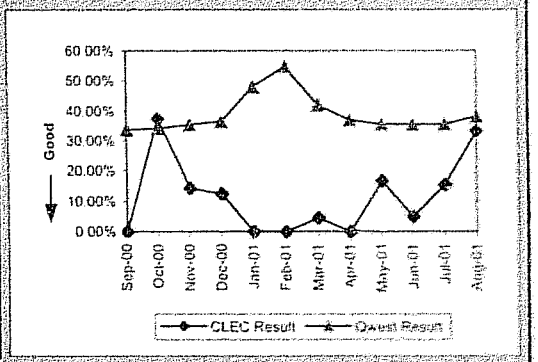
Trouble Rate Percents (MR-5)-- Interval Zone One and Two

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	4145	229346	1 81%	-1 72	-2 04
[illegible]	[illegible]	[illegible]	[illegible]	3781	227599	1 66%	-2 37	-2 44
[illegible]	[illegible]	[illegible]	[illegible]	3493	226121	1 54%	-2 33	-2 41
[illegible]	[illegible]	[illegible]	[illegible]	2620	224460	1 17%	-1 4	-1 85
[illegible]	[illegible]	[illegible]	[illegible]	2454	223071	1 10%	-2 76	-2 68
[illegible]	[illegible]	[illegible]	[illegible]	2030	221311	0 92%	1 32	-0 19
[illegible]	[illegible]	[illegible]	[illegible]	2870	219161	1 31%	1 86	0 13
[illegible]	[illegible]	[illegible]	[illegible]	3400	217622	1 56%	-1 99	-2 21
[illegible]	[illegible]	[illegible]	[illegible]	3226	215311	1 50%	-3 01	-2 83
[illegible]	[illegible]	[illegible]	[illegible]	3787	213146	1 78%	-0 57	-1 35
[illegible]	[illegible]	[illegible]	[illegible]	3521	210770	1 67%	-2 3	-2 4
[illegible]	[illegible]	[illegible]	[illegible]	3118	208908	1 49%	-3 58	-3 18



Trouble Rate Qwest Repeat Trouble Reports (Percent) (MR-10)-- Interval Zone One and Two

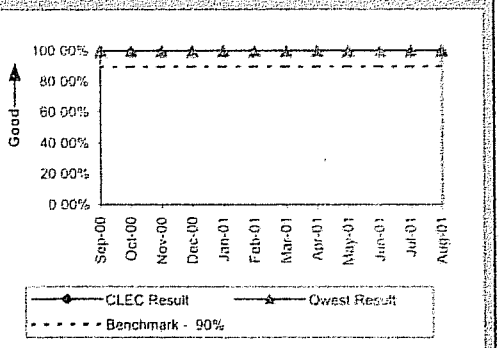
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2110	6256	33 73%	-1 75	-2 06
[illegible]	[illegible]	[illegible]	[illegible]	1959	5740	34 13%	0 21	-0 87
[illegible]	[illegible]	[illegible]	[illegible]	1921	5414	35 48%	-1 17	-1 71
[illegible]	[illegible]	[illegible]	[illegible]	1514	4143	36 54%	-1 41	-1 86
[illegible]	[illegible]	[illegible]	[illegible]	2273	4727	48 09%	-1 36	-1 83
[illegible]	[illegible]	[illegible]	[illegible]	2462	4492	54 81%	-4 11	-3 5
[illegible]	[illegible]	[illegible]	[illegible]	2086	4956	42 09%	-3 56	-3 16
[illegible]	[illegible]	[illegible]	[illegible]	1998	5398	37 01%	-2 42	-2 47
[illegible]	[illegible]	[illegible]	[illegible]	1780	5006	35 56%	-0 97	-1 59
[illegible]	[illegible]	[illegible]	[illegible]	2098	5885	35 65%	-2 86	-2 74
[illegible]	[illegible]	[illegible]	[illegible]	1950	5471	35 64%	-1 52	-1 93
[illegible]	[illegible]	[illegible]	[illegible]	1937	5055	38 32%	-0 25	-1 15



Checklist #4 - Unbundled Loop - Non-Loaded (2-Wire) Installation

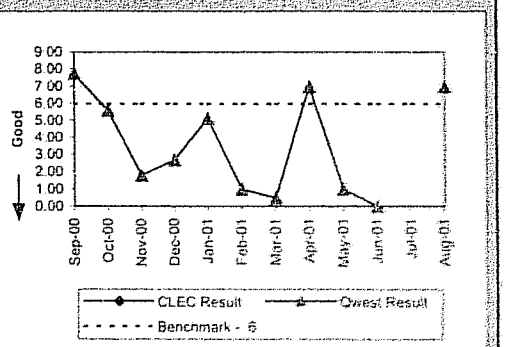
Installation Commitments Met (Percent) (OP-3) -- Interval Zone One

CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
			4	4	100.00%		
			5	5	100.00%		
			9	9	100.00%		
			13	13	100.00%		
			8	8	100.00%		
			3	3	100.00%		
			4	4	100.00%		
			4	4	100.00%		
			2	2	100.00%		
			4	4	100.00%		
			1	1	100.00%		
			2	2	100.00%		



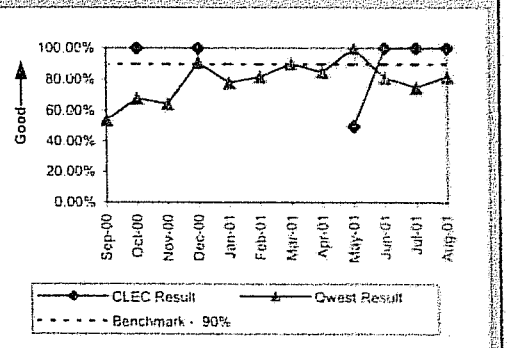
Installation Interval (Average Days) (OP-4) -- Interval Zone One

CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
			31	4	7.75		
			28	5	5.60		
			16	9	1.78		
			35	13	2.69		
			41	8	5.12		
			3	3	1.00		
			2	4	0.50		
			28	4	7.00		
			2	2	1.00		
			0	2	0.00		
			14	2	7.00		



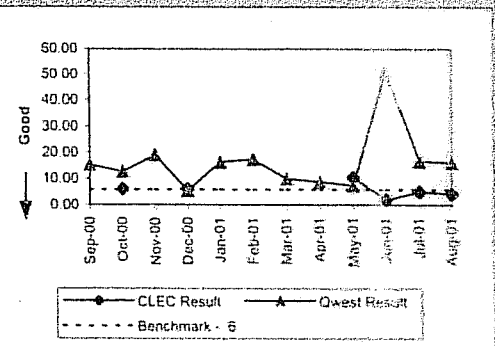
Installation Commitments Met (Percent) (OP-3) -- Interval Zone Two

CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
			7	13	53.85%		
		100.00%	17	25	68.00%	-0.93	-1.57
			9	14	64.29%		
		100.00%	10	11	90.91%	-0.3	-1.18
			14	18	77.78%		
			9	11	81.82%		
			18	20	90.00%		
			11	13	84.62%		
		50.00%	10	10	100.00%	N/A	0.97
		100.00%	17	21	80.95%	-0.47	-1.29
		100.00%	6	8	75.00%	-0.85	-1.52
		100.00%	18	22	81.82%	-1.14	-1.69



Installation Interval (Average Days) (OP-4) -- Interval Zone Two

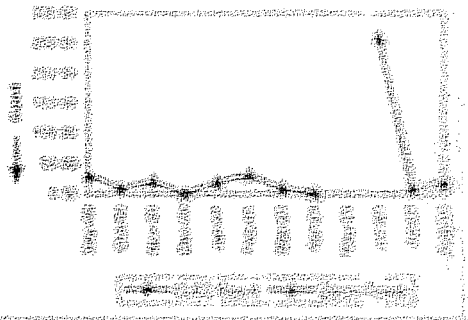
CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
			170	11	15.45		
	1	6.00	279	22	12.68	-0.66	-1.4
			268	14	19.14		
	1	6.00	60	11	5.45	0.09	-0.95
			261	16	16.31		
			176	10	17.60		
			160	16	10.00		
			116	13	8.92		
	2	10.50	66	9	7.33	0.76	-0.54
	1	2.00	986	19	50.84	-0.26	-1.16
	2	5.00	167	10	16.70	-0.98	-1.6
	5	4.20	391	24	16.29	-1.57	-1.95



Checklist #4 - Unbundled Loop - Non-Recurring Charges

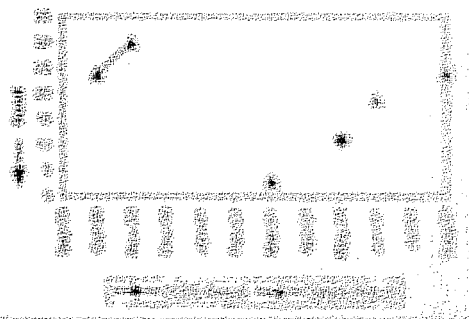
Delayed Days for Non-Facility Reasons (Average Days) OP-5A - Interval Plan Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Parity Result	Mod Z Score	Parity Status
Sep-00				191	6	31.83		
Oct-00				65	7	9.29		
Nov-00				56	2	28.00		
Dec-00				1	1	1.00		
Jan-01				60	4	15.00		
Feb-01				63	2	31.50		
Mar-01				10	1	10.00		
Apr-01				5	2	2.50		
May-01								
Jun-01				261	5	52.20		
Jul-01				42	4	10.50		
Aug-01				57	3	19.00		



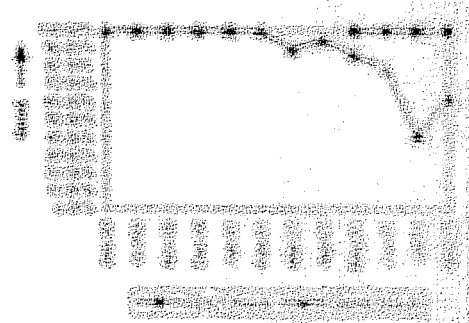
Delayed Days for Facility Reasons (Average Days) OP-5A - Interval Plan Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Parity Result	Mod Z Score	Parity Status
Sep-00								
Oct-00				24	1	24.00		
Nov-00				30	1	30.00		
Dec-00								
Jan-01								
Feb-01								
Mar-01				2	1	2.00		
Apr-01								
May-01	11	1	11.00					
Jun-01				19	1	19.00		
Jul-01								
Aug-01				61	2	30.50		



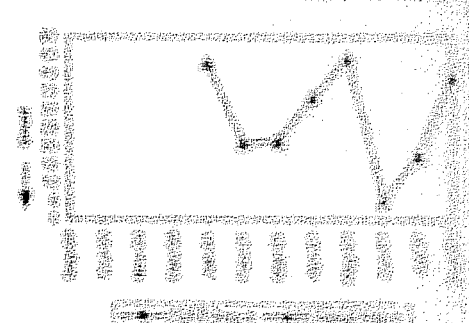
New Service Installation Quality Percent OP-3 - Interval Plan One and Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Parity Result	Mod Z Score	Parity Status
Sep-00				32	32	100.00%		
Oct-00	1	1	100.00%	23	23	100.00%	0.0	Parity
Nov-00	1	1	100.00%	31	31	100.00%	0.0	Parity
Dec-00	1	1	100.00%	24	24	100.00%	0.0	Parity
Jan-01	1	1	100.00%	31	31	100.00%	0.0	Parity
Feb-01				27	27	100.00%		
Mar-01				12	12	92.42%		
Apr-01				23	21	95.24%		
May-01	1	1	100.00%	13	13	96.00%	0.0	Parity
Jun-01	2	2	100.00%	19	19	79.00%	0.0	Parity
Jul-01	2	2	100.00%	3	3	42.19%	0.0	Parity
Aug-01	6	6	100.00%	52	52	95.00%	0.0	Parity



Interval for Pending Orders Delayed Past Due Date (Average Days) OP-4

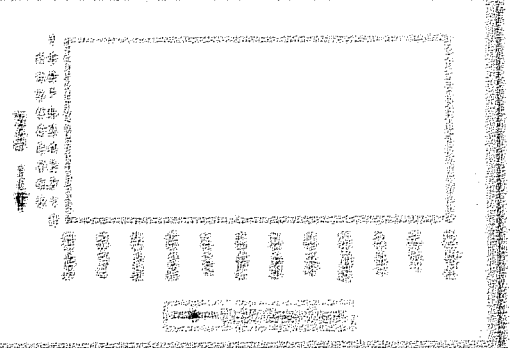
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Parity Result	Mod Z Score	Parity Status
Sep-00								
Oct-00								
Nov-00								
Dec-00								
Jan-01				55	3	18.33		
Feb-01				37	1	37.00		
Mar-01				63	3	21.00		
Apr-01				57	2	28.50		
May-01				61	2	30.50		
Jun-01				31	2	15.50		
Jul-01				69	4	17.25		
Aug-01				116	3	38.67		



Checklist #4 - Unbundled Loop - [illegible]

Count of Pending Orders Delayed for Facilities Reasons Unbundled Loop - [illegible]

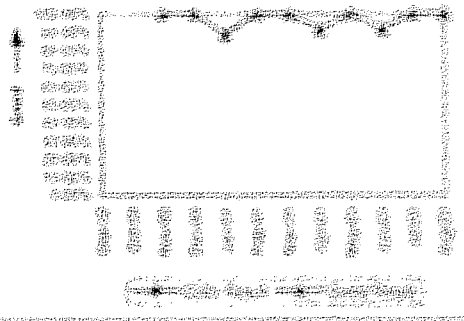
Date	CLEC Order Count
Sep-00	
Oct-00	
Nov-00	
Dec-00	
Jan-01	
Feb-01	
Mar-01	
Apr-01	
May-01	
Jun-01	
Jul-01	
Aug-01	



Checklist #4 - Unbundled Loops - Non-Loaded 2-Wire Loops

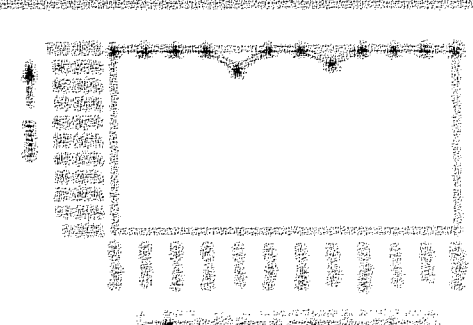
Out of Service Cleared within 24 hours (Percent) (MR-1 – Interval Zone Six)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Min Sample	Parity Met
Sep-00								
Oct-00								
Nov-00				1	1	100.00%		
Dec-00				1	1	100.00%		
Jan-01				6	6	100.00%		
Feb-01				9	9	100.00%		
Mar-01				14	14	100.00%		
Apr-01				11	12	91.67%		
May-01				12	12	100.00%		
Jun-01				11	12	91.67%		
Jul-01				12	12	100.00%		
Aug-01				15	15	100.00%		



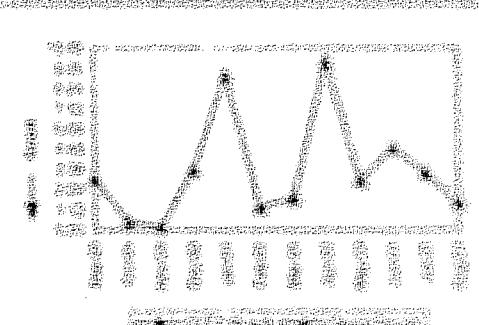
All Troubles Cleared within 48 hours (Percent) (MR-1 – Interval Zone Six)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Min Sample	Parity Met
Sep-00				1	1	100.00%		
Oct-00				1	1	100.00%		
Nov-00				1	1	100.00%		
Dec-00				2	2	100.00%		
Jan-01				6	6	100.00%		
Feb-01				9	9	100.00%		
Mar-01				14	14	100.00%		
Apr-01				12	12	100.00%		
May-01				12	12	100.00%		
Jun-01				12	12	100.00%		
Jul-01				12	12	100.00%		
Aug-01				15	15	100.00%		



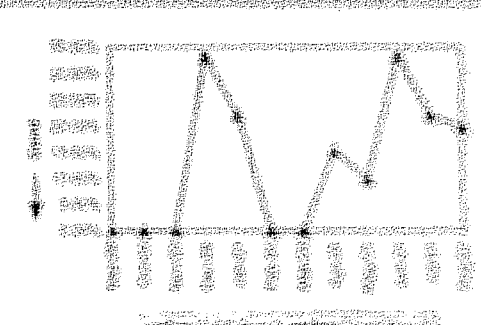
Mean Time to Restore (Hours:Minutes) (MR-1 – Interval Zone Six)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Min Sample	Parity Met
Sep-00				1:00	1	1:00		
Oct-00				0:32	1	0:32		
Nov-00				0:42	1	0:42		
Dec-00				10:43	1	10:43		
Jan-01				22:48	1	22:48		
Feb-01				0:54	1	0:54		
Mar-01				27:56	14	1:59		
Apr-01				139:04	11	12:39		
May-01				29:30	12	2:27		
Jun-01				54:24	11	4:56		
Jul-01				61:20	11	5:34		
Aug-01				24:52	15	1:39		



Repair Repeat Report Rate (Percent) (MR-1 – Interval Zone One)

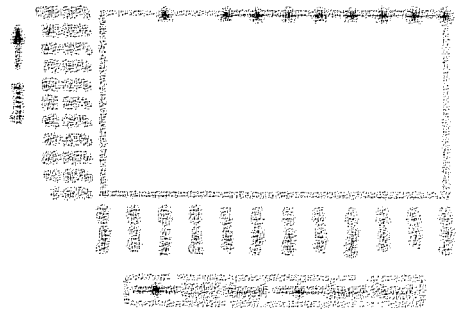
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Min Sample	Parity Met
Sep-00				1	1	100.00%		
Oct-00				0	1	0.00%		
Nov-00				1	1	100.00%		
Dec-00				4	1	33.33%		
Jan-01				2	1	50.00%		
Feb-01				2	1	50.00%		
Mar-01				0	14	0.00%		
Apr-01				1	11	9.09%		
May-01				1	12	8.33%		
Jun-01				4	12	33.33%		
Jul-01				4	12	33.33%		
Aug-01				1	15	6.67%		



Checklist #4 - Unbundled Loop - Non-Loaded (2-Wire) Loops

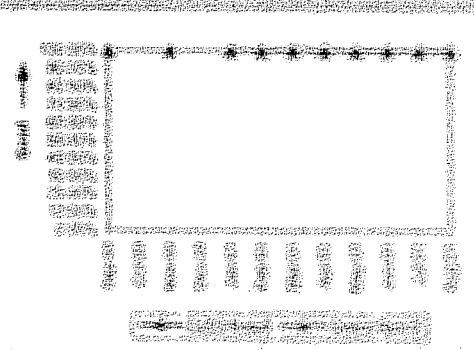
Out of Service Cleared within 24 hours (Percent) (MR-3 - Interval Zone Tier)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Num Zone	Denom Zone
Sep-00								
Oct-00								
Nov-00				1	1	100.00%		
Dec-00								
Jan-01				4	4	100.00%		
Feb-01				2	2	100.00%		
Mar-01				4	4	100.00%		
Apr-01				5	5	100.00%		
May-01				7	7	100.00%		
Jun-01				5	5	100.00%		
Jul-01				4	4	100.00%		
Aug-01				3	3	100.00%		



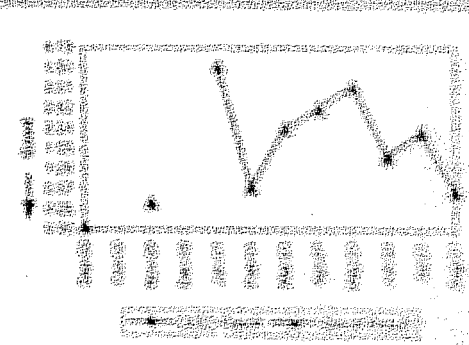
All Troubles Cleared within 48 hours (Percent) (MR-4 - Interval Zone Tier)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Num Zone	Denom Zone
Sep-00				1	1	100.00%		
Oct-00								
Nov-00				1	1	100.00%		
Dec-00								
Jan-01				4	4	100.00%		
Feb-01				2	2	100.00%		
Mar-01				4	4	100.00%		
Apr-01				5	5	100.00%		
May-01				7	7	100.00%		
Jun-01				5	5	100.00%		
Jul-01				4	4	100.00%		
Aug-01				3	3	100.00%		



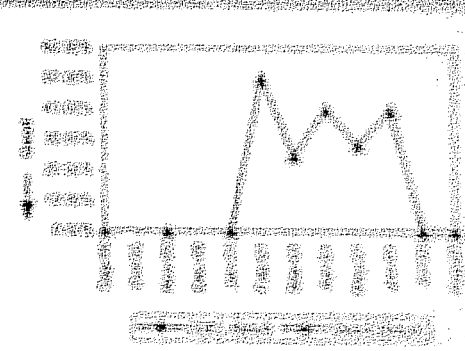
Mean Time to Restore (Hours Minutes) (MR-6 - Interval Zone Tier)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Num Zone	Denom Zone
Sep-00				0:04	1	0:04		
Oct-00								
Nov-00				0:35	1	0:35		
Dec-00								
Jan-01				15:03	4	3:46		
Feb-01				2:04	2	1:02		
Mar-01				9:40	4	2:25		
Apr-01				14:27	5	2:53		
May-01				23:54	7	3:25		
Jun-01				8:50	5	1:46		
Jul-01				9:22	4	2:21		
Aug-01				3:44	3	1:15		



Repair Repeat Report Rate (Percent) (MR-7 - Interval Zone Tier)

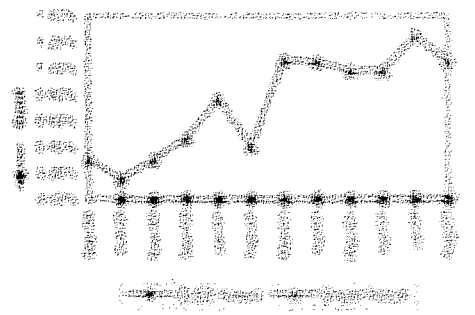
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Num Zone	Denom Zone
Sep-00				0	1	0.00%		
Oct-00								
Nov-00				0	1	0.00%		
Dec-00								
Jan-01				0	4	0.00%		
Feb-01				1	2	50.00%		
Mar-01				1	4	25.00%		
Apr-01				2	5	40.00%		
May-01				1	7	14.29%		
Jun-01				2	5	40.00%		
Jul-01				0	4	0.00%		
Aug-01				0	3	0.00%		



Checklist #4 - Unbundled Loop - [illegible]

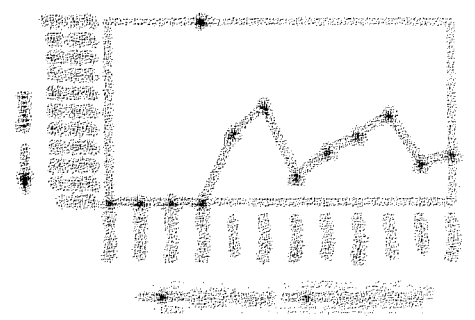
Trouble Rate (Percent) CLEC to Network Zone Retail and Fac

Date	CLEC Num	CLEC Denom	CLEC Rate	Qwest Num	Qwest Denom	Qwest Rate	Test Sig	Parity Met
Sep-00								
Oct-00	0	2	0.00%					
Nov-00	0	2	0.00%					
Dec-00	0	3	0.00%					
Jan-01	0	1	0.00%					
Feb-01	0	1	0.00%					
Mar-01	0	1	0.00%					
Apr-01	0	2	0.00%					
May-01	0	4	0.00%					
Jun-01	0	5	0.00%					
Jul-01	0	8	0.00%					
Aug-01	0	20	0.00%					



Customer and Non-Qwest Relative Trouble Reports Domain

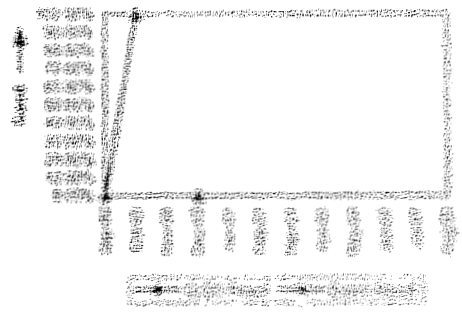
Date	CLEC Num	CLEC Denom	CLEC Rate	Qwest Num	Qwest Denom	Qwest Rate	Test Sig	Parity Met
Sep-00								
Oct-00								
Nov-00								
Dec-00	1	1	100.00%					
Jan-01								
Feb-01								
Mar-01								
Apr-01								
May-01								
Jun-01								
Jul-01								
Aug-01								



Checklist #4 - Unbundled Loop - Non-Design (Hot Cut)

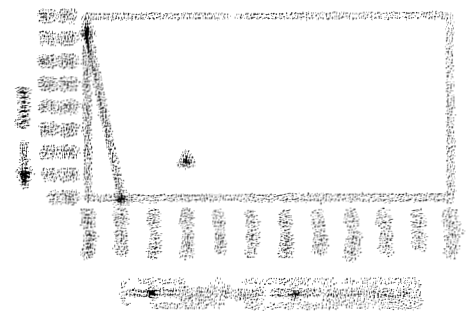
Installation Commitments Met (Percent) (OP-3 - Interval Zone One)

Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev	Qwest Num	Qwest Dem	Qwest Res	Num Sim	Prob Sim
Sep-00					0	1	0.00%		
Oct-00					3	3	100.00%		
Nov-00									
Dec-00					5	1	5.00%		
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



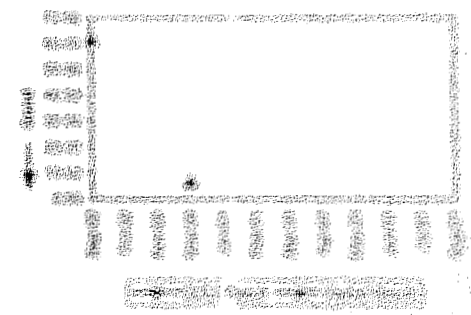
Installation Interval (Average Days) (OP-4 - Interval Zone One)

Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev	Qwest Num	Qwest Dem	Qwest Res	Num Sim	Prob Sim
Sep-00					74	1	74.00		
Oct-00					2	3	0.67		
Nov-00									
Dec-00					57	1	57.00		
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



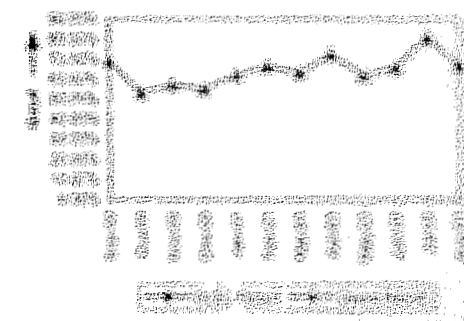
Delayed Days for Non-Facility Reasons (Average Days) (OP-5 - Interval Zone One)

Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev	Qwest Num	Qwest Dem	Qwest Res	Num Sim	Prob Sim
Sep-00					60	1	60.00		
Oct-00									
Nov-00									
Dec-00					1	1	1.00		
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



Installation Commitments Met (Percent) (OP-3 - Interval Zone Two)

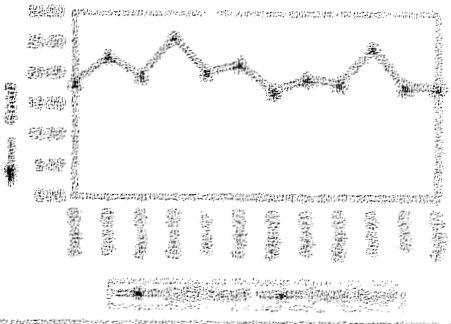
Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev	Qwest Num	Qwest Dem	Qwest Res	Num Sim	Prob Sim
Sep-00					57	74	77.03%		
Oct-00					49	88	55.68%		
Nov-00					51	81	62.96%		
Dec-00					52	94	55.32%		
Jan-01					41	66	62.12%		
Feb-01					64	80	80.00%		
Mar-01					93	131	70.99%		
Apr-01					64	85	75.29%		
May-01					55	74	74.32%		
Jun-01					69	94	73.40%		
Jul-01					64	79	81.01%		
Aug-01					75	104	72.12%		



Checklist #4 - Unbundled Loop - Non-Capital (Retail Analogue)

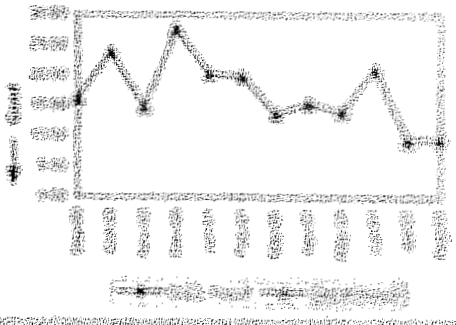
Installation Interval (Average Days)

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Result Z Score	Parity Gap
Sep-00					1375	18	19.50		
Oct-00					2014	43	22.84		
Nov-00					1771	89	19.90		
Dec-00					2481	94	26.40		
Jan-01					1341	67	20.01		
Feb-01					1452	62	23.44		
Mar-01					2287	130	17.59		
Apr-01					1441	65	19.91		
May-01					1375	74	18.58		
Jun-01					1725	73	23.63		
Jul-01					2335	131	17.82		
Aug-01					2644	141	18.75		



Delayed Days for Non-Facility Reasons (Average Days)

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Result Z Score	Parity Gap
Sep-00					292	18	16.22		
Oct-00					741	37	20.03		
Nov-00					430	23	18.70		
Dec-00					512	30	17.06		
Jan-01					445	22	20.23		
Feb-01					337	18	18.72		
Mar-01					536	29	18.48		
Apr-01					378	21	18.00		
May-01					240	13	18.46		
Jun-01					480	22	21.82		
Jul-01					595	34	17.50		
Aug-01					823	39	21.10		

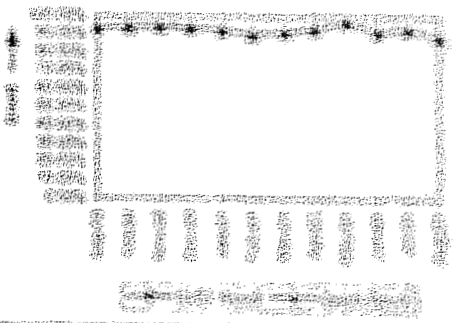


Delayed Days for Facility Reasons (Average Days)

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Result Z Score	Parity Gap
Sep-00					170	8	21.25		
Oct-00					306	9	34.00		
Nov-00					441	8	55.13		
Dec-00					177	9	19.67		
Jan-01					534	8	66.75		
Feb-01					254	6	42.33		
Mar-01					189	7	27.00		
Apr-01					84	4	21.00		
May-01					240	11	21.82		
Jun-01					84	4	21.00		
Jul-01					161	3	53.67		
Aug-01					181	11	16.45		

New Service Installation Quality (Percent)

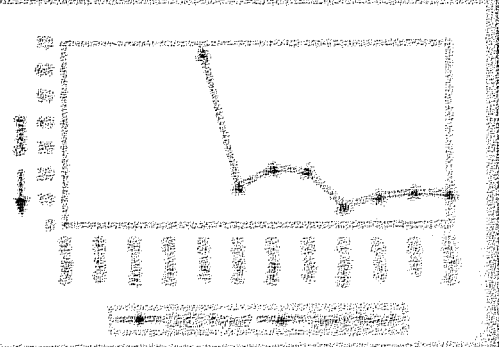
Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Result Z Score	Parity Gap
Sep-00					111	120	92.50%		
Oct-00					92	98	93.88%		
Nov-00					130	136	95.59%		
Dec-00					104	111	93.69%		
Jan-01					91	93	97.85%		
Feb-01					71	80	88.75%		
Mar-01					109	111	98.20%		
Apr-01					124	131	94.66%		
May-01					99	102	97.06%		
Jun-01					91	93	97.85%		
Jul-01					127	131	96.95%		
Aug-01					123	131	93.89%		



Checklist #4 - Unbundled Loop - Non-Loaded (4 Wire) Interval

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

Date	CLEC Num	CLEC Den	CLEC Res	Std Dev	Qwest Num	Qwest Den	Qwest Res	Mod Z Scr	Parity Calc
Sep-00									
Oct-00									
Nov-00									
Dec-00									
Jan-01					255	4	66.25		
Feb-01					472	31	15.23		
Mar-01					288	13	22.15		
Apr-01					106	5	21.20		
May-01					80	11	7.27		
Jun-01					156	14	11.14		
Jul-01					285	22	12.95		
Aug-01					342	28	12.21		



Checklist #4 - Unbundled Loop - [illegible]

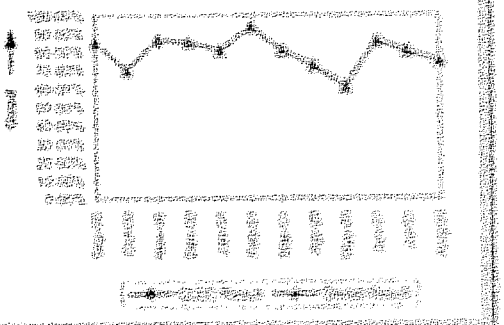
Count of Pending Orders Delayed for Facilities Reasons Unbundled Loop - [illegible]

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 #4 - Unbundled Loop - Non-Loaded (4-Wire) Report

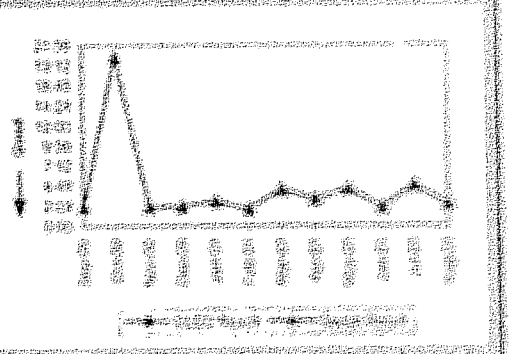
All Troubles Cleared within 4 hours (Percent) (MR-5)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Flag
Sep-00					59	69	85.51%		
Oct-00					42	60	70.00%		
Nov-00					39	45	86.67%		
Dec-00					41	48	85.42%		
Jan-01					42	52	80.77%		
Feb-01					163	174	93.68%		
Mar-01					66	82	80.49%		
Apr-01					42	58	72.41%		
May-01					46	76	60.76%		
Jun-01					85	99	85.86%		
Jul-01					61	76	80.26%		
Aug-01					114	152	75.00%		



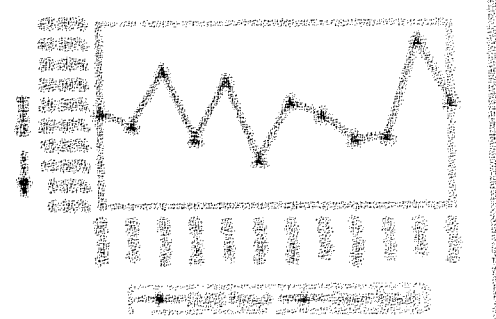
Mean Time to Restore (Hours:Minutes) (MR-6)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Flag
Sep-00					154:24	69	2:14		
Oct-00					1213:34	60	20:14		
Nov-00					102:38	45	2:17		
Dec-00					111:22	48	2:19		
Jan-01					151:05	52	2:54		
Feb-01					351:20	174	2:01		
Mar-01					352:35	82	4:18		
Apr-01					193:50	58	3:19		
May-01					347:28	76	4:34		
Jun-01					218:43	99	2:12		
Jul-01					364:21	76	4:48		
Aug-01					369:54	152	2:26		



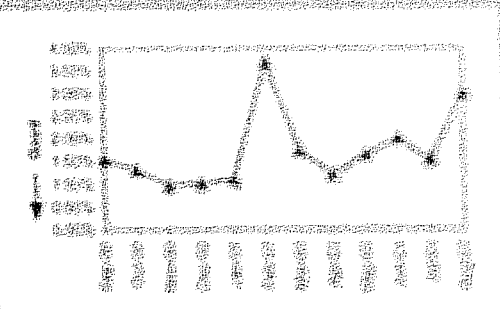
Repair Repeat Report Rate (Percent) (MR-7)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Flag
Sep-00					10	69	20.29%		
Oct-00					12	60	20.00%		
Nov-00					15	45	33.33%		
Dec-00					8	48	16.67%		
Jan-01					16	52	30.77%		
Feb-01					20	174	11.49%		
Mar-01					21	82	25.61%		
Apr-01					13	58	22.41%		
May-01					13	76	17.11%		
Jun-01					17	99	17.17%		
Jul-01					31	76	40.79%		
Aug-01					39	152	25.66%		



Trouble Rate (Percent) (MR-8)-- Interval Zone One and Two

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Flag
Sep-00					69	4490	1.54%		
Oct-00					60	4556	1.32%		
Nov-00					45	4654	0.97%		
Dec-00					48	4724	1.02%		
Jan-01					52	4738	1.10%		
Feb-01					174	4721	3.69%		
Mar-01					82	4721	1.74%		
Apr-01					58	4636	1.25%		
May-01					76	4646	1.64%		
Jun-01					99	4666	2.12%		
Jul-01					76	4665	1.63%		
Aug-01					152	4694	3.24%		

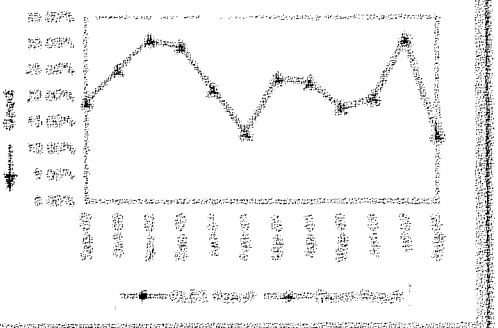


South Dakota

Checklist #4 - Unbundled Loop - Non-Loaded (4-Wire) Repair

Customer and Non-Qwest Related Trouble Reports (Percent) (MR-10) – Interval Zone One and Two

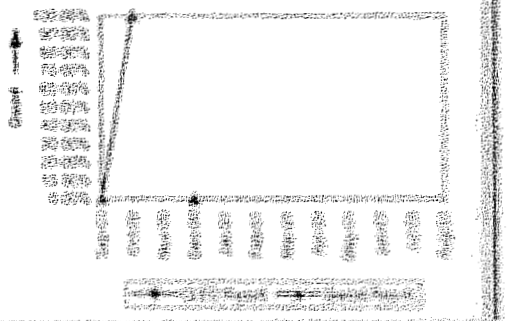
Date	CLEC Num	CLEC Den	CLEC Resu	Std Dev	Qwest Num	Qwest Den	Qwest Resu	Mod Z Sco	Parity Sco
Sep-00					16	85	18.82%		
Oct-00					20	80	25.00%		
Nov-00					20	65	30.77%		
Dec-00					20	68	29.41%		
Jan-01					14	66	21.21%		
Feb-01					26	200	13.00%		
Mar-01					25	107	23.36%		
Apr-01					17	75	22.67%		
May-01					17	96	17.71%		
Jun-01					24	123	19.51%		
Jul-01					34	110	30.91%		
Aug-01					22	174	12.64%		



Checklist #4 - Unbundled Loop - DS1 Capable Installation

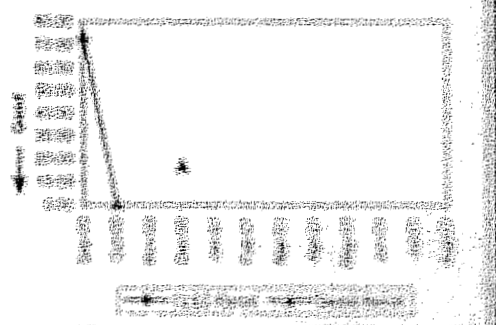
Installation Commitments Met (Percent) (OP-3) -- Interval Zone One

Date	CLEC Num	CLEC Den	CLEC Resu	Std Dev	Qwest Num	Qwest Den	Qwest Res	Mod Z Scr	Parity Stat
Sep-00					0	1	0.00%		
Oct-00					3	3	100.00%		
Nov-00									
Dec-00					0	1	0.00%		
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



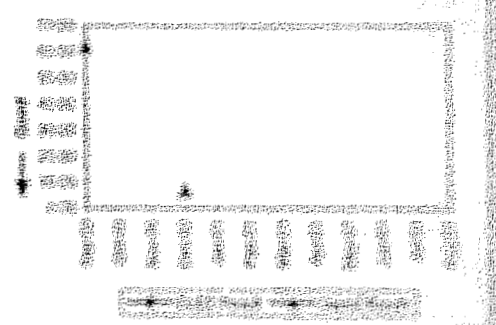
Installation Interval (Average Days) (OP-4) -- Interval Zone One

Date	CLEC Num	CLEC Den	CLEC Resu	Std Dev	Qwest Num	Qwest Den	Qwest Res	Mod Z Scr	Parity Stat
Sep-00					74	1	74.00		
Oct-00					2	3	0.67		
Nov-00									
Dec-00					17	1	17.00		
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



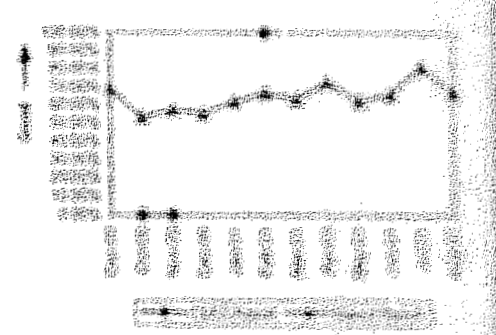
Delayed Days for Non-Facility Reasons (Average Days) (OP-6A) -- Interval Zone One

Date	CLEC Num	CLEC Den	CLEC Resu	Std Dev	Qwest Num	Qwest Den	Qwest Res	Mod Z Scr	Parity Stat
Sep-00					62	1	62.00		
Oct-00									
Nov-00									
Dec-00					7	1	7.00		
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



Installation Commitments Met (Percent) (OP-3) -- Interval Zone Two

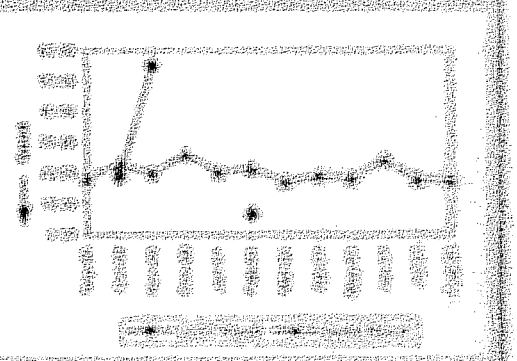
Date	CLEC Num	CLEC Den	CLEC Resu	Std Dev	Qwest Num	Qwest Den	Qwest Res	Mod Z Scr	Parity Stat
Sep-00					51	74	68.92%		
Oct-00	0	1	0.00%	0.00%	47	88	53.41%	1.63	-0.00
Nov-00	0	1	0.00%	0.00%	51	89	57.30%	1.09	-0.00
Dec-00					52	94	55.32%		
Jan-01					45	88	51.13%		
Feb-01	1	1	100.00%	0.00%	46	69	66.67%	-0.81	-0.43
Mar-01					83	131	63.36%		
Apr-01					64	88	72.73%		
May-01					46	74	62.16%		
Jun-01					49	74	66.22%		
Jul-01					64	79	81.01%		
Aug-01					75	164	45.73%		



Checklist #4 - Unbundled Loops - [illegible]

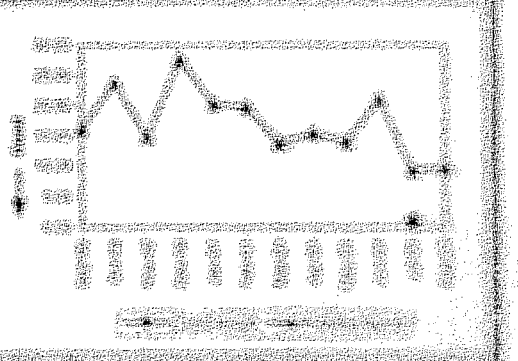
Installation Interval (Average Days) [illegible]

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	[illegible]
Sep-00					
Oct-00	19	1	19.00		
Nov-00	55	1	55.00		
Dec-00					
Jan-01					
Feb-01	7	1	7.00		
Mar-01					
Apr-01					
May-01					
Jun-01					
Jul-01					
Aug-01					



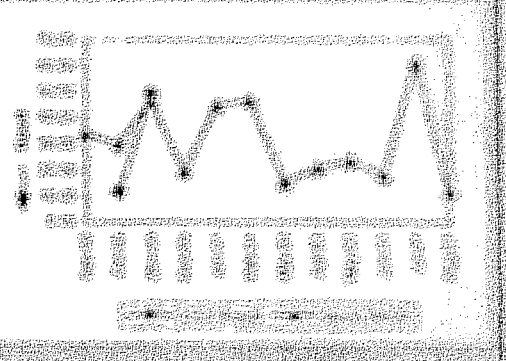
Delayed Days for Non-Facility Reasons (Average Days) [illegible]

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	[illegible]
Sep-00					
Oct-00					
Nov-00					
Dec-00					
Jan-01					
Feb-01					
Mar-01					
Apr-01					
May-01					
Jun-01					
Jul-01	1	1	1.00		
Aug-01					



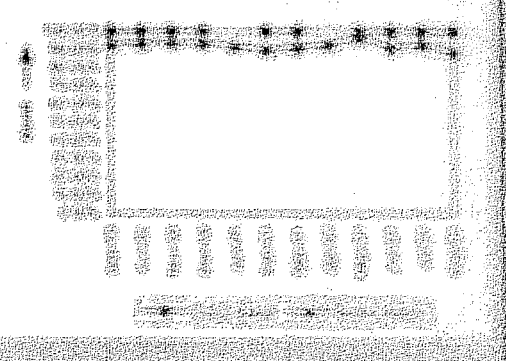
Delayed Days for Facility Reasons (Average Days) [illegible]

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	[illegible]
Sep-00					
Oct-00	12	1	12.00		
Nov-00	49	1	49.00		
Dec-00					
Jan-01					
Feb-01					
Mar-01					
Apr-01					
May-01					
Jun-01					
Jul-01					
Aug-01					



New Service Installation Quality (Percent Missed Appointments)

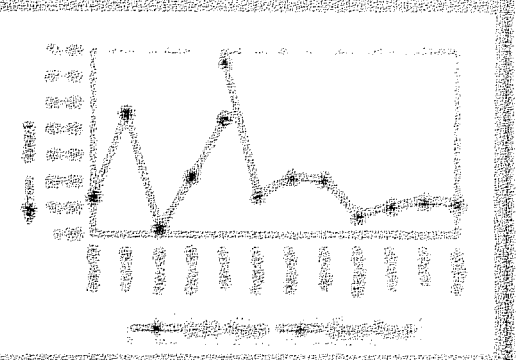
Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	[illegible]
Sep-00	1	1	100.00%	0.00%	
Oct-00	1	1	100.00%	0.00%	
Nov-00	3	3	100.00%	0.00%	
Dec-00	2	2	100.00%	0.00%	
Jan-01					
Feb-01	1	1	100.00%	0.00%	
Mar-01	1	1	100.00%	0.00%	
Apr-01					
May-01	1	1	100.00%	0.00%	
Jun-01	1	1	100.00%	0.00%	
Jul-01	1	1	100.00%	0.00%	
Aug-01	1	1	100.00%	0.00%	



Checklist #4 - Unbundled Loops - Line Conditioning

Interval for Pending Orders Delayed Past Due Due Electronic Flow-Through

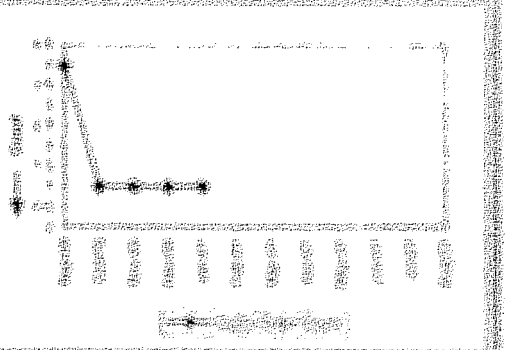
Date	CLEC Num	CLEC Dem	CLEC Resl	Std Dev					
Sep-00	56	4	14.00	12.7%					
Oct-00	46	1	46.00						
Nov-00	2	1	2.00						
Dec-00	22	1	22.00						
Jan-01	44	1	44.00						
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									

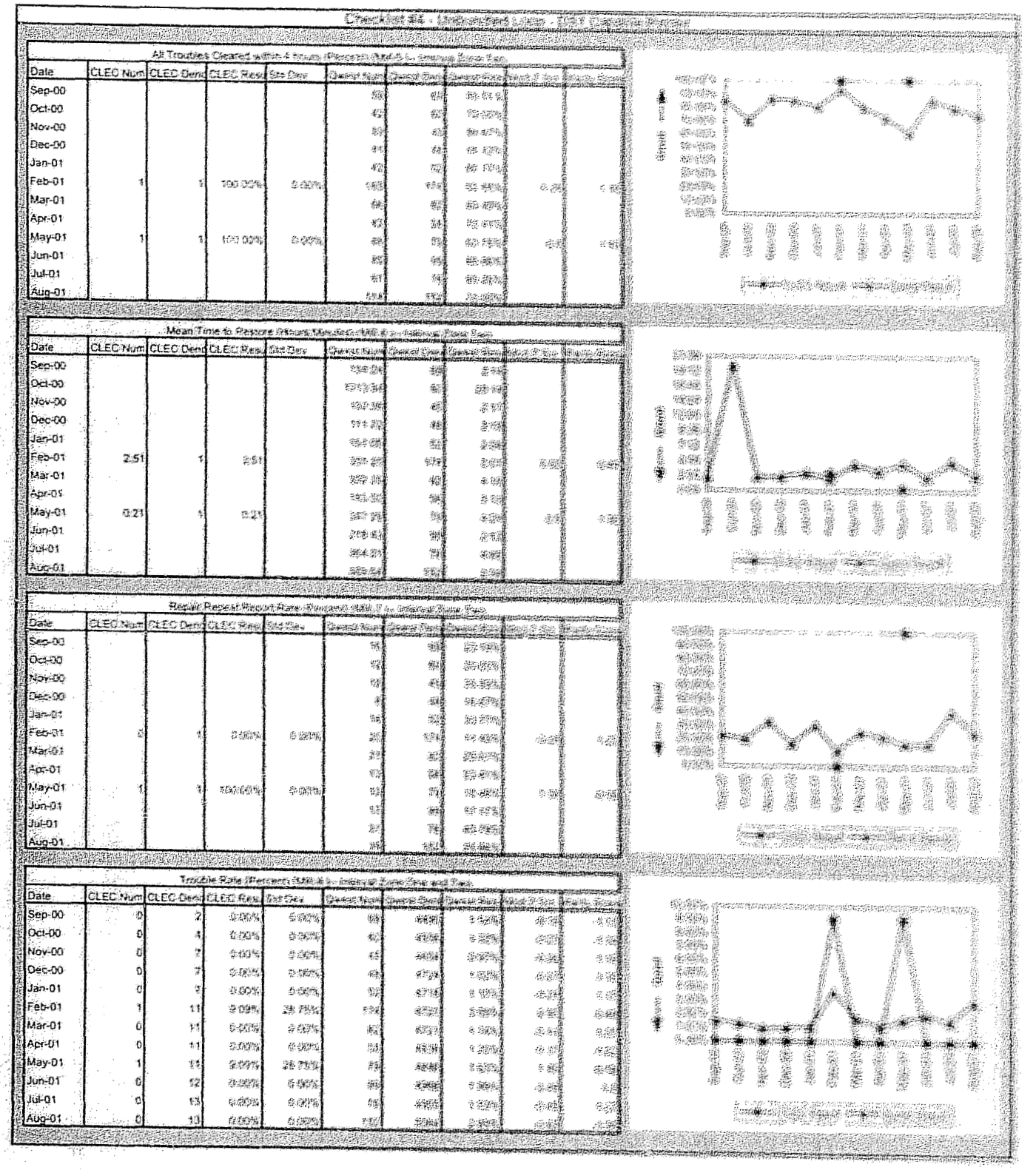


Checklist #4 - Interstate Low - DS1 Capacity Loops

Count of Pending Orders Delayed for Facilities Reasons Interstate Low - DS1 Capacity Loops

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	



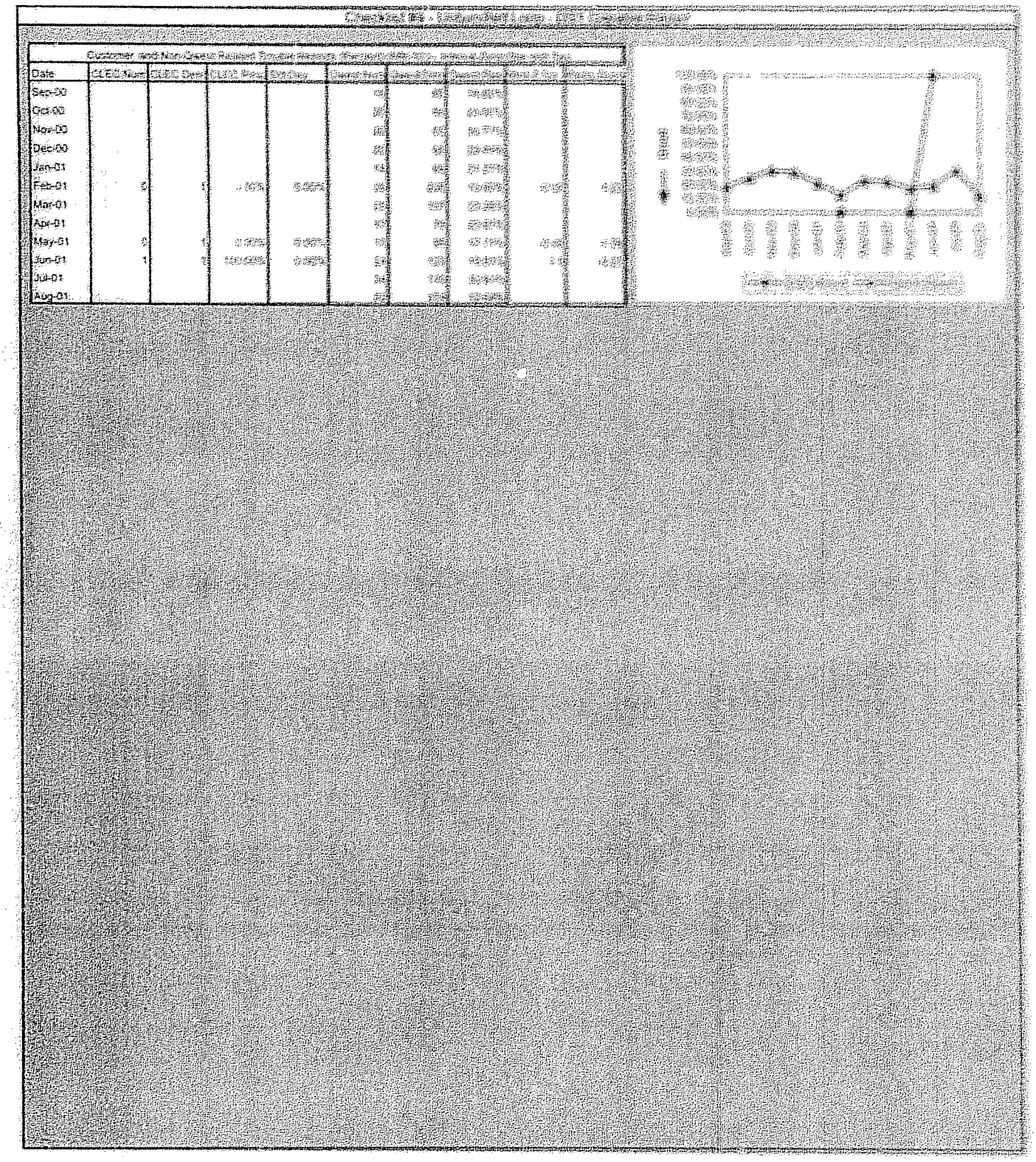


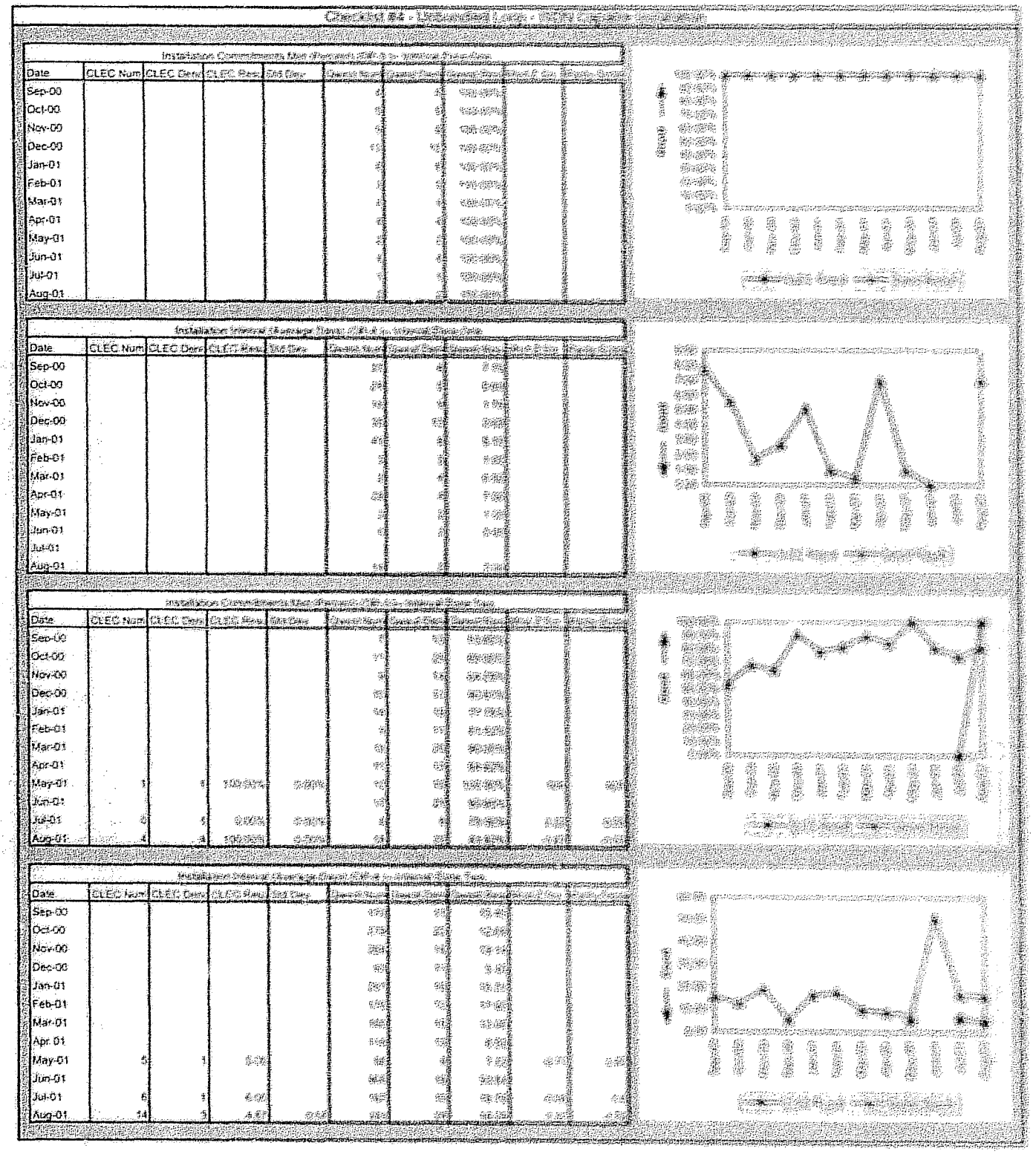
Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Z Score	Results
Sep-00									
Oct-00									
Nov-00									
Dec-00									
Jan-01									
Feb-01	1	1	100.00%	0.00%					
Mar-01									
Apr-01									
May-01	1	1	100.00%	0.00%					
Jun-01									
Jul-01									
Aug-01									

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Z Score	Results
Sep-00									
Oct-00									
Nov-00									
Dec-00									
Jan-01									
Feb-01	2.51	1	2.51						
Mar-01									
Apr-01									
May-01	0.21	1	0.21						
Jun-01									
Jul-01									
Aug-01									

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Z Score	Results
Sep-00									
Oct-00									
Nov-00									
Dec-00									
Jan-01									
Feb-01	0	1	0.00%	0.00%					
Mar-01									
Apr-01									
May-01	1	1	100.00%	0.00%					
Jun-01									
Jul-01									
Aug-01									

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Z Score	Results
Sep-00	0	2	0.00%	0.00%					
Oct-00	0	4	0.00%	0.00%					
Nov-00	0	7	0.00%	0.00%					
Dec-00	0	7	0.00%	0.00%					
Jan-01	0	9	0.00%	0.00%					
Feb-01	1	11	9.09%	28.79%					
Mar-01	0	11	0.00%	0.00%					
Apr-01	0	11	0.00%	0.00%					
May-01	1	11	9.09%	28.79%					
Jun-01	0	12	0.00%	0.00%					
Jul-01	0	13	0.00%	0.00%					
Aug-01	0	13	0.00%	0.00%					



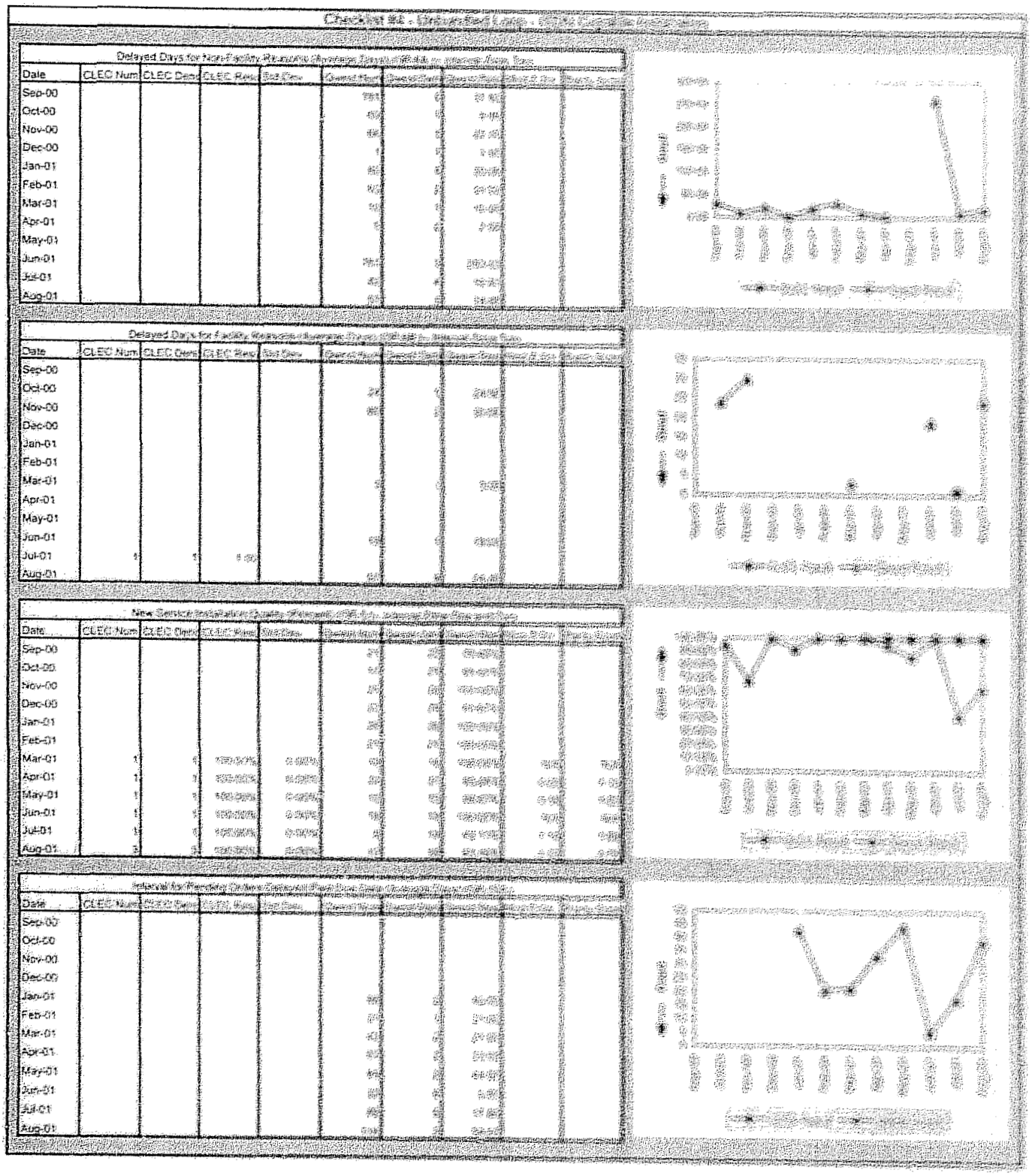


Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev						
Sep-00										
Oct-00										
Nov-00										
Dec-00										
Jan-01										
Feb-01										
Mar-01										
Apr-01										
May-01										
Jun-01										
Jul-01										
Aug-01										

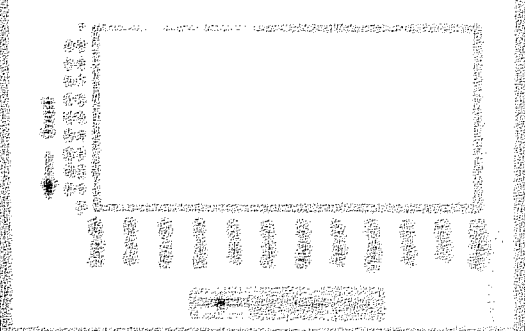
Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev						
Sep-00										
Oct-00										
Nov-00										
Dec-00										
Jan-01										
Feb-01										
Mar-01										
Apr-01										
May-01										
Jun-01										
Jul-01										
Aug-01										

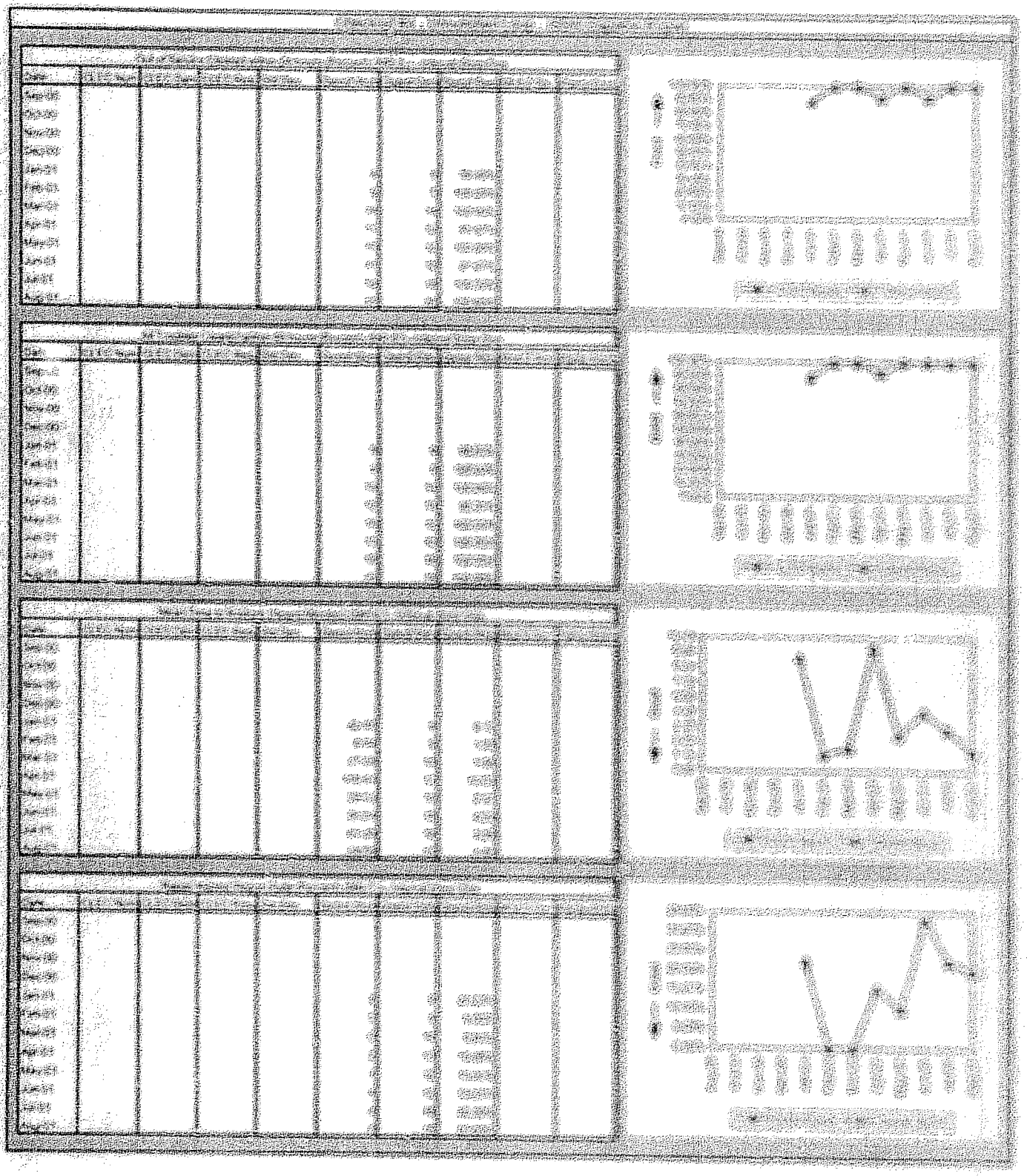
Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev						
Sep-00										
Oct-00										
Nov-00										
Dec-00										
Jan-01										
Feb-01										
Mar-01										
Apr-01										
May-01	1	1	100.00%	0.00%						
Jun-01										
Jul-01	5	5	100.00%	0.00%						
Aug-01	4	4	100.00%	0.00%						

Date	CLEC Num	CLEC Dem	CLEC Res	Std Dev						
Sep-00										
Oct-00										
Nov-00										
Dec-00										
Jan-01										
Feb-01										
Mar-01										
Apr-01										
May-01	5	1	0.00%							
Jun-01										
Jul-01	6	1	0.00%							
Aug-01	14	5	0.00%	0.00%						



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	

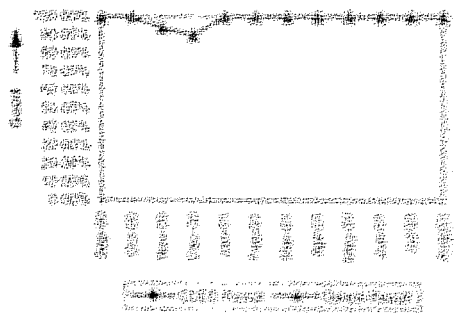




Checklist #4 - Unbundled Loop - ISDN Capable Repair

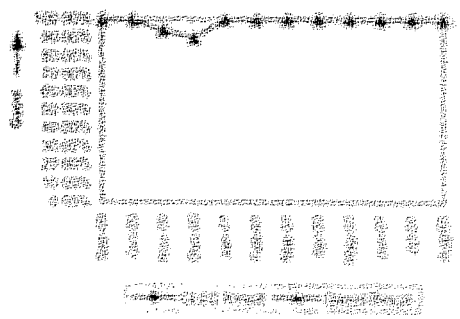
Out of Service Cleared within 24 hours (Percent) (MR-3 – Interval Zone Two)

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Status
Sep-00					20	20	100.00%		
Oct-00					19	19	100.00%		
Nov-00					16	17	94.12%		
Dec-00					9	10	90.00%		
Jan-01					4	4	100.00%		
Feb-01					2	2	100.00%		
Mar-01					4	4	100.00%		
Apr-01					5	5	100.00%		
May-01					7	7	100.00%		
Jun-01					5	5	100.00%		
Jul-01					4	4	100.00%		
Aug-01					4	4	100.00%		



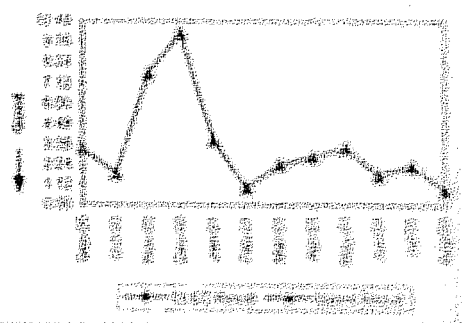
All Troubles Cleared within 48 hours (Percent) (MR-4 – Interval Zone Two)

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Status
Sep-00					20	20	100.00%		
Oct-00					19	19	100.00%		
Nov-00					16	17	94.12%		
Dec-00					9	10	90.00%		
Jan-01					4	4	100.00%		
Feb-01					2	2	100.00%		
Mar-01					4	4	100.00%		
Apr-01					5	5	100.00%		
May-01					7	7	100.00%		
Jun-01					5	5	100.00%		
Jul-01					4	4	100.00%		
Aug-01					4	4	100.00%		



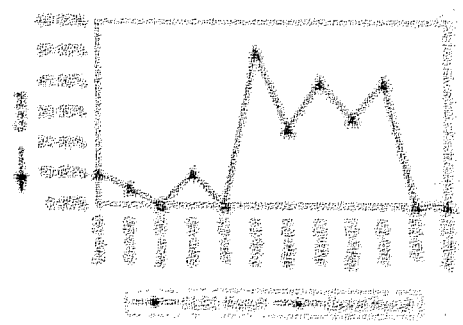
Mean Time to Restore (Hours:Minutes) (MR-6 – Interval Zone Two)

Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Status
Sep-00					61:22	20	3:04		
Oct-00					38:33	19	2:02		
Nov-00					131:59	17	7:46		
Dec-00					120:47	10	12:05		
Jan-01					15:33	4	3:53		
Feb-01					2:04	2	1:02		
Mar-01					9:48	4	2:27		
Apr-01					14:23	5	2:53		
May-01					23:54	7	3:25		
Jun-01					6:56	5	1:23		
Jul-01					9:22	4	2:20		
Aug-01					3:44	4	0:56		



Repair Repeat Report Rate (Percent) (MR-7 – Interval Zone Two)

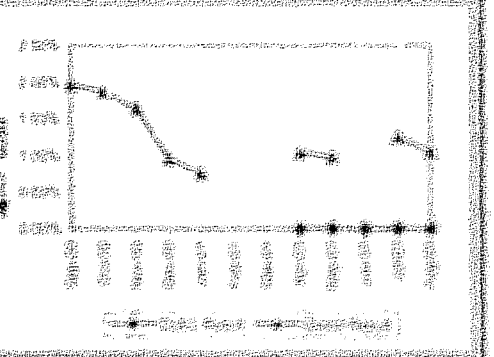
Date	CLEC Num	CLEC Denom	CLEC Result	Std Dev	Qwest Num	Qwest Denom	Qwest Result	Mod Z Score	Parity Status
Sep-00					2	20	10.00%		
Oct-00					1	19	5.26%		
Nov-00					0	17	0.00%		
Dec-00					1	10	10.00%		
Jan-01					0	4	0.00%		
Feb-01					1	2	50.00%		
Mar-01					1	4	25.00%		
Apr-01					2	5	40.00%		
May-01					2	7	28.57%		
Jun-01					2	5	40.00%		
Jul-01					0	4	0.00%		
Aug-01					0	4	0.00%		



Checklist #4 - Unbundled Loop - UDIT Capable Repair

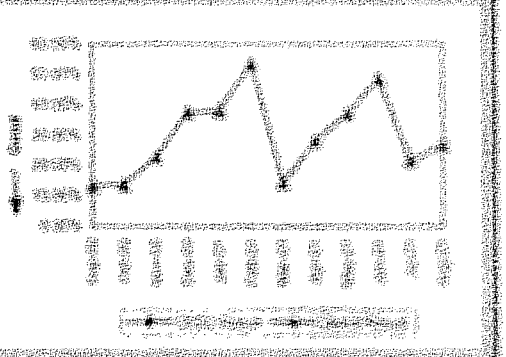
Trouble Rate (Percent) (MR-6)– Interval Zone One and Two

Date	CLEC Num	CLEC Deno	CLEC Resu	Std Dev	Qwest Num	Qwest Den	Qwest Res	Mod Z Sc	Prob Sco
Sep-00					26	1618	1.61%		
Oct-00					19	1315	1.44%		
Nov-00					17	1081	1.57%		
Dec-00					10	1052	0.95%		
Jan-01					13	1010	1.27%		
Feb-01									
Mar-01									
Apr-01	0	1	0.00%	0.00%	18	1211	1.49%	-0.1	54%
May-01	0	2	0.00%	0.00%	17	1120	1.52%	-0.1	54%
Jun-01	0	2	0.00%	0.00%					
Jul-01	0	3	0.00%	0.00%	22	1240	1.77%	-0.3	61%
Aug-01	0	8	0.00%	0.00%	15	1139	1.32%	-0.2	57%



Customer and Non-Qwest Related Trouble Reports (Percent) (MR-6)– Interval Zone One and Two

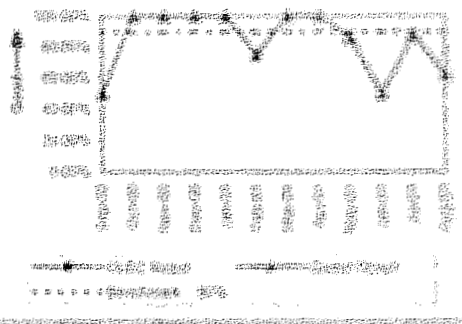
Date	CLEC Num	CLEC Deno	CLEC Resu	Std Dev	Qwest Num	Qwest Den	Qwest Res	Mod Z Sc	Prob Sco
Sep-00					3	23	13.04%		
Oct-00					3	22	13.64%		
Nov-00					5	22	22.73%		
Dec-00					3	16	18.75%		
Jan-01					6	17	35.29%		
Feb-01					3	16	18.75%		
Mar-01					3	21	14.29%		
Apr-01					7	25	28.00%		
May-01					10	27	37.04%		
Jun-01					14	31	45.16%		
Jul-01					6	28	21.43%		
Aug-01					7	24	29.17%		



Checklist #4 - Unbundled Loop - ADSL Qwest Retail

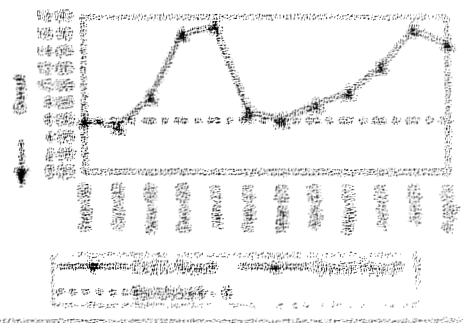
Installation Commitments Met (Percent) (OP-3 – Interval Zone One)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Test 2 Sig	Parity Status
Sep-00				1	2	50.00%		
Oct-00				4	4	100.00%		
Nov-00				3	3	100.00%		
Dec-00				1	1	100.00%		
Jan-01				1	1	100.00%		
Feb-01				3	4	75.00%		
Mar-01				2	2	100.00%		
Apr-01				4	4	100.00%		
May-01				5	7	85.71%		
Jun-01				3	6	50.00%		
Jul-01				7	8	87.50%		
Aug-01				3	8	42.86%		



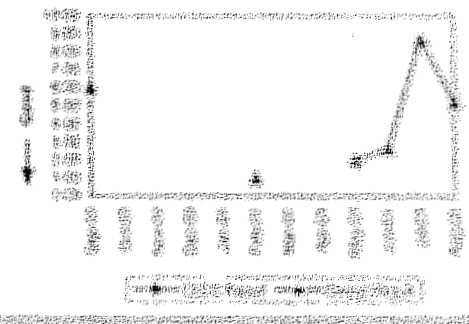
Installation Interval (Average Days) (OP-4 – Interval Zone One)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Test 2 Sig	Parity Status
Sep-00				12	2	6.00		
Oct-00				21	4	5.25		
Nov-00				28	3	9.67		
Dec-00				16	1	16.00		
Jan-01				12	1	12.00		
Feb-01				28	4	7.00		
Mar-01				12	2	6.00		
Apr-01				31	4	7.75		
May-01				64	5	12.80		
Jun-01				73	6	12.17		
Jul-01				155	10	15.50		
Aug-01				130	5	26.00		



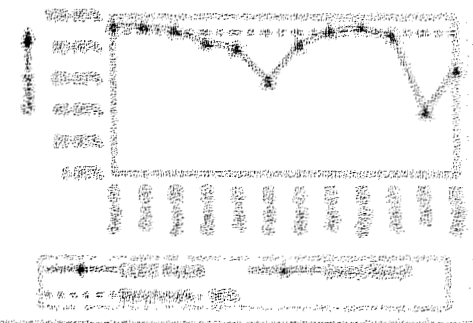
Delayed Days for Non-Facility Reasons (Average Days) (OP-5A – Interval Zone One)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Test 2 Sig	Parity Status
Sep-00				6	1	6.00		
Oct-00								
Nov-00								
Dec-00								
Jan-01								
Feb-01				1	1	1.00		
Mar-01								
Apr-01								
May-01				2	1	2.00		
Jun-01				8	3	2.67		
Jul-01				26	3	8.67		
Aug-01				21	4	5.25		



Installation Commitments Met (Percent) (OP-3 – Interval Zone Two)

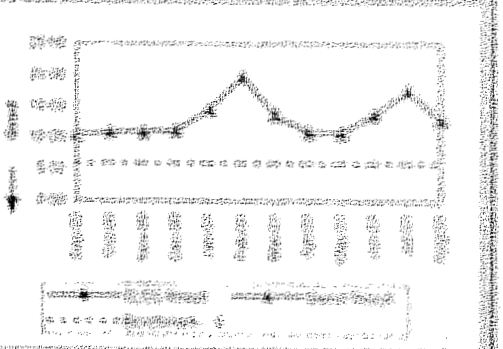
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Test 2 Sig	Parity Status
Sep-00				120	127	94.49%		
Oct-00				175	188	93.09%		
Nov-00				125	137	91.24%		
Dec-00				130	155	83.87%		
Jan-01				139	159	87.42%		
Feb-01				119	272	96.91%		
Mar-01				139	185	92.25%		
Apr-01				123	135	91.11%		
May-01				73	73	94.33%		
Jun-01				47	48	97.92%		
Jul-01				2	5	40.00%		
Aug-01				3	3	66.67%		



Checklist #4 - Unbundled Loops - ADSL Qualified Installation

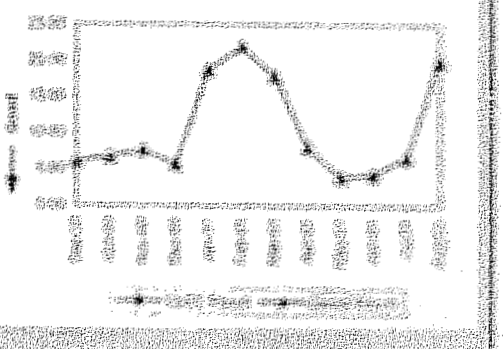
Installation Interval (Average Days) (OP-4 [illegible] Interval Zone Two)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Stat	Parity Status
Sep-00				1334	127	10.50		
Oct-00				2057	169	12.17		
Nov-00				1596	127	12.57		
Dec-00				1749	156	11.21		
Jan-01				1906	131	14.55		
Feb-01				2478	251	19.77		
Mar-01				2267	185	12.25		
Apr-01				1459	132	11.05		
May-01				812	75	10.83		
Jun-01				662	49	13.51		
Jul-01				95	5	19.00		
Aug-01				39	3	13.00		



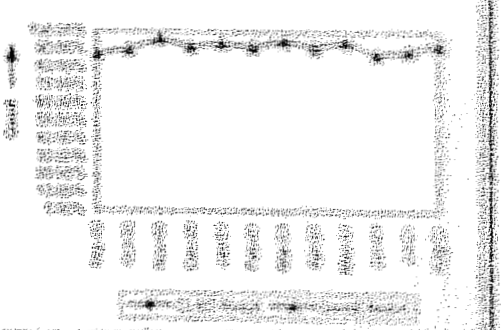
Delayed Days for Non-Facility Reasons (Average Days) (OP-4 [illegible] Interval Zone Two)

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Stat	Parity Status
Sep-00				43	7	6.14		
Oct-00				51	12	4.25		
Nov-00				62	10	6.20		
Dec-00				148	25	5.92		
Jan-01				525	77	6.82		
Feb-01				1824	83	21.98		
Mar-01				646	36	17.94		
Apr-01				97	12	8.08		
May-01				29	5	5.80		
Jun-01				25	4	6.25		
Jul-01				28	5	5.60		
Aug-01				28	1	28.00		



New Service Installation Quality (Percent) (OP-5 [illegible] Interval Zone One and Two)

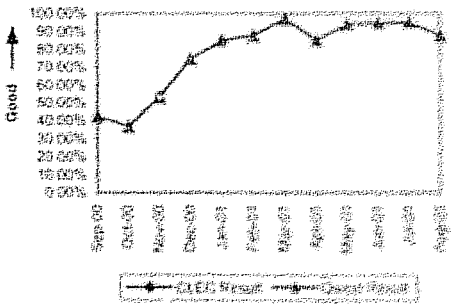
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Stat	Parity Status
Sep-00				101	115	87.83%		
Oct-00				145	164	88.41%		
Nov-00				153	169	90.53%		
Dec-00				137	149	91.95%		
Jan-01				135	147	91.84%		
Feb-01				155	173	89.60%		
Mar-01				180	199	90.45%		
Apr-01				143	157	91.08%		
May-01				107	119	89.92%		
Jun-01				64	73	87.67%		
Jul-01				34	38	89.47%		
Aug-01				13	14	92.86%		



Checklist #4 - Unbundled Loop - ADSL Qualified Repair

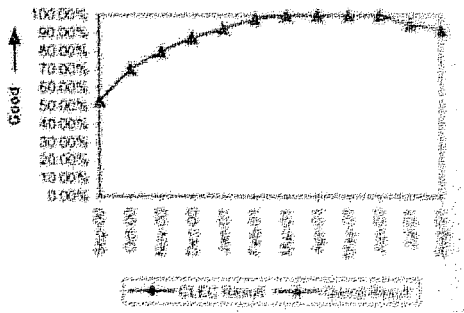
Out of Service Cleared within 24 hours (Percent) (MR-3)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				20	47	42.55%		
Oct-00				10	27	37.04%		
Nov-00				8	15	53.33%		
Dec-00				18	24	75.00%		
Jan-01				35	41	85.37%		
Feb-01				44	50	88.00%		
Mar-01				36	37	97.30%		
Apr-01				35	41	85.37%		
May-01				16	17	94.12%		
Jun-01				38	40	95.00%		
Jul-01				20	21	95.24%		
Aug-01				22	25	88.00%		



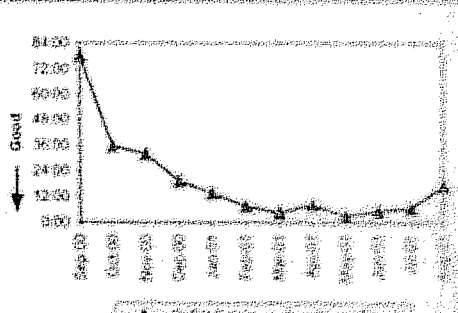
All Troubles Cleared within 48 hours (Percent) (MR-4)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				25	47	53.19%		
Oct-00				19	27	70.37%		
Nov-00				12	15	80.00%		
Dec-00				21	24	87.50%		
Jan-01				38	41	92.68%		
Feb-01				49	50	98.00%		
Mar-01				37	37	100.00%		
Apr-01				41	41	100.00%		
May-01				17	17	100.00%		
Jun-01				40	40	100.00%		
Jul-01				20	21	95.24%		
Aug-01				23	25	92.00%		



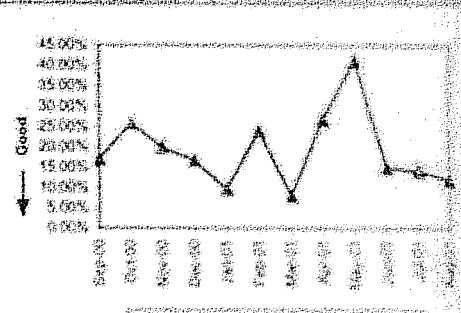
Mean Time to Restore (Hours:Minutes) (MR-6)-- Interval Zone Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				3672:55	47	78:09		
Oct-00				962:41	27	35:39		
Nov-00				479:19	15	31:57		
Dec-00				464:28	24	19:21		
Jan-01				562:08	41	13:42		
Feb-01				382:32	50	7:39		
Mar-01				172:11	37	4:39		
Apr-01				338:09	41	8:15		
May-01				49:06	17	2:53		
Jun-01				208:17	40	5:12		
Jul-01				141:22	21	6:44		
Aug-01				428:50	25	17:09		



Repair Repeat Report Rate (Percent) (MR-7)-- Interval Zone Two

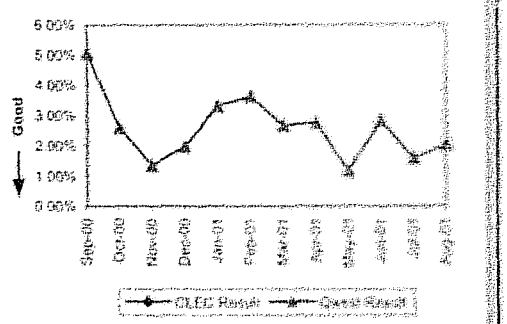
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				8	47	17.02%		
Oct-00				7	27	25.93%		
Nov-00				3	15	20.00%		
Dec-00				4	24	16.67%		
Jan-01				4	41	9.76%		
Feb-01				12	50	24.00%		
Mar-01				3	37	8.11%		
Apr-01				11	41	26.83%		
May-01				7	17	41.18%		
Jun-01				6	40	15.00%		
Jul-01				3	21	14.29%		
Aug-01				3	25	12.00%		



Checklist #4 - Unbundled Loop - ADSL Qualified Repair

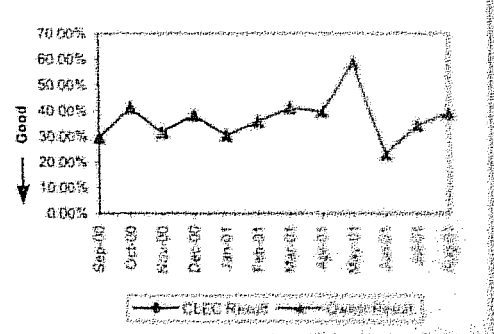
Trouble Rate (Percent) (MR-8)-- Interval Zone One and Two

Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				47	928	5.06%		
Oct-00				27	1038	2.60%		
Nov-00				15	1094	1.37%		
Dec-00				24	1205	1.99%		
Jan-01				41	1233	3.33%		
Feb-01				50	1378	3.63%		
Mar-01				37	1378	2.69%		
Apr-01				41	1482	2.77%		
May-01				17	1455	1.17%		
Jun-01				40	1405	2.85%		
Jul-01				21	1315	1.60%		
Aug-01				25	1224	2.04%		



Customer and Non-Qwest Related Trouble Reports (Percent) (MR-10)-- Interval Zone One and Two

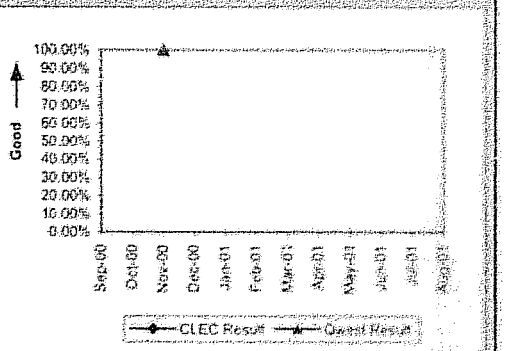
Date	CLEC Num	CLEC Denom	CLEC Result	Qwest Num	Qwest Denom	Qwest Result	Mod Z Scr	Parity Score
Sep-00				20	67	29.85%		
Oct-00				19	46	41.30%		
Nov-00				7	22	31.82%		
Dec-00				15	39	38.46%		
Jan-01				18	59	30.51%		
Feb-01				28	78	35.90%		
Mar-01				26	63	41.27%		
Apr-01				27	68	39.71%		
May-01				24	41	58.54%		
Jun-01				12	52	23.08%		
Jul-01				11	32	34.38%		
Aug-01				16	41	39.02%		



Checklist #4 - Unbundled Loop - Installation for DS3 and Higher

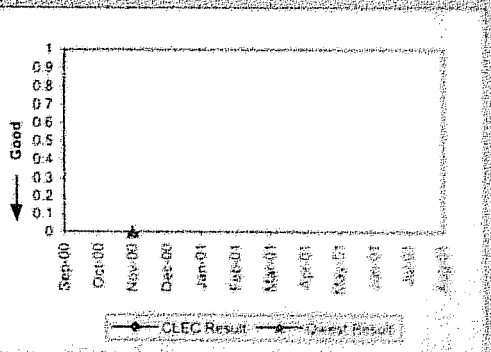
Installation Commitments Met (Percent) (OP-3)-- Interval Zone One

Date	CLEC Num	CLEC Den	CLEC Result	Std Dev	Qwest Num	Qwest Den	Qwest Result	Mod Z Scr	Parity Scr
Sep-00									
Oct-00									
Nov-00					1	1	100.00%		
Dec-00									
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



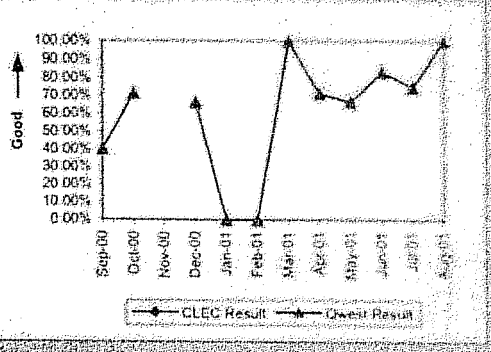
Installation Interval (Average Days) (OP-4)-- Interval Zone One

Date	CLEC Num	CLEC Den	CLEC Result	Std Dev	Qwest Num	Qwest Den	Qwest Result	Mod Z Scr	Parity Scr
Sep-00									
Oct-00									
Nov-00					0	1	0.00		
Dec-00									
Jan-01									
Feb-01									
Mar-01									
Apr-01									
May-01									
Jun-01									
Jul-01									
Aug-01									



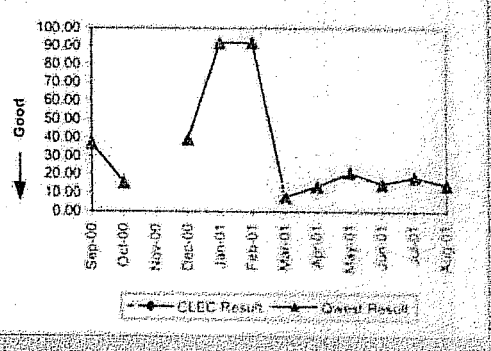
Installation Commitments Met (Percent) (OP-3)-- Interval Zone Two

Date	CLEC Num	CLEC Den	CLEC Result	Std Dev	Qwest Num	Qwest Den	Qwest Result	Mod Z Scr	Parity Scr
Sep-00					2	5	40.00%		
Oct-00					5	7	71.43%		
Nov-00									
Dec-00					2	3	66.67%		
Jan-01					0	4	0.00%		
Feb-01					0	1	0.00%		
Mar-01					2	2	100.00%		
Apr-01					5	7	71.43%		
May-01					2	3	66.67%		
Jun-01					5	6	83.33%		
Jul-01					3	4	75.00%		
Aug-01					1	1	100.00%		



Installation Interval (Average Days) (OP-4)-- Interval Zone Two

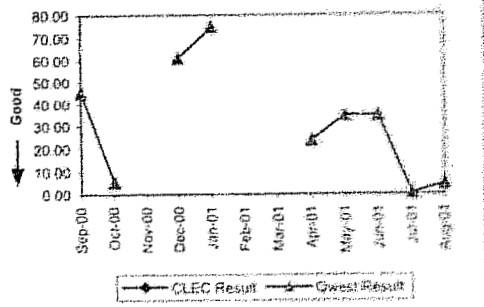
Date	CLEC Num	CLEC Den	CLEC Result	Std Dev	Qwest Num	Qwest Den	Qwest Result	Mod Z Scr	Parity Scr
Sep-00					185	5	37.00		
Oct-00					110	7	15.71		
Nov-00									
Dec-00					118	3	39.33		
Jan-01					368	4	92.00		
Feb-01					92	1	92.00		
Mar-01					16	2	8.00		
Apr-01					96	7	13.71		
May-01					64	3	21.33		
Jun-01					89	6	14.83		
Jul-01					93	5	18.60		
Aug-01					73	5	14.60		



Checklist #4 - Unbundled Loop - Installation for DS3 and Higher

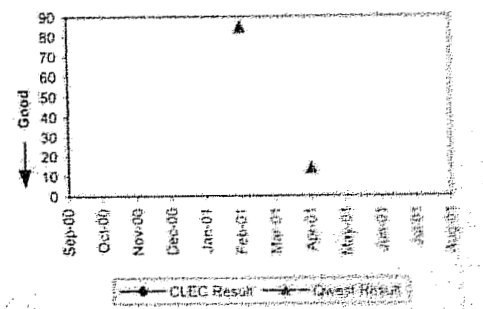
Delayed Days for Non-Facility Reasons (Average Days) (OP-6A)-- Interval Zone Two

Date	CLEC Num	CLEC Dem	CLEC Result	Std Dev	Qwest Num	Qwest Dem	Qwest Result	Mod Z Scr	Parity Scr
Sep-00					135	3	45.33		
Oct-00					11	2	5.50		
Nov-00									
Dec-00					61	1	61.00		
Jan-01					300	4	75.00		
Feb-01									
Mar-01									
Apr-01					24	1	24.00		
May-01					35	1	35.00		
Jun-01					35	1	35.00		
Jul-01					1	2	0.50		
Aug-01					18	4	4.50		



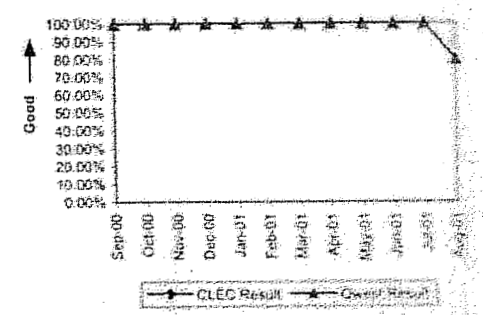
Delayed Days for Facility Reasons (Average Days) (OP-6B)-- Interval Zone Two

Date	CLEC Num	CLEC Dem	CLEC Result	Std Dev	Qwest Num	Qwest Dem	Qwest Result	Mod Z Scr	Parity Scr
Sep-00									
Oct-00									
Nov-00									
Dec-00									
Jan-01									
Feb-01					85	1	85.00		
Mar-01									
Apr-01					14	1	14.00		
May-01									
Jun-01									
Jul-01									
Aug-01									



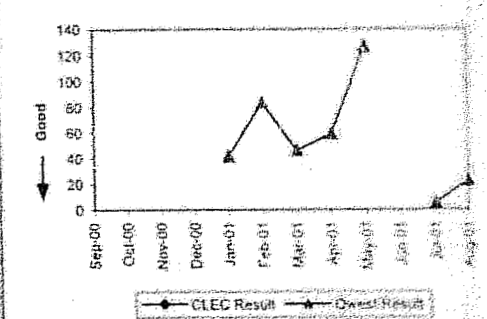
New Service Installation Quality (Percent) (OP-5)-- Interval Zone One and Two

Date	CLEC Num	CLEC Dem	CLEC Result	Std Dev	Qwest Num	Qwest Dem	Qwest Result	Mod Z Scr	Parity Scr
Sep-00					6	6	100.00%		
Oct-00					9	9	100.00%		
Nov-00					10	10	100.00%		
Dec-00					8	8	100.00%		
Jan-01					7	7	100.00%		
Feb-01					5	5	100.00%		
Mar-01					7	7	100.00%		
Apr-01					11	11	100.00%		
May-01					9	9	100.00%		
Jun-01					8	8	100.00%		
Jul-01					8	8	100.00%		
Aug-01					4	5	80.00%		



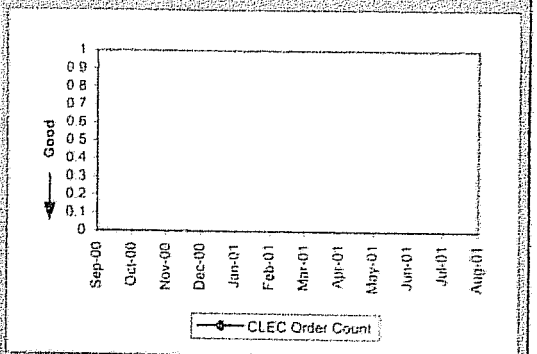
Interval for Pending Orders Delayed Past Due Date (Average Days) (OP-15A)

Date	CLEC Num	CLEC Dem	CLEC Result	Std Dev	Qwest Num	Qwest Dem	Qwest Result	Mod Z Scr	Parity Scr
Sep-00									
Oct-00									
Nov-00									
Dec-00									
Jan-01					42	1	42.00		
Feb-01					168	2	84.00		
Mar-01					93	2	46.50		
Apr-01					119	2	59.50		
May-01					127	1	127.00		
Jun-01									
Jul-01					11	2	5.50		
Aug-01					92	4	23.00		



Checklist #4 - Unbundled Loop - Installation for DS3 and Higher

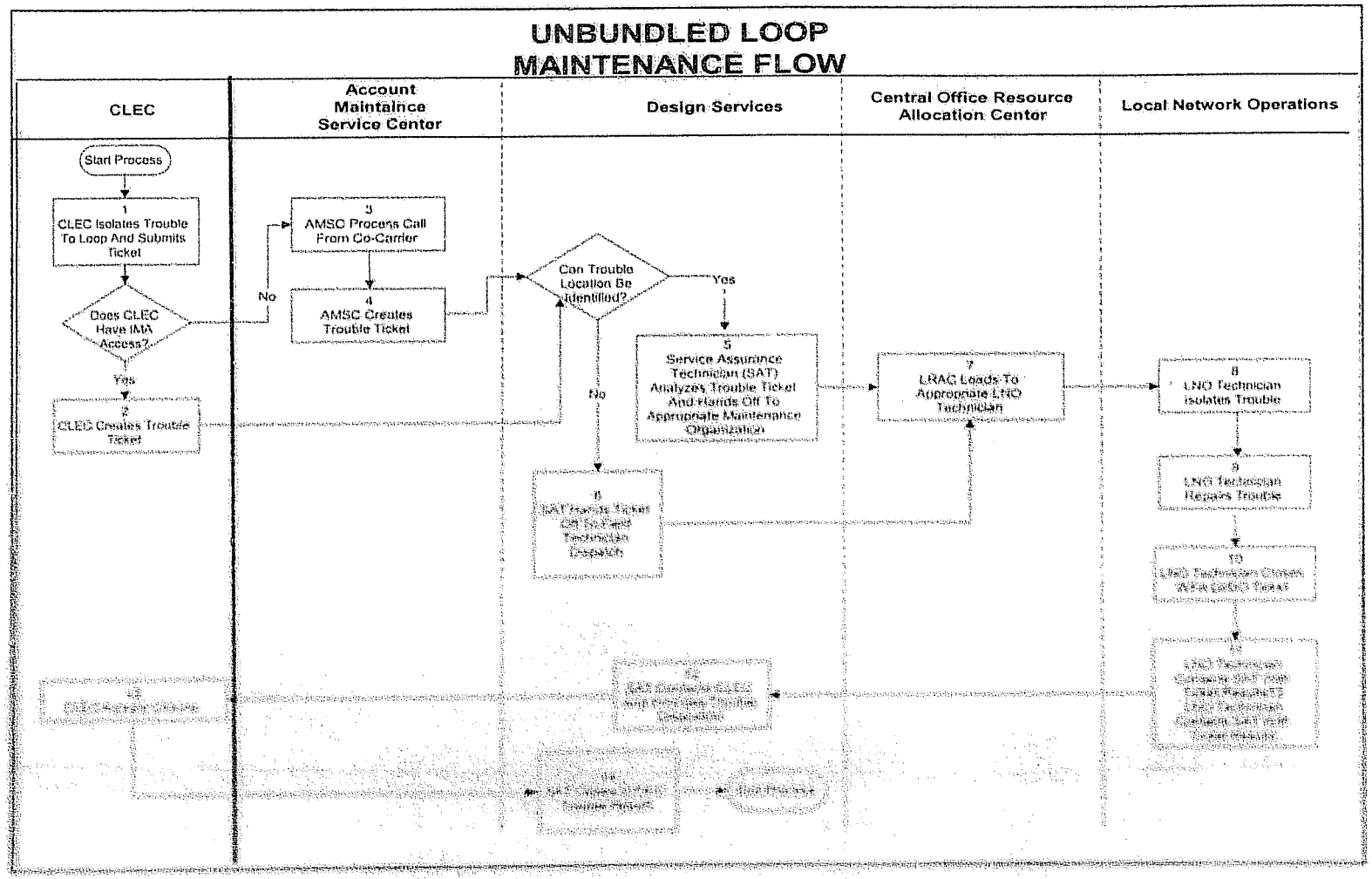
	CLEC Order Count



CONTINUATION

[7]

Scan ~ _____ ~ # Pages [___]


UNBUNDLED LOOP
MAINTENANCE FLOW
CLEC
Account Maintaince Service Center
Design Services
Central Office Resource Allocation Center
Local Network Operations
Start Process
1
CLEC Isolates Trouble To Loop And Submits Ticket
Does CLEC Have IMA Access?
No
Yes
2
CLEC Creates Trouble Ticket
3
AMSC Process Call From Co-Carrier
4
AMSC Creates Trouble Ticket
Can Trouble Location Be Identified?
Yes
No
5
Service Assurance Technician (SAT) Analyzes Trouble Ticket And Hands Off To Appropriate Maintenance Organization
7
LRAC Loads To Appropriate LNO Technician
8
LNO Technician Isolates Trouble
9
LNO Technician Repairs Trouble

CONTINUATION

[8]

Unbundled Local Loop 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 2 and 3 are required.
3	Process ticket received from CLEC
4	Trouble ticket created
5	Analyze trouble ticket, identify location, and assign to appropriate organization
6	When trouble location cannot be identified, ticket assigned to Installation & Maintenance Technician
7	Trouble ticket received in Network Operations
8	Trouble is isolated
9	Trouble repaired
10	Trouble ticket updated
11	Contact SAT with ticket results
12	CLEC notified
13 and 14	CLEC accepts service and Trouble ticket closed

3.7.2 Available Advanced Digital Channel NCI Codes

Table 3-? Advanced Digital NCI Protocol and Protocol Option Codes

Protocol Code 3 4	Protocol Option 7 8 9	Definition
Q B		Central Office Manual Cross-Connect Termination with No Subscribing Capability
	0 0 F	HDSL4, Technology Specific. Transmission System Per ANSI Standard T1.417
	0 0 G	G.shdsl, Technology Specific. Transmission System Per ANSI Standard T1.417
	0 0 S	2B1Q SDSL, Technology Specific. Transmission System Per ANSI Standard T1.417
	0 0 1	Spectrum Management Class 1, Per ANSI Standard T1.417
	0 0 2	Spectrum Management Class 2, Per ANSI Standard T1.417
	0 0 3	Spectrum Management Class 3, Per ANSI Standard T1.417
	0 0 4	Spectrum Management Class 4, Per ANSI Standard T1.417
	0 0 5	Spectrum Management Class 5, Per ANSI Standard T1.417
	0 0 6	Spectrum Management Class 6, Per ANSI Standard T1.417
	0 0 7	Spectrum Management Class 7, Per ANSI Standard T1.417
	0 0 8	Spectrum Management Class 8, Per ANSI Standard T1.417
	0 0 9	Spectrum Management Class 9, Per ANSI Standard T1.417
D U		End User Digital Access Interface
	0 0 F	HDSL4, Technology Specific. Transmission System Per ANSI Standard T1.417
	0 0 G	G.shdsl, Technology Specific. Transmission System Per ANSI Standard T1.417
	0 0 S	2B1Q SDSL, Technology Specific. Transmission System Per ANSI Standard T1.417
	0 0 1	Spectrum Management Class 1, Per ANSI Standard T1.417
	0 0 2	Spectrum Management Class 2, Per ANSI Standard T1.417
	0 0 3	Spectrum Management Class 3, Per ANSI Standard T1.417
	0 0 4	Spectrum Management Class 4, Per ANSI Standard T1.417
	0 0 5	Spectrum Management Class 5, Per ANSI Standard T1.417
	0 0 6	Spectrum Management Class 6, Per ANSI Standard T1.417
	0 0 7	Spectrum Management Class 7, Per ANSI Standard T1.417
	0 0 8	Spectrum Management Class 8, Per ANSI Standard T1.417
	0 0 9	Spectrum Management Class 9, Per ANSI Standard T1.417

Table 3-7: Advanced Digital Transport Loop NC/NCI Code Combinations

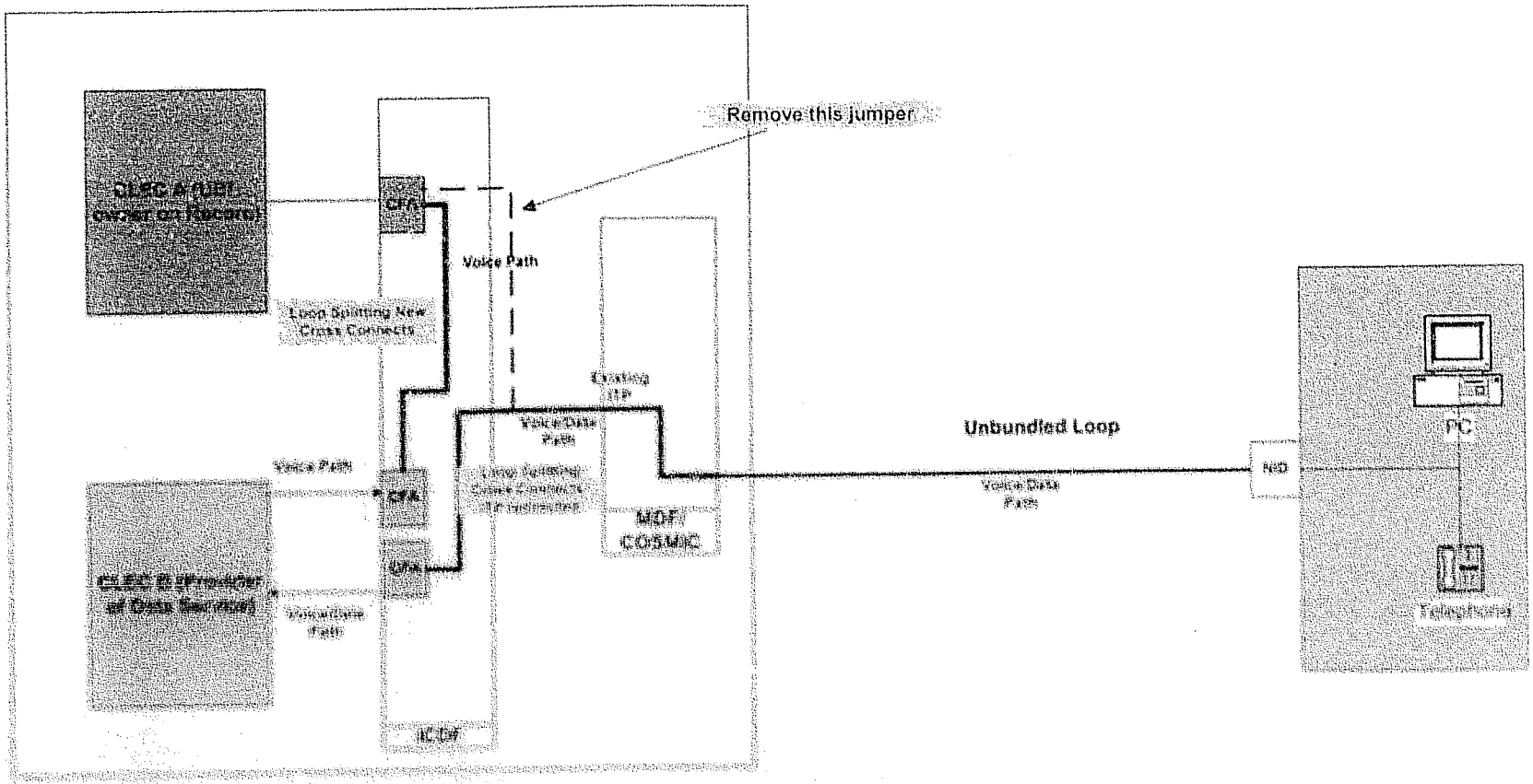
NC Code	NCI Code		DESCRIPTION
	Qwest CO-NI	End-User EU-NI	
ADVANCED DIGITAL TRANSPORT			
LX-N	02QB5.001	02DU5.001	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management Class 1
LX-N	02QB5.002	02DU5.002	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management Class 2
LX-N	02QB5.003	02DU5.003	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management Class 3
LX-N	02QB5.004	02DU5.004	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI T Standard. 1.417 Spectrum Management Class 4
LX-N	02QB5.005	02DU5.005	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard T1.417 Spectrum Management Class 5
LX-N	02QB5.006	02DU5.006	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management Class 6
LX-N	02QB5.007	02DU5.007	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management Class 7
LX-N	02QB5.008	02DU5.008	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management Class 8
LX-N	02QB5.009	02DU5.009	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management Class 9
LX-N	02QB5.00F	02DU5.00F	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard. T1.417 Spectrum Management HDSL4. Technology Specific. Transmission System Per ANSI Standard T1.417

LX-N	02QB5.00G	02DU5.00G	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard, T1.417 Spectrum Management Global, Technology Specific. Transmission System Per ANSI Standard T1.417
LX-N	02QB5.00S	02DU5.00S	Advanced Digital Transport Loop. Signals at interfaces conform to ANSI Standard, T1.417 Spectrum Management 2B1Q DSL, Technology Specific. Transmission System Per ANSI Standard T1.417

CONTINUATION

[9]

Scan ~ _____ ~ # Pages [___]



Loop Splitting

CLEC A is Owner of Record of Unbundled Loop (Voice provider) and CLEC B provides Data (POTS Splitter resides within Collocation Area)

CONTINUATION

[10]

UNE-P LINE SPLITTING SCENARIOS

	END USER CURRENTLY HAS:	END USER TRANSITIONS TO:	CLEC ACTION	DSL SERVICE would be same as different than CLEC	Description
1.	**Qwest voice service** **Qwest Megabit™ service** **(this is happening today)**	UNE-P combination service *without* Qwest DSL service	Submit LSR to convert to UNE-P combination service, specifying removal of Qwest DSL service	N/A	CLEC submits the service order to convert Megabit customer's service to UNE-P combination
	Qwest voice service **Qwest DSL service**	UNE-P combination service with Qwest DSL service	Submit LSR to convert to UNE-P combination service, specifying maintenance of Qwest DSL service	N/A	CLEC submits service order to convert Qwest DSL service to UNE-P combination
	UNE-P combination service	UNE-P combination service with Qwest DSL service	Submit LSR to add Qwest DSL service	N/A	CLEC submits service order to add Qwest DSL service to UNE-P combination
	Qwest voice service **Qwest DSL Host Volume Discount Program**	UNE-P combination service without Qwest DSL service (Qwest DSL Host Volume Discount Program - providing Qwest DSL service to end-users on behalf of Volume Internet Service Providers) is not available with UNE-P combination service.	Submit LSR to convert to UNE-P combination service	DSL service would have to be moved from Qwest	CLEC submits service order to convert Qwest DSL service to UNE-P combination
2.	**Qwest voice service** **Qwest Megabit™ service**	CLEC voice service DLEC data service	Submit LSR to convert to UNE-P Submit LSR for Line Splitting Process UNE-P Cut & follow procedures to make line splitting	Provide CLEC with DSL service equipment alternative CLEC makes coordination agreement	CLEC submits service order to convert Megabit customer's service to UNE-P combination CLEC submits Line Splitting service order to Qwest CLEC and DLEC coordinate cutover
3.	**Qwest voice service** **DLEC data service (Line Sharing)** **(this is happening today)**	CLEC voice service only via UNE-P	Submit LSR request for UNE-P	DLEC will have to agree with CLEC	CLEC submits service order to convert Qwest voice service to UNE-P combination CLEC and DLEC coordinate cutover

4	Qwest voice service DLEC data service (Line Sharing)	CLEC voice service DLEC data service (remains same as Line Sharing DLEC)	Submit LSR request for UNE-P Submit LSR request for Line Splitting Populate RPON field & follow procedures to order line sharing	Line Sharing billing removed from Summary Bill. DLEC receive loss report CLEC receive completion report	UNE-P conversion activity re-classifies voi service. Line Sharing i removed . Conversion order created. Line Sharing billing removed from Summar Bill of DLEC. POC the UNE-P order a add Line Splitting UNE-P & Line Splitting billing submitted to CLEC.
5	Qwest voice service DLEC data service	CLEC voice service DLEC(different than existing data provider)	Submit LSR request for UNE-P Submit LSR for Line Splitting. Populate RPON field & follow procedures to order line sharing	DLEC receives loss report CLEC receives completion report	UNE-P conversion activity re-classifies voi service. Line Sharing is removed. Conversion order created with standard due date Line Sharing billing removed from Summar Bill of DLEC. UNE-P & Line Splitting billing submitted to CLEC.
6	UNE-P	UNE-P with Line Splitting	Submit LSR for Line Splitting	CLEC receives completion report	Issue C order to establi Line Splitting
7	UNE-P with Line Splitting	UNE-P only	Submit LSR to remove Line Splitting	CLEC receives loss report	Issue C order to remove Line Splitting
8	UNE-P with Line Splitting	Complete disconnect	Submit LSR for complete disconnect of UNE-P	CLEC receives loss report	Issue D order to remove UNE-P and Line Splitt
9	UNE-P with Line Splitting	UNE-P change Data provider	Submit LSR for conversion from one DATA provider to another	CLEC receives a loss and completion report	Issue C order to change data providers
10	UNE-P with Line Splitting	T&F service	Submit T&F request for UNE-P	CLEC receives a loss report	Issue T&F order, line splitting is removed at t T
11	UNE-P with Line Splitting	Change of responsibility of UNE-P	Submit change of responsibility		Issue order to ownershi of UNE-P (keeps Line Splitting)

LOOP SPLITTING SCENARIOS

Current:	Transition To:	Customer of Record Will:	Qwest action:	
Established Unbundled Loop (other UNE, or UNE)	Loop Splitting	Submit LSR for Loop Splitting	Issue service order to add Loop Splitting on the Unbundled Loop	
Established Unbundled Loop (other UNE, or UNE) with Loop Splitting	Unbundled Loop	Submit LSR to remove Loop Splitting	Issue service order to remove Loop Splitting from Unbundled Loop	
Established Unbundled Loop (other UNE, or UNE) with Loop Splitting	Changing splitter	Submit LSR to change splitter	Issue service order to change splitter	
Established Unbundled Loop (other UNE, or UNE) with Loop Splitting	Change second provider	Submit LSR to change provider	Issue service order to change provider	
Established Unbundled Loop (other UNE, or UNE) with Loop Splitting	UNE-P with Line Splitting	New LSP will issue LSR for UNE-P POTS Second LSR for Line Splitting with RPON	Issue order for UNE-P POTS removing UBL and Loop splitting Issue order from second LSR adding Line Splitting to UNE-P POTS account	
Established Unbundled Loop (other UNE, or UNE) with Loop Splitting	Shared Loop (retail)	Data provider will: issue LSR for Shared Loop	Qwest retail will send LSR to ISC to Disconnect the UNBNDLD LOOP and issue a New Connect for the End User Qwest Wholesale will issue order to add Shared Loop on account	
Established Unbundled Loop (other UNE, or UNE) with Loop Splitting	Shared Distribution Loop (retail)	Data provider will: issue LSR for Shared Disribution Loop	Qwest retail will send LSR to ISC to Disconnect the UNBNDLD LOOP and issue a New Connect for the End User Qwest Wholesale will issue order to add Shared Distribution Loop on account	

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

KAREN A. STEWART

CHECKLIST ITEM 5 – UNBUNDLED LOCAL TRANSPORT

OCTOBER 24, 2001

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AFFIDAVIT

OF

KAREN A. STEWART

Checklist Item 5 – Unbundled Local Transport

Karen A. Stewart states as follows:

My name is Karen A. Stewart. I am a Senior Staff Advocate, Policy and Law for Qwest Corporation ("Qwest"). My office is located at 421 SW Oak Street, Portland, Oregon. I base this affidavit on professional experience, personal knowledge, and information available to me in the normal course of my duties. Exhibit KAS-TR-1 contains my qualification summary.

I. EXECUTIVE SUMMARY

The purpose of this affidavit is to demonstrate that Qwest has complied with item number 5 of the checklist contained in Section 271(c)(2)(B) of the Telecommunications Act of 1996 ("the Act") concerning unbundled local transport. Specifically, Qwest provides access to dedicated and shared transport unbundled from other services.

The term "local transport" encompasses two categories, dedicated transport and shared transport. Dedicated transport refers to transmission facilities dedicated to a particular customer or carrier. Shared transport refers to transmission facilities shared by more than one carrier, including the incumbent local exchange carrier ("ILEC").

Qwest provides access to unbundled local transport in a nondiscriminatory manner. The only limitations Qwest imposes are those authorized by the Federal

Communications Commission ("FCC") and the South Dakota Public Utilities Commission ("Commission").

In its SGAT, Qwest has undertaken a concrete and specific legal obligation to provide competitive local exchange carriers ("CLECs") with access to unbundled transport in substantially the same time and manner as Qwest provides those network elements to itself, and in a manner that offers CLECs a meaningful opportunity to compete.[1] Qwest has already installed unbundled local transport facilities for CLECs in South Dakota.

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

Section 271(c)(2)(B)(v) of the Act requires a Bell Operating Company ("BOC") to provide "local transport from the trunk side of a wireline local exchange carrier switch unbundled from switching or other services."[2] BOCs are required to provide all technically feasible capacity-related services, as well as higher capacities as they evolve over time.[3] The FCC requires that BOCs provide both dedicated and shared

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1 SGAT § 9.1.2.

2 47 U.S.C. § 271(c)(2)(B)(v); *see also* 47 C.F.R. § 51.319(d) ("An incumbent LEC shall provide nondiscriminatory access . . . to interoffice transmission facilities on an unbundled basis to any requesting telecommunications carrier for the provision of a telecommunications service.").

3 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, ¶ 323 (rel. Nov. 5, 1999) ("UNE Remand Order").

transport to requesting carriers.[4] Shared transport need only be offered to CLECs that also request unbundled local switching,[5] because it is not technically feasible to use shared transport in conjunction with self-provisioned switching.[6]

Qwest has completed 271 workshops for transport in the states of Arizona, Colorado, Nebraska, Oregon, and Washington, and in the multistate proceeding which includes Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming. The workshop process spanned more than one year and involved detailed and rigorous negotiations in which the parties reached consensus on all possible issues related to unbundled transport. The revised South Dakota SGAT attached to this petition has been updated to incorporate changes to the SGAT agreed to in these other 271 unbundled transport workshops.

Examples of changes Qwest has made to its unbundled transport offering as a result of 271 workshops include:

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4 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 No. 98-271, 13 FCC Rcd 20599 ¶ 201 (rel. Oct. 13, 1998) ("BellSouth Louisiana II Order"); *see also* Joint Application by SBC Communications, Inc., Southwestern Bell Telephone Co., and Southwestern Bell Communications Services, Inc. d/b/a 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, ¶ 331 (rel. Jan. 22, 2001) ("SBC Kansas Oklahoma Order").

5 UNE Remand Order, fn. 127.

6 UNE Remand Order, ¶ 372.

Requiring Multiplexers for Access to Transport - A CLEC expressed concern about whether the SGAT Section 9.6.1.2 reference to an unbundled multiplexer as a stand-alone element meant that CLECs would have to acquire it to get transport as an unbundled network element ("UNE"). Qwest changed the section to clarify that such multiplexers were not required, but were available at the option of CLECs.

Cross Connecting UDIT and E-UDIT - A CLEC objected to the requirement of SGAT 9.6.2.1 that CLECs pay for the costs of cross connecting UDIT and E-UDIT when they are in fact a single element. Qwest has eliminated any cross connect charges between UDIT and E-UDIT, thus addressing the CLEC's concerns.

Rates for OC-48 unbundled transport – CLECs requested set rates, versus, ICB rates, for OC-48 level unbundled transport. Qwest agreed and Exhibit A to the SGAT contains the rates in South Dakota.

Qwest's technical publications were also reviewed in the 271 workshops. Qwest technical specifications for the revised unbundled transport including interfaces and parameters are described in Technical Publication 77389. Qwest technical publications have recently been made available to CLECs on the following URL: http://www.uswest.com/techpub/.[7]

In addition, the Wholesale Product Catalog ("PCAT") provides CLECs with additional product information. CLECs can access the PCAT at URL: http://www.qwest.com/wholesale/pcat/. These are just a few examples of the

[7]

consensus reached by Qwest and CLECs through the workshop process. I believe that through the long workshop process, the parties have reached consensus on all transport issues for which consenus is possible.

A. Dedicated Transport

Qwest has a legal obligation to provide, and is currently providing, unbundled dedicated transport to CLECs in South Dakota. Qwest's dedicated transport offerings provide CLECs with a single transmission path between Qwest end offices, serving wire centers, or tandem switches in the same LATA and state; they also include a bandwidth-specific transmission path between the Qwest serving wire center and the CLEC's wire center or an interexchange carrier's point of presence located within the same Qwest serving wire center area.[8] Qwest offers dedicated transport in DS0 through OC-192 bandwidths, as well as such higher capacities that evolve over time.[9]

An unbundled multiplexer is offered as an optional feature associated with dedicated transport and (unbundled loops).[10] SONET add/drop multiplexing is available on an individual case basis where facilities are available and capacity exists.[11]

If a CLEC orders a UNE combination that includes dedicated transport facilities, Qwest will perform requested and necessary cross connections between UNEs in the same manner that it would perform such cross connections for its own end user

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8 SGAT § 9.6.1.1.

9 SGAT § 9.6.1.1.

10 SGAT § 9.6.1.2.

11 SGAT § 9.6.1.2.

customers.[12] When transport is ordered separately (i.e., not as part of a UNE combination), the CLEC is responsible for performing cross connections at its collocation or other mutually determined demarcation point, but such cross connections are not required when a CLEC orders a continuous dedicated transport element from one point to another.[13] To the extent that collocation is required for a CLEC to take advantage of dedicated transport facilities, the CLEC may utilize any form of collocation.[14]

As of August 31, 2001, Qwest had provided 3 unbundled dedicated transport facilities for 2 CLECs in South Dakota.[15]

In the Qwest SGAT, the unbundled transport rate element for transport between Qwest Wire Centers is called Unbundled Dedicated Interoffice Transport ("UDIT"). UDIT is a distance-sensitive, flat-rated bandwidth-specific interoffice transmission path designed to a digital cross-connect system in each Qwest wire center.

For unbundled transport between a Qwest wire center and CLEC wire center the rate element is called Extended Unbundled Dedicated Interoffice Transport ("E-UDIT"). E-UDIT, like an entrance facility, provides a CLEC with a bandwidth specific transmission path between the Qwest serving wire center to CLEC's wire center or an IXC's point of presence located within the same Qwest serving wire center area.

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12 SGAT § 9.6.2.1.

13 SGAT § 9.6.2.1.

14 SGAT § 9.6.2.3.

15 Official Qwest Wholesale Volumes Report, August 31, 2001.

E-UDIT is a flat-rated, bandwidth-specific interoffice transmission path. Exhibit KAS-TR-2 provides a diagram of UDIT and E-UDIT. UDIT's two components are priced differently to reflect the way costs are incurred.

By delineating the unbundled dedicated transport between the Qwest serving wire center and the CLEC central office as "E-UDIT", Qwest's intent was to clearly identify that this specific segment of dedicated transport has historically been recovered in cost models and resultant rate schedules as a non-distance sensitive rate element. All other "interoffice" transport has typically been "cost modeled" and rated on a fixed and per mile basis.

For example, other transport services have this segment of "transport" as a non-distance sensitive rate component, e.g., in Switched Access Services or Local Interconnection Trunks it is an "entrance facility" and in retail private line tariffs it is typically called a "channel termination".

This is a standard industry practice on how to rate dedicated transport. The FCC suggested use of existing rates for interstate dedicated switched transport as a default proxy for unbundled dedicated transport.[16] The FCC actually gave an example of the price structure difference between the equivalent of UDIT and E-UDIT:

> Interstate access rates for dedicated transport vary by region, type of circuit, mileage, and other factors. For example, BellSouth's entrance facility charge, for transport from an IXC's point of presence to a BellSouth

[16] Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, First Report and Order, CC Docket Nos. 96-98 and 95-185, FCC 96-325, 11 FCC Rcd 15499, ¶ 621 (rel. Aug. 8, 1996) ("Local Competition Order").

serving wire center, is $134 monthly per DS1 circuit ($5.58 per derived voice grade circuit) and $2,100 monthly per DS3 circuit ($3.13 per derived voice grade circuit). Dedicated transport for 10 miles of interoffice transmission between a serving wire center and an end office is $333 monthly per DS1 circuit ($13.54 per derived voice grade circuit) and $2,950 monthly per DS3 circuit ($4.39 per derived voice grade circuit). Installation, multiplexing and other transport-related charges may also apply.[17]

Moreover, SBC's Texas 271 Agreement provides for a price structure similar to Qwest's distinction between UDIT and E-UDIT:

> The price for dedicated transport is found in Appendix Pricing – UNE Schedule of Prices labeled "Interoffice Transport." Entrance facility rates are found in Appendix Pricing – UNE Schedule of Prices, labeled as "Dedicated Transport, Entrance Facilities."[18]

In summary, Qwest is offering dedicated unbundled transport under rates terms and conditions that are in compliance with the Act and the FCC's rules.

B. Shared Transport.

Qwest provides shared transport transmission facilities between end office switches, between end office and tandem switches, and between tandem switches in its network, as required by the FCC.[19] Qwest provides shared transport in a way that enables the traffic of a CLEC to be carried on the same transport facilities that Qwest uses for its own traffic.[20]

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17 Local Competition Order, fn. 1948.

18 T2A, Attachment UNE-TX, Section 8.2.1.

19 SGAT § 9.8.2.1; *see also* UNE Remand Order, ¶ 378; BellSouth Louisiana II Order, ¶ 204.

20 SGAT § 9.8.2.3(a).

ILECs are required to provide unbundled shared transport only where they also provide unbundled switching[21] (as the FCC noted, it is not technically feasible for a competitor to use shared transport with self-provisioned switching[22]). In compliance with this requirement, Qwest offers unbundled shared transport in conjunction with unbundled local switch ports and as part of its Unbundled Network Element-Platform ("UNE-P") offering.[23] Shared transport is automatically provisioned when a CLEC orders switching unless the CLEC requests otherwise.

Qwest permits CLECs that purchase unbundled shared transport and unbundled switching to use the same routing table that is resident in Qwest's switch.[24] A CLEC has the option, however, of using custom routing to direct its end user's operator services and directory assistance calls in a different manner than Qwest routes its own operator services and directory assistance calls.[25] For this application, the CLEC provides Qwest the information necessary for Qwest to create a custom routing table that is programmed within the Qwest central office switch.

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21 UNE Remand Order, ¶ 369.

22 UNE Remand Order, ¶ 372.

23 SGAT § 9.8.2.1.

24 SGAT § 9.8.2.3(c).

25 SGAT § 9.8.2.2.

Qwest permits CLECs to use shared transport as an unbundled element to carry originating access traffic from, and terminating to, customers to whom the CLECs provide local exchange service.[26]

C. Access to Digital Cross-Connect Facilities

FCC rules require that an ILEC permit, to the extent technically feasible, a requesting CLEC to obtain the functionality provided by the ILEC's digital cross-connect systems in the same manner that the ILEC provides such functionality to interexchange carriers.[27] To comply with this requirement, Qwest offers CLECs a capability called Unbundled Customer Controlled Rearrangement Element ("UCCRE").[28] UCCRE gives CLECs access to Qwest's digital cross-connect system and provides the means by which a CLEC can control the configuration of unbundled network elements or ancillary services on a near real-time basis. UCCRE is available in Qwest wire centers that contain a digital cross-connect system that is UCCRE compatible.[29] Qwest has received no requests for UCCRE in South Dakota, but the Bench Test discussed below also tested and confirmed Qwest's ability to provide UCCRE upon request.

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26 SGAT § 9.8.2.3(d).

27 47 C.F.R. § 51.319(d)(2)(iv).

28 SGAT § 9.9.

29 SGAT § 9.9.1.

D. Unbundled Transport Provisioning and Maintenance

Prior to receiving commercial volumes for transport, Qwest conducted a "Bench Test," which demonstrated that Qwest could, upon request, provision and maintain unbundled transport in a timely and nondiscriminatory manner.

Under the Bench Test, the provisioning of unbundled transport, as well as the repair, maintenance, and billing related to the transport element, were tested. In the test, actual "CLEC" unbundled network element orders were successfully placed and fulfilled. A local service request ("LSR") or access service request ("ASR") was completed and sent to the Service Delivery Coordinator, and orders were then sent through the entire provisioning process, using all of the appropriate Operational Support Systems ("OSS"). Unbundled transport was successfully provisioned, and billing was established.

The Bench Test also included the transmission of "test calls" over the unbundled elements that were provisioned. The test calls generated local minutes of use that were captured by AMA equipment, allowing a summary bill to be created. After provisioning was completed, trouble reports were processed to test and validate Qwest processes and procedures for the repair/maintenance of these services. A complete description of the 1999 Bench Test methodology and the results of the test are contained in Exhibit KAS-TR-3.

More recently, Qwest has demonstrated its ability to provide shared transport through its success in provisioning UNE-P, a standard UNE combination that includes

shared transport and unbundled switching. Please see the affidavit of Ms. Lori Simpson for detailed information regarding Qwest's provisioning of UNE-P in South Dakota.

Qwest is providing all components of unbundled local transport on a nondiscriminatory basis. Shared transport is provided to CLECs via the same transport facilities Qwest uses for its own calls (in every instance except where the CLEC chooses to route operator services and directory assistance calls differently), so there is no discrimination in access to these facilities.

Qwest will provision unbundled dedicated transport in South Dakota utilizing a defined order and provisioning flow. Exhibit KAS-TR-4 contains a flowchart and task list that delineates the tasks performed by Qwest personnel in order to provide unbundled transport. This exhibit also includes a matrix that describes each of the work tasks identified in the flow chart. Qwest will follow these steps each time unbundled transport is ordered in South Dakota.

The unbundled switching process and provisioning flows contained in the testimony of Lori Simpson are also used for unbundled shared transport. There is no need for a separate process flow for shared transport since shared transport is automatically provisioned with unbundled switching unless the CLEC specifically selects otherwise.

Qwest maintains unbundled transport in South Dakota utilizing defined maintenance flows. Exhibit KAS-TR-5 contains a flowchart and task list that delineates the tasks performed by Qwest personnel in order to maintain unbundled transport and a matrix that describes all of the work identified in the flow chart. In summary, Qwest and

CLEC will perform cooperative testing and trouble isolation to identify where trouble points exist. If required, CLEC cross-connections will be repaired by the CLEC, and Qwest cross connections will be repaired by Qwest.[30] Maintenance and repair of shared transport facilities are the sole responsibility of Qwest.[31]

E. Performance Measurements for Unbundled Transport

Currently, the parties in the ROC proceeding have agreed that Qwest should track 10 different performance measurements for dedicated unbundled transport. These measurements concern either the installation/provisioning of DS1 and above DS1 UDITs or the repair/maintenance of these facilities. The agreed-upon measurements for unbundled transport are listed in the table below. The definitions for these performance indicators can be found in the affidavit of Mr. Michael Williams.

Indicator Number	***Checklist Item 5 Performance Indicator***
OP-3	Installation Commitments Met
OP-4	Installation Interval
OP-5	New Service Installation Without Trouble Reports for 30 Days After Installation
OP-6	Delayed Days
OP-15	Interval for Pending Orders Delayed past Due Date
MR-5	Out of Service Cleared within 4 Hours (designed repair process)
MR-6	Mean Time to Restore
MR-7	Repair Repeat Report Rate
MR-8	Trouble Rate
MR-10	Customer Related Trouble Reports

30 SGAT § 9.6.5.1.1.

31 SGAT § 9.8.5.1.

On September 25, 2001, the Liberty Consulting Group, an independent third party retained as part of the ROC OSS Test, completed its audit of Qwest's performance measures (PIDs) and concluded that "the audited performance measures accurately and reliably report actual Qwest performance."[32] Qwest has offered to have Liberty verify its audit by conducting data reconciliation with any CLEC that believes Qwest's performance data is inaccurate. No party has questioned the authenticity or accuracy of the performance data specific to unbundled transport.

As of August 31, 2001, Qwest had provisioned 3 UDIT orders in South Dakota. This minimal volume does not allow for statistically significant performance result comparisons.

III. SUMMARY AND CONCLUSION

Qwest satisfies the unbundled transport requirements of sections 271(c)(2)(B)(v) and 271(c)(2)(B)(v). Qwest is providing unbundled local transport, including unbundled dedicated and shared transport, in a nondiscriminatory manner to CLECs in South Dakota. Qwest's compliance with checklist item 5 provides CLECs a meaningful opportunity to compete in South Dakota. This Commission should find that Qwest has satisfied checklist item 5.

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[32] *See* Liberty Consulting Final Performance Measures Audit Report at 2-3 which is attached to the Affidavit of Michael G. Williams regarding Performance Measures as Exhibit MGW-PERF-2.

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 TC01-

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 11th day of October, 2001.

Karen A. Stewart
Karen A. Stewart

STATE OF Oregon

COUNTY OF Multnomah

Subscribed and sworn to before me this 11 day of October 2001.

Janice Kay Kerr
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

KAREN A. STEWART

CHECKLIST ITEM 5 – UNBUNDLED LOCAL TRANSPORT

OCTOBER 24, 2001

INDEX TO EXHIBITS

QUALIFICATIONS OF KAREN A. STEWART

I received a Bachelor of Science degree in Business Administration from Portland State University in 1980, and a Masters degree in Business Administration from the University of Oregon in July 1994. I have been employed by Qwest (previously known as Pacific Northwest Bell and U S WEST) since 1981. I have held a variety of positions in Qwest, including sales, product management, regulatory affairs, issues management, and E911 project management and technical design. Currently I am responsible for representing Qwest in a number of 271 workshops related to Qwest's provisioning of unbundled network elements (UNEs).

CONTINUATION

[11]

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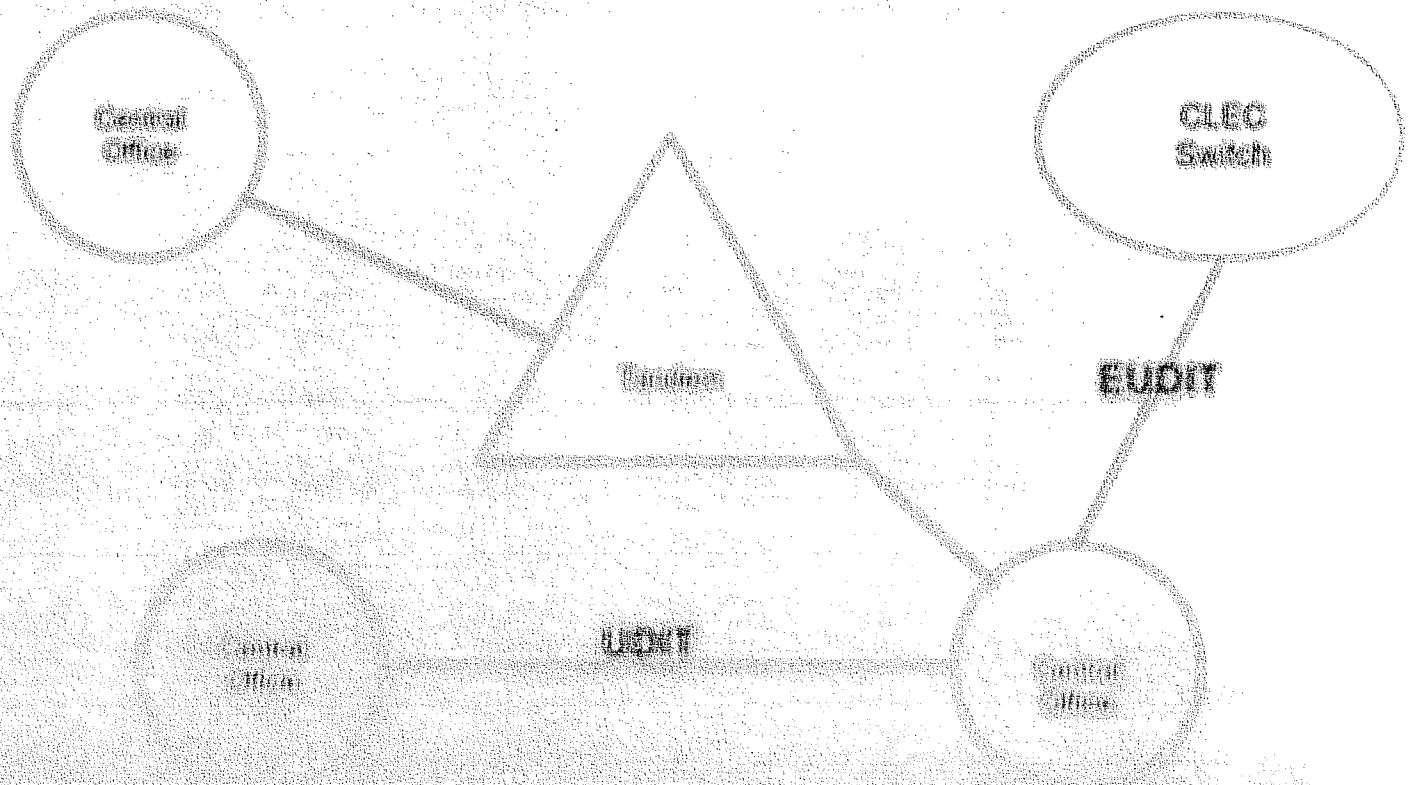
Unbundled Dedicated Interoffice Transport (UDIT) Diagram



CONTINUATION

[12]

S # Pgs [ ]

1999 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

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1.0 GENERAL

1.01 In May and June of 1999, a bench test to support U S West's Section 271 filings 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 Shypulski at 612-795-2419.

2.0 DEFINITION AND SCOPE OF THE BENCH TEST

2.01 UNBUNDLED SWITCHING:

- Unbundled analog line ports were provisioned[1] and physically installed in the Phoenix, Arizona North East 5E switch.

- Unbundled analog line ports were provisioned[1] in the Omaha, Nebraska 56th Street DMS 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 (TOPS) switch in the Phoenix Main central office.

This was accomplished using the following combination of unbundled elements:

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

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[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).

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 (UCCRE).

Unbundled UDIT orders were provisioned between the Omaha 84th 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 S West's process and procedures for Repair/Maintenance.

Figure Two

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)

Product	APP/BIT Test Call	Due Date[2]	Completion
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

Product	APP/BIT Test Call	Due Date[2]	Completed
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)

Product	APP/BIT Test Call	Due Date[4]	Completion
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)

Product	APP/BIT Test Call	Due Date	Completion
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.

5.0 BENCH TEST BUSINESS INTEGRATION TEST (BIT) SUMMARY:

5.01 Testing took place in the Central and Eastern Region OSS Production environment. Complete detailed test scenarios, results and associated verifying OSS system screen prints can be found in the Business Integration Test (BIT) Bench Test binder.

Sub-chapter numbering will corresponding to the individual tasks contained within the documented unbundled element process flows.

Service Order Processor (SOP) is represented specifically as:
Central Region- Service Order Processing and Distribution (SOPAD)
Eastern Region- Service Order Local Administration and Report (SOLAR)

5.02 UNBUNDLED DEDICATED INTEROFFICE TRANSPORT (UDIT)

U S West's process and procedures for the provisioning of UDIT contains thirteen (13) process tasks. Each task was tested. The provisioning flow is described in the following tasks.

5.02.1 **Task 1: Co-Provider submits Access Service Request (ASR) form submitted through EXACT or FAX.**
UDIT order processing was initiated with a service order request received in EXACT via the Access Service Request (ASR) process. The orders passed the all system edit checks and proceeded to LSOG and into the Service Order Processor (SOPAD for Central Region and SOLAR for Eastern Region).

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

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 Identifier (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 "standard" 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 & 303I0S for use as our BAN number for our "standard" Co-Provider accept.

5.02.5 **Task 5: SDC issues order to Service Order Processor (SOP) and issues Firm Order Confirmation (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 processed in the central region. The new UDIT Class of Service of "UTLIN" was added to the appropriate SOPAD table. The 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 "access service/IABS 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 "standard" Co-Provider.
- Work Order Record Document (WORD) document which was issued to the Central Office and Design Center implementation personnel.

5.02.7 **Task 7: Implementor contacts Central Office Resource Allocation Center (CORAC) to load appropriate central office technicians.**
This task was successfully completed and error-free.

5.02.8 **Task 8: CORAC loads appropriate Central Office Personnel**

This task was successfully completed and error-free.

5.02.9 **Task 9: Central Office Technician (COT) performs work steps**
This task was successfully completed and error-free.

5.02.10 **Task 10: Implementor tests circuit**
This task was successfully completed and error-free.

5.02.11 **Task 11: Order completed**
This task was successfully completed and error-free.

5.02.12 **Task 12: Co-Provider notified**
This task was successfully completed and error-free. The "simulated" Co-Provider accepted service.

5.02.13 **Task 13: Billing established**
IABS billing results indicated non-recurring and recurring billing information. Also the summary 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

U S 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 entered through EXACT to ASR. There were some typographic errors, which were caught by EXACT, so the fixes exited. The circuit

for immediate correction and the orders re-released. Subsequent track for and Group Number orders passed all formatting issues.

5.03.2 **Task 2: Service Delivery Coordinator (SDC) receives/verifies ASR order 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) "CTC" was subsequently put in place. A check was made of the methods and the use of FID "CTC" was already documented.

The same issue from paragraph 5.02.3 around the ACTL information on UNE, also surfaced on the Beta orders. The team used the "emulated" ACTL with an H in the 7th character and retested the orders. There was an SOAC error with Message 1 on the Trunk Port orders routed to 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 primary combined 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 Trunk Port/Group Numbers. 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 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 assigned successfully, Design DLR & ADLR was created and processed into WFA.

An issue arose concerning which internal design group would handle the engineering orders for the Design Design Center. The Beta test orders went to two different groups. Designed 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 flow-through Design.

5.03.6 **Task 6: Facility Design Layout and/or Circuit Design Layout created, reviewed and sent with 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 reviews jeopardies.**
This task was successfully completed and error-free.

5.03.8 **Task 8: Load Specialist loads Central Office translations (COTs) with work orders.**
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.

5.03.12 **Task 12: Co-provider notified**
This task was successfully completed and error-free.

5.03.13 **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 rate elements ordered 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 EXX.**
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) or SOPAR (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 cited 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 System. 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 elements. Also the customer bill reflected the individual unbundled elements ordered and the rates elements ordered 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 on 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 Translations 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 UOIT 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 UOIT on a U S West Digital Access Control System (DACS). Our test included successfully mapping multiple UOITs in the DACS with designated ports that were programmed into the remote access option "Flex Conn".

-Remote reconfigurations of the multiple UOITs, through "Flex-Conn", were successfully completed to test various port configurations. These were done both in 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 IVS NAV equipment to TOPS switches across the region is on-going and should be completed by 10-26-01. 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 4WT****

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 Lata 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 602-936-9255 from IMB to AMA****
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.

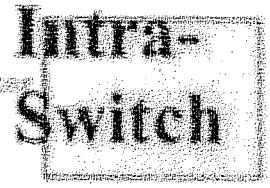
Figure Five
Line Class Code XYZ

Call #1

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

  ORIGINATING SM/PORT = 41/H'61B          TERMINATING SM/PORT = 2/H'78A

-------------------------------------------------------------------------------
00 29 00 00 aa 00 50 2c 00 1c 90 51 1c 0c 00 0c 60 2c 95 69 39 5e 1c 80 68
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, Mich MSG
DATE                   1-5   90511         99/11/*9
CLD PARTY OFF-HK IND   1     0             Called party off-hook detected
SERVICE FEATURE        1-3   000           Other (All Reserved)
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   0843054       08:43:05.4
ELAPSED TIME           1-9   000001241     00001241
WATS BAND or MSG       1-3   002           WATS Band or Type Indicator
  End of Record----
```



Call #2

```
    SMAD-215744628 99-05-11 08:46:09 076785 AMA RECORDING
M   REPT AMATRC AMA RECORD ON REQUESTED DIRECTORY NUMBER

  ORIGINATING SM/PORT = 41/E'61B          TERMINATING SM/PORT = 60/B'47B

-------------------------------------------------------------------------------
00 46 00 00 aa 40 50 2c 00 1c 90 51 1c 6c 00 0c 40 2c 30 40 2c 2c 3c 00
2e 37 90 31 4c 08 44 05 6c 00 00 02 02 5c 05 2c 78 6c 00 2c 60 24 54 30 22
ff ff ff ff ff ff ff ff ff ff ff ff ff ff 18 16 06 1c 40 3c
-------------------------------------------------------------------------------
```

Field Name	Char.	Value	Meaning
RECORD DESCRIPTOR	1-4	00460000	70M
RECORD HEADER	1-2	aa	No Fill Char Expected in Data Record
STRUCTURE CODE	1-5	40502	Structure Code
CALL TYPE	1-3	001	Detailed Message Rec.Used, Sch Rec
DATE	1-5	90511	05/11/99
CLD PARTY OFF-HK IND	1	0	Called party off-hook detected
SERVICE FEATURE	1-3	000	Other Bill Method
ORIGINATING NPA	1-3	602	NPA
ORIGINATING NUMBER	1-3	956	XXX
	4-7	9255	Four Digit Number
OVERSEAS INDICATOR	1	1	Not Overseas Call (NPA not Global)
TERMINATING NPA	1-2	00	Overseas Signaling Indicator
	3-5	602	NPA
TERMINATING NUMBER	1-3	379	XXX
	4-7	0314	Four Digit Number
CONNECT/ANSWER TIME	1-7	0844056	08:46:05.6
ELAPSED TIME	1-9	000002025	00002[illegible].5
WATS BAND or MBI	1-3	002	WATS Band or Type Indicator
SSAF MODULE CODE	1-3	720	Local Switch Portability
PARTY IDENTIFIER	1-3	002	Terminating Party Over

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.

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 SNNU 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.

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).

Task 6: CLEC creates trouble ticket.

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

Task 7: 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 Integrated Service Center and was handed off to the appropriate Central Office work lists in Work Flow Administration/ Dispatch In (WFA-DI).

Task 8: SAT follows major outage notification processes.

Our test trouble reports did not involve any major outage.

Task 9: 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.

Task 9: CORAC hands 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.

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.

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.

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.

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.

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

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

Task 14: Co-Provider accepts closure.

Co-Provider accepted ticket resolution.

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.

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.

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

APPENDIX A (CONTINUED)

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
Collect CLLI codes for switches, frames and NXXs 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 Z90 is valid in CRIS and IABS 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 order between Wire Ctr and OPS/DA switch	Unbundled UDIT tasks 1-5	**Completed** 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 CLEC LCC	Custom Routing tasks	**Completed** Deployed 4-29-99

into CO		
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

CONTINUATION

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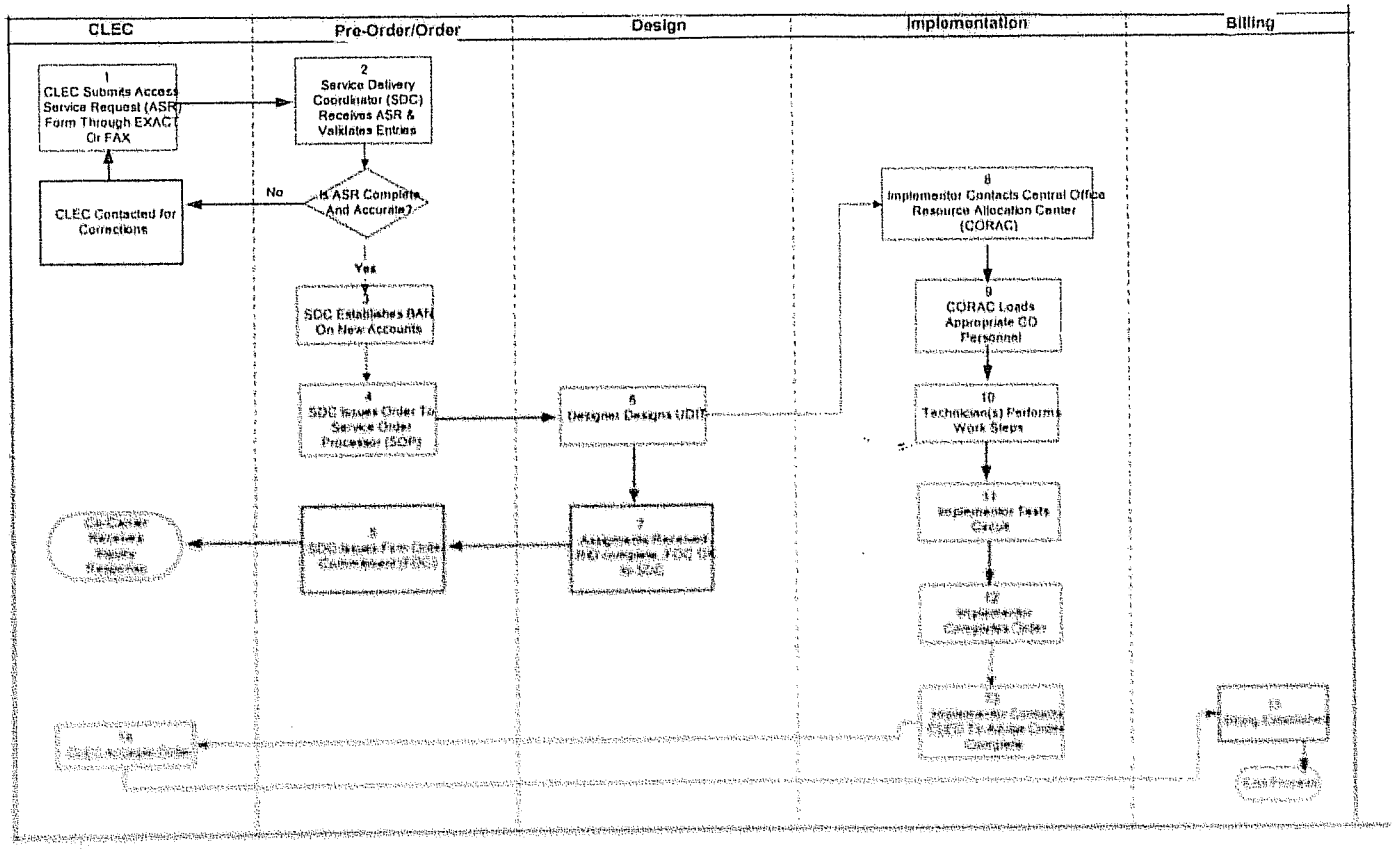
Unbundled Dedicated Interoffice Transport Provisioning Process



CONTINUATION

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Unbundled Dedicated Interoffice Transport Provisioning Task List

Assoc. Task #	Process
1	Co-Provider Issues complete and accurate Access Service Request. These requests are issued through EXACT or by fax.
2	ASR and associated forms reviewed for completeness and accuracy by Service Delivery Coordinator (SDC). Contacts CLEC if necessary for corrections.
3	SDC establishes Billing Account Number (BAN) if necessary.
4	SDC issues order into the service order processor using appropriate intervals.
5	SDC receives OK from Designers (RID complete) and issues Firm Order Confirmation (FOC).
6	Unbundled dedicated interoffice transport facility is designed in TIRKS.
7	Design Center ensures Assignments are received, completes RID, and advises the SDC to issue FOC.
8	Implementor contacts Central Office Resource Allocation Center (CORAC).
9	CORAC loads appropriate Central Office Technician(s) to perform work steps.
10	CO Technician(s) receive work request and complete work steps.
11	Implementor tests circuit
12	Implementor completes order and completes in WFA/C
13	Implementor contacts Co-Provider to advise order complete. CLEC accepts circuit.
14	Service orders completes and posts to begin billing.

CONTINUATION

[15]

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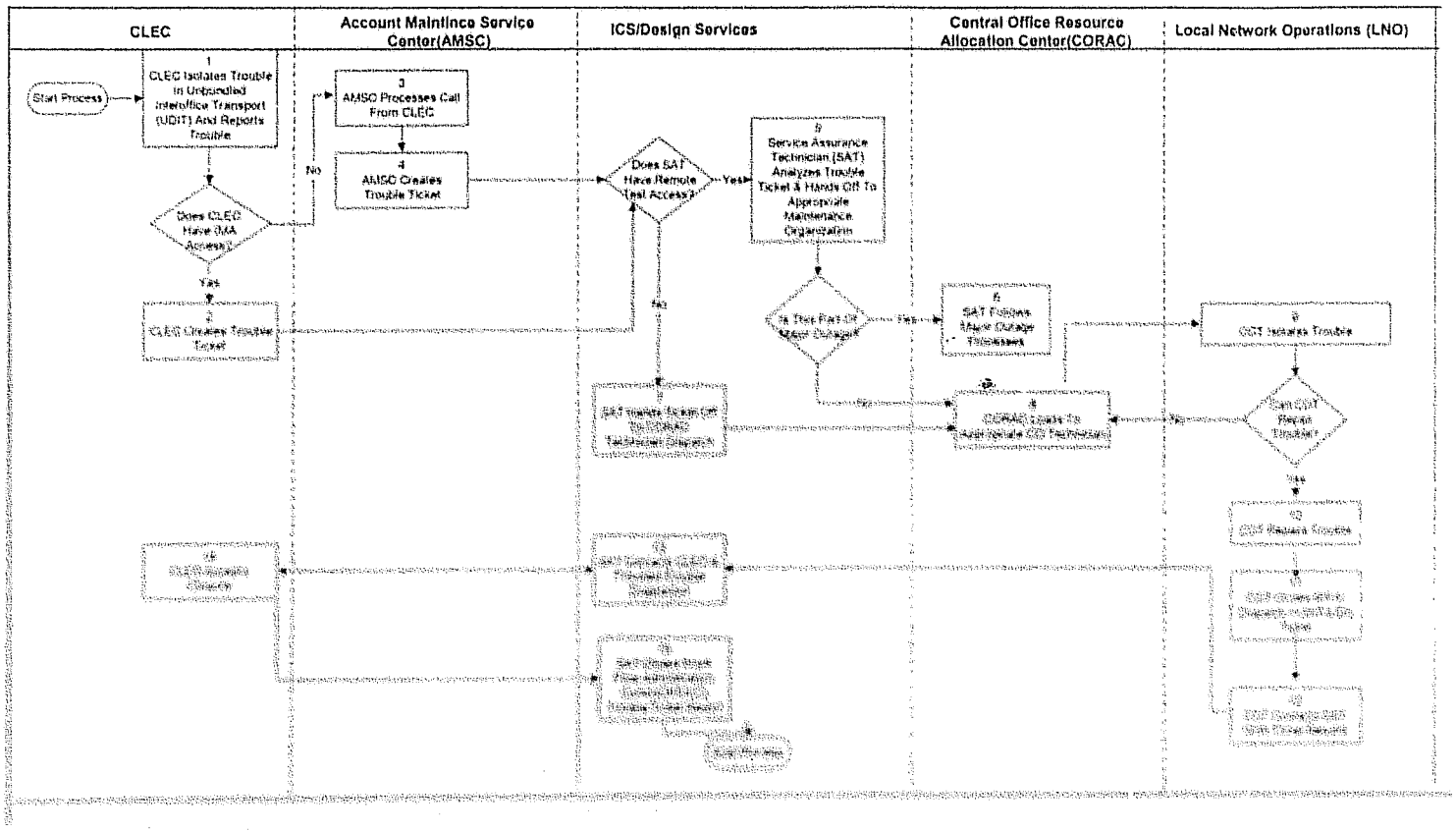
Unbundled Dedicated Interoffice Transport Maintenance Process



CONTINUATION

[16]

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Unbundled Dedicated Interoffice Transport 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 trouble is related to a major outage SAT follows major outage notification processes
7	If trouble location can not be identified by SAT the SAT hands off tkt to CORAC to dispatch technician
8	CORAC loads to appropriate Central Office Technician (COT)
9	Trouble is isolated
10	Trouble repaired
11	Trouble ticket updated
12	Contact SAT with ticket results
13	CLEC notified
14 and 15	CLEC accepts service and Trouble ticket closed