0000022907

ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

RECEIVED

2001 JUL 13 A 11: 14

AZ CORP COMMISSION
DOCUMENT CONTROL

WILLIAM A. MUNDELL
CHARIMAN
JIM IRVIN
COMMISSIONER
MARC SPITZER
COMMISSIONER

IN THE MATTER OF U S WEST COMMUNICATIONS, INC.'S COMPLIANCE WITH § 271 OF THE TELECOMMUNICATIONS ACT OF 1996.	DOCKET NO: T-00000A-97-0238 **QWEST'S NOTICE OF FILING WORKSHOP 2 REPORT - SEVEN STATES**

Attached hereto for filing are the following documents, which were electronically mailed on June 28, 2001 to the entire e-mail distribution list for this docket:

Arizona cover letter dated June 28, 2001

Cover Report

Emerging Services Report dated June 11, 2001

Multistate SGAT Lite – Idaho

Multistate SGAT Lite – Non-redlined

Exhibit C

Exhibit E

Exhibit F

Acronyms list

Arizona Corporation Commission
DOCKETED

JUL 13 2001

DOCKETED BY

DATED this 12th day of July, 2001.

Respectfully submitted,

QWEST CORPORATION

By:_____

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

FENNEMORE CRAIG, P.C.
Timothy Berg
Theresa Dwyer
3003 North Central Ave., Suite 2600
Phoenix, AZ 85012
(602) 916-5421

ORIGINAL and 10 Copies delivered this
____ day of July, 2001 to:

Docket Control
ARIZONA CORPORATION COMMISSION
1200 West Washington
Phoenix, AZ

COPY of the foregoing delivered this day to:

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

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

Lyn Farmer, Chief Administrative Law Judge
Hearing Division
ARIZONA CORPORATION COMMISSION
1200 W. Washington
Phoenix, AZ 85007

COPY of the foregoing mailed this day to:

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

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

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

Thomas F. Dixon
Karen L. Clausen
Worldcom, Inc.
707 17th Street # 3900
Denver, CO 80202

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

Michael M. Grant
Todd C. Wiley
Gallagher & Kennedy
2575 E. Camelback Rd.
Phoenix, AZ 85016-9225

Michael Patten
Roshka Heyman & DeWulf
400 North Fifth St., Ste. 1000
Phoenix, AZ 85004-3906

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

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

Traci Grundon
Davis Wright & Tremaine
1300 S.W. Fifth Avenue
Portland, OR 97201

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

David Kaufman
e.spire Communications, Inc.

343 W. Manhattan Street
Santa Fe, NM 87501

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

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

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

W. Hagood Bellinger
5312 Trowbridge Drive
Dunwoody, GA 30338

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

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

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

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

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

Qwest
1801 California Street, 49th Floor
Denver, Colorado 80202
Phone 303 672-2709
Facsimile 303 298-8197

Chuck Steese
Corporate Counsel

June 28, 2001

Maureen Scott, Esq.
Arizona Corporation Commission
Legal Division
1200 West Washington
Phoenix, AZ 85007-2996

RE: Resolution of Emerging Services Issues in the Seven-State Proceeding

Dear Maureen:

As you are aware, the state commissions of Idaho, Iowa, Montana, New Mexico, North Dakota, Utah, and Wyoming have established a joint proceeding to determine Qwest's compliance with Section 271 of the Telecommunication Act. The Facilitator of those proceedings, Mr. John Antonuk, has now released his report on emerging services. The Report concludes that, with certain modifications to Qwest's SGAT, and subject to the results of OSS testing, Qwest can be deemed in compliance with the applicable emerging services requirements.

The Report resolves most of the same issues that have been at impasse in Arizona. In light of the Facilitator's extensive fact-finding and thorough consideration of the issues, Qwest respectfully suggests that the ACC adopt the Facilitator's Report in its entirety.

Qwest was able to accommodate the CLECs and commission staffs on a majority of the issues they had raised, and the parties were able reach consensus on 28 of the 50 issues originally in dispute even before final briefing. The Facilitator's resolution of the remaining disputed issues was careful and even-handed. Even though many of the disputed issues were resolved against Qwest, Qwest still believes that, on the whole, the Report reflects a well-thought-out effort to balance the interests of incumbents and competitors. Qwest has therefore recommended that each of the participating states adopt the Report's recommendations in their entirety. Several state commission staffs have done the same.

Qwest respectfully suggests that the ACC likewise follow the Facilitator's resolution of the emerging services impasse issues. Doing so would avoid the need for further face-to-face workshops, saving the resources of the Commission and the parties. It would also help ensure that Qwest and its competitors face interconnection terms and requirements that are consistent across the fourteen-state region.

I have enclosed a copy of the Facilitator's Report for your convenience.

Very truly yours,

Chuck Steese

Chuck Steese
Corporate Counsel

cc: Parties of Record

PHX/JHERRON/1204158.1/67817.150

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

In the Matter of U S WEST Communications, Inc.'s Motion for an Alternative Procedure to Manage the Section 271 Process	)))))	**Case No. USW-T-00-3**

Report on Emerging Services

Table of Contents

I. Scope Of This Report 1

II. General Background 2

III. Disputed Issues And Recommendations Summary 4

Line Sharing 4
1. Ownership of and Access to Splitters 4
2. Tying Qwest Data Service and Voice Service 4
3. Line Sharing Over Fiber Loops 4
4. Provisioning Interval 5

Subloop Unbundling 5
1. Subloop Access at MTE Terminals 5
2. Requiring LSRs for Access to Premise Wiring at MTEs 6
3. CLEC Facility Inventories 6
4. Determining Ownership of Inside Wire 6
5. Intervals 7
6. Requirement for Qwest-Performed Jumpering at MTEs 7
7. Expanding Explicitly Available Subloop Elements 7

Packet Switching 8
1. Availability of Spare Copper Loops 8
2. Denial of DSLAM Collocation 8
3. ICB Pricing 9
4. Unbundling Conditions as a Prerequisite to Ordering 9
5. Line Card "Plug and Play" 10

Dark Fiber 10
1. Affiliate Obligations to Provide Access to Dark Fiber 10
2. Access to Dark Fiber in Joint Build Arrangements 11
3. Applying a Local Exchange Usage Requirement to Dark Fiber 11
4. Consistency With Technical Publications 11

IV. Line Sharing 13

Background – Line Sharing 13

Issues Resolved During This Workshop – Line Sharing 13
1. Collocating DSLAMs 13
2. Direct Connections Option 14
3. Requiring Separate CLEC "MELD" Runs 14
4. Allowing for Direct Connection in Common Areas 14
5. Line Sharing Cost Elements 14
6. Line Splitting 14

Issues Remaining in Dispute – Line Sharing 15
1. Ownership of and Access to Splitters 15
2. Tying Qwest Data Service and Voice Service 15
3. Line Sharing Over Fiber Loops 18
4. Provisioning Interval 19

V. Subloop Unbundling 23

Background – Subloop Unbundling 23

Issues Resolved During This Workshop – Subloop Unbundling 23
1. Subloop Definition 23
2. Unbundling All Loop Types 24
3. Spectrum Restrictions 24
4. Subloop Ordering Information 24
5. Rights of Way 24
6. Dispute Resolution 25
7. Copper Feeder and Fiber Subloops 25

Issues Deferred – Subloop Unbundling 26
1. Undefined Rates 26
2. Pricing for Overly Broad Definitions of Subloop Categories 26

Issues Remaining in Dispute – Subloop Unbundling 27
1. Subloop Access at MTE Terminals 27
2. Requiring LSRs for Access to Premise Wiring at MTEs 30
3. CLEC Facility Inventories 33
4. Determining Ownership of Inside Wire 34
5. Intervals 35
6. Requirement for Qwest-Performed Jumpering at MTEs 36
7. Expanding Explicitly Available Subloop Elements 37

VI. Packet Switching 39

Background – Packet Switching 39

Issued Resolved During This Workshop – Packet Switching 39
1. Defining Packet Switching 39
2. Defining the Condition Regarding No CLEC Collocation of DSLAMS 40
3. Access at Any Feasible Point 40
4. Availability of CLEC-Specified Packet Switching Options 40
5. Limiting Access to Packet Management Systems 40
6. Separate Rate Elements for Packet Switching Components 40
7. Satisfying the Condition Relating to DSLAM Collocation Denial 41
8. Maintenance and Repair Responsibilities 41

Issues Remaining in Dispute – Packet Switching 41
1. Availability of Spare Copper Loops 41
2. Denial of DSLAM Collocation 44
3. ICB Pricing 45

4. Unbundling Conditions as a Prerequisite to Ordering 46
5. Line Card "Plug and Play" 47

VII. Dark Fiber 49

Background – Dark Fiber 49

Issues Resolved During This Workshop – Dark Fiber 49
1. Dark Fiber Forecasts 49
2. Access to Dark Fiber Without Collocation 49
3. Testing 50
4. Addition of E-UDF rate elements. 50
5. Purchase of a Single Dark Fiber Strand 50
6. Provisioning and Ordering Processes 51
7. Dark Fiber at Collocation Build-Out Completion 51
8. Cross Connect Charges 51

Issues Remaining in Dispute - Dark Fiber 52
1. Affiliate Obligations to Provide Access to Dark Fiber 52
2. Access to Dark Fiber in Joint Build Arrangements 55
3. Applying a Local Exchange Usage Requirement to Dark Fiber 56
4. Consistency With Technical Publications 57

I. Scope Of This Report

This report discusses the second group of issues that fall within the seven-state workshop process addressing Qwest's compliance with the Section 271 Checklist of the Telecommunications Act of 1996. This report covers the issues assigned to "Workshop Two" by the initial procedural orders, which are the first of a series of orders under which the workshop process has operated. This report addresses the following issues:

- Line Sharing
- Subloop Unbundling
- Packet Switching
- Dark Fiber

Transport issues were addressed in the same testimony and workshop days that included these four subjects. However, transport issues will be addressed in the upcoming report that addresses other Unbundled Network Element (UNE) issues. Line sharing, subloops, and packet switching are all UNEs. Dark fiber is better thought of as a medium that can comprise a loop or transport UNE. In general, these UNEs were not unbundled by the FCC in its *Local Competition First Report and Order*, but were unbundled later in the *UNE Remand Order* or the *Line Sharing Order*. They are here considered as a group of what are referred to as the "Emerging Services."

The Summary of Findings and Conclusions section of this report identifies the issues raised under each of these four subject areas, and briefly describes those deferred to other workshops or proceedings for resolution, and those remaining in dispute. For those issues remaining in dispute, the summary section describes the recommended resolution of the disagreements. The later sections of this report provide more detailed discussions of the issues, particularly those that remain in dispute. The Summary of Findings and Conclusions and the detailed sections use the same numbering for these disputed issues.

II. General Background

The purpose of this report is to assist the seven state Commissions (Iowa, Idaho, Utah, New Mexico, North Dakota, Montana, and Wyoming) in reaching a decision as to what recommendations to make to the Federal Communications Commission (FCC) on the question of whether Qwest should be granted the authority to provide in-region interLATA services. To be eligible to provide in-region interLATA service, Qwest must meet the competitive checklist and other requirements of Section 271 of the Telecommunications Act of 1996 (the Act). A Qwest May 4, 2000 filing encouraged the several state commissions to consider a multi-state process to jointly review track A (competition issues), various aspects of the 14-point competitive checklist, Section 272 (separate subsidiary issues), and public interest considerations. Iowa, Idaho, Utah, North Dakota and Montana joined together (with Wyoming joining in September 2000 and New Mexico thereafter) in a multi-state collaborative proceeding, and issued procedural orders to govern the conduct of joint workshops. The joint workshops provide a common forum for all participants in all the states involved to present, for individual consideration by the seven commissions, all issues related to Qwest's Section 271 compliance.

On November 20, 2000, Qwest filed the testimony of Karen A. Stewart. On or about December 20, 2000 the following intervenors filed testimony: the Wyoming Consumer Advocate Staff; AT&T Communications of the Mountain States, Inc., AT&T Communications of the Midwest, Inc. and TCG affiliates (AT&T); the Information Services Division, Department of Administration, State of Montana; Rhythms and New Edge (Joint Comments); and the New Mexico Advocacy Staff. Qwest filed Rebuttal Testimony on January 5, 2001, and an Open Issues Matrix On January 8, 2001 and a Supplemental Affidavit on January 9, 2001. AT&T filed a Statement Regarding Dark Spectrum on February 20, 2001.

We have adopted a general rule that requires Qwest to file, before briefing of the issues, a copy of SGAT language related to those issues. This "frozen SGAT language" is intended to reflect language on which there is general agreement among the parties and language proposed by Qwest to address issues or language on which there is not general agreement. The purpose of this language is to provide a reference base first for the participants' briefs and second for the commissions in reviewing this report. It is not intended to offer new language that has not before been seen or discussed in workshops, filings, or discussions among the parties.

Qwest filed the required language here on March 20, 2001.[1] The language is set forth as an appendix to this report.

The following participants filed briefs on or about April 30, 2001: Qwest, AT&T, Sprint, Rhythms Links Inc., and the Wyoming Consumer Advocate Staff. Qwest's timely filing of the frozen SGAT language has provided the participants a fair opportunity to brief any disagreements with any language that Qwest may have added or changed since its original and rebuttal filings on the issues addressed by this report.

[1] Hereafter, the Frozen SGAT.

This report assumes that the SGAT language filed by Qwest on March 20, 2001 will remain in effect, except as commission acceptance of any of the findings and conclusions of this report may require such language to change. Therefore, to the extent that any further changes in SGAT language are proposed (e.g., as a result of agreements reached in similar workshops in other states) they must be separately filed and supported, in order that the commissions may consider any issues associated with such proposed language changes. Absent individual commission approval of any such proposed changes, the language set forth in the appendix hereto shall be considered to be the final language for purposes of any state SGAT review or consultation with the FCC under Section 271.

III. Disputed Issues And Recommendations Summary

The following summary addresses the deferred and disputed issues and it provides a brief description of how each issue was resolved.

Line Sharing

The parties raised and resolved prior to the briefs a total of six issues related to Line Sharing. Four issues remain to be resolved. Of these four issues, none requires an SGAT language change. However, Qwest pursues a policy (i.e., of not providing its data services to customers who switch to a CLEC for voice services) that imposes an inappropriate barrier to the development of voice competition. Qwest should not be deemed to be in compliance with this checklist item before it changes this policy. However, upon making an appropriate change, Qwest can be deemed to have met its burden of proof, subject to the completion and commission consideration of the results of any OSS testing that may relate to the item. The four issues and the proposed resolutions are summarized below.

1. Ownership of and Access to Splitters

Several CLECs testified that Qwest should be required to own splitters and to make them available to CLECs on a line-at-a-time basis. Existing FCC requirements provide no basis for obliging Qwest to provide splitters, nor has the evidence in this proceeding provided any basis for concluding that a requirement for such access is necessary or appropriate.

2. Tying Qwest Data Service and Voice Service

Qwest's policy is to disconnect its high-speed data service (called "Megabit") from a customer deciding to change to a CLEC for local voice service. Qwest's provision of voice and Megabit services to one of its end users over the same loop is the functional equivalent of line sharing. The threatened loss of Megabit service from Qwest will affect customer decisions about taking voice service from others. Qwest's refusal to continue to provide Megabit services in these circumstances imposes significant barriers to competition, particularly in an uncertain data service market. Qwest should not be considered to be in compliance with public interest requirements as long as it maintains a policy of denying its end users Qwest's own Megabit or xDSL services when it loses a voice customer to a CLEC through line sharing.

3. Line Sharing Over Fiber Loops

Several CLECs argued that the SGAT should require Qwest to provide line sharing over fiber loops. Qwest said that the FCC has merely recognized the possibility of line sharing over fiber portions of loops, but has not determined that it is feasible. Qwest agreed to change the SGAT to provide for fiber sharing when the technology becomes available and when Qwest is obliged to provide access to it by law. The record will not support a conclusion that there are other technologies and methods already proven to be feasible for providing line sharing over fiber facilities. The feasibility of the suggested "plug and play" option is at issue now before the FCC, which will presumably decide it upon much more than the scant evidence available here.

4. Provisioning Interval

Rhythms proposed that Qwest provision line-sharing in three days (compared with Qwest's proposed five days), with a future reduction to one day. Qwest argued that the FCC required ILECs to provision line sharing under intervals similar to those in which ILECs provide DSL service to their own end users. Qwest said that the five-day line-sharing interval to which it could commit here is significantly less than its 10-day retail DSL provisioning interval for its own end users. Qwest noted that the testimony would support CLEC needs for only a day or two (at most) on top of the Qwest's proposed interval of five days.

The correct standard here should be one that promotes parity with Qwest retail performance, recognizing that CLECs need an extra day or two to begin service to end users. Qwest's five-day interval will allow ample opportunity overall for CLECs to complete remaining work in time to provide end users with xDSL services within time frames that are competitive with what Qwest is now experiencing in serving its own retail customers. However, if Qwest succeeds in materially shortening the 10-day interval for its end users, then a failure to change the five-day line-sharing interval for CLECS could leave them disadvantaged. Therefore, the acceptance of Qwest's interval should be with the understanding that it should be revisited if Qwest's retail performance improves in the future.

Subloop Unbundling

The parties raised and resolved prior to the briefs a total of seven issues related to Subloop Unbundling. Two issues were deferred. Seven issues remained to be resolved by the facilitator. Of these seven issues, five require SGAT language changes, and two require no change. Qwest should not be deemed to be in compliance with this checklist item before it makes the changes necessary to deal with the five issues. However, upon making those changes, Qwest can be deemed to have met its burden of proof, subject to the completion and commission consideration of the results of any OSS testing that may relate to the item. The seven issues and the proposed resolutions are summarized below.

1. Subloop Access at MTE Terminals

AT&T argued that access to wiring on customer premises as a subloop element at the terminal block in multi-tenant environments (e.g., campus-type arrangements or high rises) should not require collocation. Qwest agreed to drop the SGAT requirement for collocation and Qwest performance of cross connections at MTE terminals on or in buildings, but would not do so for detached MTE terminals.

A rote application of collocation and CLEC access rules crafted primarily with reference to collocation in settings like central offices will not work well for access to subloops at remote locations. A more case-specific approach is needed to consider the service reliability, safety, work efficiency, cost, and engineering and operating practices involved in terminal access. Such a process would begin from an examination of the specific circumstances and let an emerging understanding of the particular situation at hand lead to what became a reasonably self evident set of necessary conditions, limits, and durations. The SGAT should be changed to allow advance solutions to be worked out for particular configuration types, provided that the focus is on the factors relevant to those particular types. Carriers should be able to request them in

advance and on a categorical basis where the applicable field circumstances are adequately defined.

2. *Requiring LSRs for Access to Premise Wiring at MTEs*

AT&T argued that the requirement to submit LSRs to gain access to such subloops represents an unreasonably complex and expensive means for facilities that have nominal cost. AT&T proposed that it merely specify monthly on an aggregate basis (by MTE terminal) the addresses of the MTEs where a CLEC has obtained access and the cables and pairs it is using there.

Qwest is entitled to bill for the wiring if it owns it; LSRs efficiently provide for billing regularity and completeness. LSRs also provide for the control necessary to support maintenance and repair, carrier switching, and customer-turnover needs. However, a brief delay in LSR processing by Qwest would expedite subloop ordering and lessen CLEC burdens in submitting information to Qwest. Therefore, Qwest should change the SGAT to preclude delay in CLEC access while it processes LSRs for MTE access to on-premise wiring. Qwest should hold those LSRs in suspense while it accumulates the information needed to identify CLEC terminations, then include that information in the LSR, and process it after CLECs proceed to gain access to the facilities involved.

3. *CLEC Facility Inventories*

The SGAT allows Qwest to inventory CLEC cable and pair terminations at MTEs. AT&T proposed instead a requirement that Qwest, at its expense, mark its owned or controlled on-premises wire and related facilities, tagging each cable pair currently being used to serve an end user. Qwest did not propose any reason for inventories other than to provide information necessary for LSRs. The inventories, as discussed under the immediately preceding issue, may be performed during the LSR suspense period. For the reasons discussed under the same issue, AT&T's alternate facility identification proposal should not be adopted.

4. *Determining Ownership of Inside Wire*

The on-premise wire at MTEs could be owned by Qwest, by the MTE owner, or by the occupants. Only in the former case is a CLEC required to get access to it from Qwest. Absent an owner's self-declaration of ownership, AT&T would allow Qwest 10 days to determine ownership, but would limit the response period to one day if another CLEC had already sought Qwest ownership information at the same MTE. It is reasonable to place upon Qwest the burden of determining facility ownership before it charges for those facilities. Therefore, absent bad faith by CLECs in MTE owner assertions of on-premise wire ownership, Qwest should also be responsible for costs beyond reasonable and minimal costs for examination of its records.

Determining ownership should take only a nominal amount of time after the issue has already been raised by another CLEC at the same MTE. Moreover, where a CLEC can provide Qwest with a written statement setting forth the basis for a claim that the MTE owner also owns the on-premises wiring, the period should be reduced. The provision of such information will provide Qwest with information that should help it to narrow the activities necessary to make a reasonable investigation of ownership.

5. Intervals

In the event of non-acceptance of its previous arguments about the FCP process, the determination of on-premises wire ownership, and the inventorying of circuit terminations, AT&T asked that the longest interval for determining ownership and inventorying be not greater than 15 days. FCP requirements have been eliminated for on-premises wiring access in a number of MTE situations; the LSR requirements have been eased; the need for a facility inventory is no longer a prerequisite to LSR issuance; and much of AT&T's argument regarding facility inventorying has been accepted. There is therefore no reason to consider added relief on the issue of intervals.

6. Requirement for Qwest-Performed Jumpering at MTEs

AT&T argued against the requirement that Qwest run the jumpers from subloop elements. Qwest said that, because the segregation of CLEC and Qwest equipment was not realistic at FDIs, allowing only Qwest technicians to have access to the FDIs for jumpering was reasonable.[2] The resolution of the first unresolved subloop issue, *Subloop Access at MTE Terminals*, recommended a case-by-case analysis of the needs and circumstances associated with unique and varying outside plant configurations and conditions. That consideration includes issues associated with jumpering. The record here does not support allowing CLECs to perform such work outside the context of in- or on-building MTE terminals. However, CLECs can presently request such authority as described under the first issue, and it should be granted to them where its propriety can be supported by showings made in the context of specific requests.

7. Expanding Explicitly Available Subloop Elements

AT&T argued that the SGAT must address the full range of subloop elements and access points contemplated by the FCC, which AT&T listed as including a large number of specific types and access points. Qwest responded that the "very limited" demand for subloops to date and the very large number of potential subloop access points made it impractical to develop standard offerings for more than the most likely expected circumstances. Qwest's brief offered the Special Request Process for additional subloop offerings for which there is not substantial "reasonably foreseeable demand."

Qwest's loop plant comprises a wide range of configurations and circumstances. It is not appropriate to expect Qwest to undertake the effort to design standard offerings for every conceivable case, without reference to potential demand for them. Qwest's offering of the special request process provides an adequate mechanism for considering such offerings when they become more tangible. We can address any potential inefficiency in the Special Request Process at the upcoming workshop on general SGAT terms and conditions.

[2] The subject of making connections at MTEs occasioned much testimony at the workshop. Qwest agreed to eliminate a distinction that it had been making between enclosed and open terminals that were located in buildings. Qwest agreed to allow CLECs to make connections and to eliminate the requirement of an FCP in either type of terminal.

Packet Switching

The parties raised and resolved prior to the briefs a total of seven issues related to Packet Switching. Five issues remained to be resolved by the facilitator. Of these five issues, one requires SGAT language changes; four require no change; assuming that Qwest has made substantial progress in developing prices for packet switching in the near future. Qwest should not be deemed to be in compliance with this checklist item before it makes the changes necessary to deal with the five issues. However, upon making those changes, Qwest can be deemed to have met its burden of proof, subject to the completion and commission consideration of the results of any OSS testing that may relate to the item. The five issues and the proposed resolutions are summarized below.

Packet switching is an alternative that allows CLECs to provide high-speed data services where suitable alternatives are not available, such as copper loops to the central office or the ability to collocate CLEC DSLAMs remotely. CLECs have said that Qwest's increasing use of DLC has magnified CLEC difficulties in providing competitive DSL services, because there are fewer continuous copper loops connecting end users with Qwest central offices. CLECs either need appropriate electronics on the DLC system, room to remotely deploy a DSLAM that can be connected to the end user's copper subloop, or a continuous, suitable (which generally means of not too long a physical distance) copper loop between the end user and the Qwest central office (a "home run" copper loop).

1. Availability of Spare Copper Loops

Several CLECs argued that access to home-run-copper loops will still leave them at a significant disadvantage, when Qwest can transfer signals at much higher rates in areas where it has remotely deployed its DSLAMs to shorten the copper portion of its connection with end users. CLECs, according to AT&T, need to be able to: (a) collocate their DSLAMs at the same place that Qwest has done so, or (b) gain access to Qwest's packet switching as a UNE, in order to be able to deliver service at the same level of quality. The SGAT already says that the test for determining necessary loop capability is the services the CLEC wishes to offer (including the data transfer rate). If a CLEC should wish to offer xDSL services that match all the characteristics of the service that Qwest is providing, then Qwest cannot meet its obligations by providing a copper loop that can only provide some of level service less than that, even if the loop could provide some defined level of DSL service.

AT&T also argued that it should not have to take copper loops in lieu of securing access to unbundled packet switching in cases where it seeks to serve more customers than there are appropriate copper loops. However, AT&T presented no evidence to support a conclusion that satisfaction of its actual orders for services through a combination of copper loops and unbundled packet switching in those cases is discriminatory, or that it would impede CLEC ability to compete for customers.

2. Denial of DSLAM Collocation

The ability to collocate CLEC DSLAMs at remote Qwest terminals would overcome the problem of a lack of suitable "home run" copper loops. However, AT&T stated that there was little chance that remote collocation of DSLAMs would give CLECs a "practical competitive

alternative," because too many circumstances would have to converge to make this alternative commonly available. AT&T also said that, because remote terminals and other Qwest field locations where CLECs could remotely deploy DSLAMS serve only limited numbers of customers, CLECs would have great difficulty in gaining the economies of scale necessary to justify such deployment. Therefore, AT&T sought to expand the standard for gaining access to unbundled packet switching from an actual denial of collocation to the economic infeasibility of collocation.

AT&T's proposal depends upon an assumption that there is a substantial difference in the economics of DLSAM deployment between CLECs and Qwest. However, apart from broad claims that were not supported by any specific analysis or quantification, there is nothing in the record to support this assumption. The failure to support those claims with evidence is particularly compelling in a case where, as here, a number of CLECs want to add an entirely new requirement to those already deemed appropriate by the FCC-- a requirement that would essentially rewrite completely the FCC's standard. Qwest's position on this FCC-established condition is appropriate.

3. *ICB Pricing*

AT&T commented that Qwest has presented no testimony about its prices or provisioning practices for unbundled packet switching. AT&T argued that it was not sufficient to offer ICB pricing. Qwest's brief noted that the company believes it will have finished its development of prices before it makes its Section 271 filing with the FCC. In any event, Qwest argued that its ICB approach would be an adequate interim solution for purposes of Section 271. There is no evidence of record to support a conclusion that price methods, other than ICBs, can now be supported. It is fairly clear that Qwest agrees conceptually that ICB pricing will not remain as the general rule after it completes its pending price development effort. It would prove to be of substantial benefit to complete that effort in time for state commission review as soon as possible, in order to support a conclusion about whether Qwest's final proposed pricing comports with the requirements of the Act.

4. *Unbundling Conditions as a Prerequisite to Ordering*

AT&T argued that CLECs would suffer competitive disadvantage under a 90-day collocation process, after which the CLEC would learn that collocation will be denied. Only after that denial would the CLEC be able to order packet switching as a UNE. AT&T argued that this long interval would allow Qwest to market its own advanced services, and to provide them on a timelier basis. AT&T sought a change that would: (a) permit simultaneous processing of DSLAM collocation and packet switching UNE requests and (b) set an interval of 10 days or less for Qwest to reject DSLAM collocation requests. Qwest agreed to streamline the processes involved in unbundling packet switching by providing information that would help CLECs to identify in advance those cases where there was likely to be insufficient space for CLECs to collocate DSLAMs remotely.

Qwest's streamlining activities should provide substantially faster notice than AT&T had anticipated. Thus, the introduction of a 10-day collocation denial notice period does not appear to be warranted. However, no evidence or argument was presented to show any necessity for packet

switching service requests to await DSLAM collocation denials. Qwest should therefore be required to respond to DSLAM collocation orders and packet switching orders in parallel.

5. *Line Card "Plug and Play"*

Sprint argued for the right to allow CLECs to place their line cards into Qwest's DSLAM (an option known as "plug and play"). Sprint noted that this option would obviate the need for the "crushing expense of adjacent collocation at remote terminals." Other CLECs made similar arguments. The CLEC concern about extraordinarily long home-run copper loops was addressed under the issue heading of *Availability of Spare Copper Loops* above. That resolution substantially mitigates a claim of further need here. Moreover, as Qwest notes, the technical feasibility of the plug and play option is now being addressed at the FCC. Particularly given the pendency of the FCC proceedings, there is very little evidence on this record to support the conclusion that technical feasibility has been established. Finally, as Qwest also noted, allowing the plug and play option would in effect eviscerate the current FCC standard.

Dark Fiber

The parties raised and resolved prior to the briefs a total of eight issues related to Packet Switching. Four issues remained to be resolved by the facilitator. Of these four issues, two require SGAT language changes; two require no change. Qwest should not be deemed to be in compliance with this checklist item before it makes the changes necessary to deal with the four issues. However, upon making those changes, Qwest can be deemed to have met its burden of proof, subject to the completion and commission consideration of the results of any OSS testing that may relate to the item. The four issues and the proposed resolutions are summarized below.

1. *Affiliate Obligations to Provide Access to Dark Fiber*

AT&T contended that Qwest should be required to make the in-region dark fiber of affiliates available to CLECs, because those affiliates are successors and assigns under Section 251(h) of the Act. In response, Qwest contended that Qwest Corporation is the only U S WEST Communications Inc. successor that provides local telecommunications services in the seven-state region; therefore, QCI's affiliates do not meet the "successor or assign" requirements of the Act. Qwest also argued that Section 251(c) does not extend to an ILEC's long-distance operations or network

The record here contains no evidence that the Qwest corporate structure has been developed or is being used to deny access to dark fiber in cases where it would, absent such structure, be required to be made available. However, a particularly interesting feature of dark fiber in this situation is that it represents a form of in-place inventory. If Qwest decided, for example, to acquire a right to use such fiber from a third party when and as needed, Qwest certainly could not deny similar access to a CLEC merely on the basis that the inventory was technically owned by a third party. The same general standard should apply to a second-party arrangement (i.e., a lease or right-to-use agreement with an affiliate) as would apply to a third-party arrangement (e.g., Qwest rights to dark fiber that arise under a lease with a financial institution or under a right of use agreement with a customer). The standard should be that if Qwest has access rights for itself, it should not refuse to use them to provide access rights for CLECs.

Accordingly, the SGAT should be changed to provide that Qwest is required to offer access not only to that which it owns directly, but to all dark fiber to which it has a right to access under agreements with any other party, affiliated or not. Moreover, the test should not be based upon the type of form of such agreement, but rather upon the nature and degree of the access that it provides to Qwest.

2. Access to Dark Fiber in Joint Build Arrangements

AT&T sought to allow CLECs to lease dark fiber that exists in "joint build arrangements" with third parties (e.g., other local, adjoining telephone companies), under which Qwest can use the other party's conduit, innerduct, or fiber to transport telecommunications traffic. Qwest testified that it would make available dark fiber in joint build arrangements up to Qwest's side of the meet point, but refused to permit CLECs to obtain access to any rights Qwest may have to the use of the "third party facilities."

The standard to which Qwest should be held here is similar to that set forth in the proposed resolution of the immediately preceding issue. The primary consideration is whether the agreement with the third party gives Qwest, with respect to the fiber owned by the third party, sufficient access rights to make it analogous to directly owned facilities that "carriers keep dormant but ready for service" and that are "in place and easily called into service." The language set forth in the proposed resolution of the immediately preceding issue accommodates this definition. There should also be a means for holding Qwest to a good-faith standard in bargaining away its rights to allow CLEC access in such situations.

3. Applying a Local Exchange Usage Requirement to Dark Fiber

AT&T objected to the application to dark fiber of the same local usage test that the FCC issued with regard to Enhanced Extended Links ("EELs"). AT&T also asserted that the requirement could not be implemented, because the FCC test cannot be applied to dark fiber.

The *UNE Remand Order* says that the loop element can consist of dark fiber, and the transport element can also consist of dark fiber. Paragraph 480 says that EELs are not a separate UNE, but consist of a loop connected to dedicated transport. Thus, when a CLEC secures access to dark fiber that provides the functionality of a loop that is connected to dedicated transport, it secures an EEL, which is a combined loop and transport element. A loop and transport combination that includes dark fiber remains a loop-transport combination. The logic behind the FCC's concern about access charges is in no way diminished because the facilities providing the combination were unlit before a CLEC gained access to them.

4. Consistency With Technical Publications

AT&T noted that SGAT Section 9.7.2.18 incorporated by reference Technical Publication 77383. AT&T determined that the publication's terms were inconsistent with the commitments Qwest has made in the language of the SGAT. According to AT&T, Qwest promised to provide a draft of the modifications to language that made it compliant with the SGAT by March 1, 2001. AT&T indicated that Qwest failed to provide the required language. Qwest in its brief did not identify Section 9.7.2.18 as being in dispute. This issue can be addressed, if the parties have not already resolved it by then, in the upcoming workshop on general SGAT terms and conditions.

We have already adopted the general proposition that the hierarchy among the SGAT, technical publications, operations guidelines and procedures, and the other documents that it will take to make the Qwest/CLEC relationship operate effectively can best be addressed in a general fashion.

IV. Line Sharing

Background – Line Sharing

Line sharing refers to the unbundling of the high-frequency portion of the local loop. Such sharing permits a CLEC to provide xDSL services over the high frequency portion of the loop, while the ILEC continues to provide voice service over the low frequency portion of that same loop. The related concept of line splitting, which will be addressed in the next report, refers to the situation where two different CLECs provide the voice and data services over the same loop, which has been acquired as a UNE from the ILEC. Line sharing operates through the use of splitters at the customer premises and at a central office or remote terminal.

The FCC required unbundled access to the loop's high frequency portion in its *Line Sharing Order*.[3] The FCC said:

> *(1) The high frequency portion of the loop network element is defined as the frequency range above the voiceband on a copper loop facility that is being used to carry analog circuit-switched voiceband transmissions.*
>
> *(2) An incumbent LEC shall provide nondiscriminatory access in accordance with section 51.311 of these rules and section 251(c)(3) of the Act to the high frequency portion of a loop to any requesting telecommunications carrier for the provision of a telecommunications service conforming with section 51.230 of these rules.*
>
> *(3) An incumbent LEC shall only provide a requesting carrier with access to the high frequency portion of the loop if the incumbent LEC is providing, and continues to provide, analog circuit-switched voiceband services on the particular loop for which the requesting carrier seeks access.*

Issues Resolved During This Workshop – Line Sharing

1. Collocating DSLAMs

AT&T requested the ability to collocate DSLAM equipment on Qwest premises.[4] Qwest agreed to allow such collocation in central office and remote locations, subject to space availability. Qwest noted that SGAT Section 8.1.2. has been changed to allow the collocation of DSLAMs.[5] Therefore, this issue can be considered closed.

---

[3] *Third Interconnection Order*, CC Docket No. 98-147, and Fourth Report and Order, CC Docket No. 96-98, FCC 99-355 (December 9, 1999) (Line Sharing Order).

[4] AT&T's Comments for the Multistate Workshop II (AT&T Comments) at page 29.

[5] Emerging Services Rebuttal Testimony on Line Sharing, Sub Loop Unbundling, Dark Fiber, Packet Switching and Checklist Item 5 of Karen A. Stewart Qwest Corporation, January 5, 2001(Stewart Rebuttal), at page 7.

2. Direct Connections Option

AT&T argued that the SGAT Section 9.4.2.2.4.2. requirement for CLECs to trunk to every module on the COSMIC frame or MDF (a point, generally at the central office, where loops are terminated, beyond which signals are carried to switching, transport, or CLEC collocation facilities, e.g.) would add unnecessary expense and exhaust COSMIC capacity. AT&T asked Qwest to allow CLECs a direct connections option that would enable them to provision cables to every other or every third module on the COSMIC/MDF.[6] Qwest agreed to allow to such connection at every other COSMIC/MDF line module in SGAT Section 8.3.1.11.2.3.[7] Therefore, this issue can be considered closed.

3. Requiring Separate CLEC "MELD" Runs

A Mechanized Engineering and Layout for Distributing Frame ("MELD") run provides Qwest information for making connections on the COSMIC efficiently. Because separate runs are expensive and not necessary just for addressing CLEC connections, AT&T requested that Qwest input CLEC needs into runs Qwest already planned for itself.[8] Qwest changes to SGAT Section 8.3.1.11.2.3 during the Collocation workshop addressed AT&T's concerns.[9] Therefore, this issue can be considered closed.

4. Allowing for Direct Connection in Common Areas

AT&T requested that the ICDF frame requirement be eliminated in common areas, which would allow direct connection between the COSMIC/MDF and a CLEC.[10] Qwest agreed and it modified the SGAT accordingly.[11] Therefore, this issue can be considered closed.

5. Line Sharing Cost Elements

AT&T noted that it did not agree with rate elements and prices included in the SGAT. The parties agreed that such issues should be considered in a cost docket.[12]

6. Line Splitting

Line sharing contemplates that Qwest will continue to provide voice service over the same circuit that a CLEC uses to provide the same end user with data services. Line splitting differs in that it contemplates that one CLEC will provide the voice services, while another will provide the data services. AT&T argued that the SGAT inappropriately failed to require Qwest to provide the line splitting required by the FCC.[13] This issue was deferred to the subsequent workshop in anticipation of the presentation of a Qwest proposal and SGAT language addressing line splitting. Line splitting will therefore be addressed in the next report.

---

[6] AT&T Comments at page 33.
[7] Simpson Rebuttal at page 7.
[8] AT&T Comments at page 33.
[9] Simpson Rebuttal at page 8.
[10] AT&T Comments at page 33.
[11] Simpson Rebuttal at page 8.
[12] AT&T Comments at page 34 and Simpson Rebuttal at page 8.
[13] AT&T Comments at page 34.

Issues Remaining in Dispute – Line Sharing

1. Ownership of and Access to Splitters

AT&T testified that Qwest should be required to own splitters and to make them available to CLECs on a line-at-a-time basis, citing technical and practical considerations.[14] Rhythms and New Edge commented that Qwest should be required to purchase and maintain splitters, at the option of CLECs. They defended this approach by saying that the splitter should be placed close to the Qwest distribution frame, in order to minimize cable length, maximize the use of existing tie cables, make the most efficient use of central office space, and provide economies through bulk purchases.[15]

Qwest said that CLEC ownership of the POTS splitters necessary for line sharing was the method provided for in the original FCC *Line Sharing Order*. Qwest also said that the FCC has upheld the positions that ILECs need not provide access to their splitters in the SWBT 271 Order.[16] Paragraph 327 of that order stated that, "We [the FCC] did not identify any circumstances in which the splitter would be treated as part of the loop." AT&T did not brief this issue.

Proposed Issue Resolution: It is very clear that existing FCC requirements provide no basis for obliging Qwest to provide splitters and to make them available to CLECs on a line-at-a-time basis. Neither has the evidence in this proceeding provided any basis for concluding that a requirement for such access is necessary or appropriate. There is no evidence to support a conclusion that CLEC installation of splitters would impose distance, cable length, or central-office space problems. SGAT Section 9.4.2.3.1 allows for the location of CLEC splitters in common areas. Qwest will maintain common-area splitters.[17]

That CLECs could gain greater economies if Qwest combined CLEC and its own splitter needs for purchasing and maintenance purposes is not the issue. The same is true for virtually every other item of equipment used by both ILECs and CLECs, from trucks to switches. Nevertheless, the SGAT provides for Qwest to act as purchasing agent for CLECs in securing splitters. Therefore, there is not a basis for concluding that Qwest fails to meet checklist requirements by declining to provide splitters at its central offices for use by CLECs in support of line sharing.

2. Tying Qwest Data Service and Voice Service

AT&T argued that Qwest has made a policy decision to disconnect Megabit service from a customer deciding to change to a CLEC for local voice service over the same loop.[18] Citing the "hundreds of thousands" of Qwest Megabit service customers, AT&T argued that Qwest's decision to "walk away" from an established, profitable business reflects an intention to create entry barriers for CLECs seeking to provide voice services. The argument was that Qwest retail

[14] AT&T Comments at page 35.
[15] Joint Initial Comments of Rhythms Links, Inc. and New Edge Networks Regarding Emerging Services (Comments of Rhythms and New Edge), at pages 12 and 13.
[16] Qwest Brief at page 25.
[17] Direct Testimony of Karen A. Stewart on Behalf of Qwest Corporation Re: Emerging Services and Checklist Item 5 (Stewart Direct) at page 15.
[18] February 27, 2001 Transcript at pages 79 through 85.

customers will be less likely to abandon Qwest's voice services, if doing so would also require them to abandon the high-speed data services that they secure from Qwest through Megabit.

Qwest acknowledged that its provision of voice and Megabit services to one of its end users over the same loop is the functional equivalent of line sharing. Qwest cited paragraph 26 of the *Line Sharing Reconsideration Order* as holding that an ILEC is not required to provide xDSL service when it is no longer the voice provider. Qwest said that the FCC also held in its Texas 271 decision that an ILEC has no obligation to provide UNE-P Combinations with xDSL data service:

> *Under our rules, the incumbent LEC has no obligation to provide xDSL service over this UNE-P carrier loop. In the Line Sharing Order, the Commission unbundled the high frequency portion of the loop when the incumbent LEC provides voice service, but did not unbundle the low frequency portion of the loop and did not obligate incumbent LECs to provide xDSL service under the circumstances AT&T describes. Furthermore, as described above, the UNE-P carrier has the right to engage in line splitting on its loop. As a result, a UNE-P carrier can compete with SWBT's combined voice and data offering on the same loop by providing a customer with line splitting voice and data service over the UNE-P in the same manner. In sum, we do not find this conduct discriminatory.*

Qwest argued that its practice was not a barrier to entry because CLECs could offer their own xDSL service or partner with another carrier who does.[19]

AT&T responded by saying that the FCC did not reject AT&T's argument in this regard, but merely found that Qwest's policy did not violate the *Line Sharing Order*.[20] In fact, AT&T noted, the FCC left explicitly open the question of the impact of ILEC denials of xDSL service when it loses voice service over the same line to a CLEC:[21]

> *To the extent that AT&T believes that specific incumbent behavior constrains competition in a manner inconsistent with the Commission's rules and/or the Act itself, we encourage AT&T to pursue enforcement action.*

Proposed Issue Resolution: This issue has its roots in the nature of the FCC's consideration of line sharing. Specifically, it considered and approved the unbundling of the high frequency portion of loops to expand competition for data services. It did not apparently consider, at least so far, the question of unbundling the low frequency portion to promote competition for voice services. This is essentially all that the FCC said in the quoted portions of the Texas decision. It has reserved for another day the question of whether actions such as Qwest takes in these circumstances impermissibly constrain competition. The FCC has decided that it will not exercise its responsibility to set new general policies in narrow proceedings, like the Texas 271 case cited by Qwest.

---

[19] Qwest Brief at page 21.
[20] AT&T Brief at pages 24 and 25.
[21] *Line Sharing Reconsideration Order* at ¶ 26.

However, nowhere has the FCC stated that its own failure yet to declare a rule of general applicability should serve as a bar to state commission consultation on the very same issues that such a policy would address. Had it done so, the FCC would turn the state commission consultative process into merely a fact finding exercise to determine whether its existing policies of general applicability across the country, exactly as it has expressed them, are being carried out in the states where Section 271 compliance is being sought. Clearly, the states, as the Congress and the FCC have confirmed on many occasions, anticipate a much more robust role for state commissions.

Insofar as this question is concerned, that role requires a determination of the competitive impacts of Qwest's decision to withdraw from customers its Megabit service where a CLEC uses sharing to provide xDSL services across a loop's high frequency portion. Qwest's policy not to continue to offer its Megabit services when a CLEC captures a customer for voice services gives grounds for concern.

The existence of this concern in the current marketplace for xDSL services makes appropriate an examination into the reasons why Qwest takes this approach. The record disclosed that there are no technical feasibility issues; in fact, when Qwest provides both voice and megabit service over the same loop to the same end user, it concedes that it is, for practical purposes, engaging in line sharing. Qwest raised no billing, customer perception or satisfaction, or other substantial business reasons either. AT&T claimed that Megabit service was profitable and was growing at a very fast rate on Qwest's system. Qwest did not refute this claim either at a general or specific, detailed level. The only reason Qwest offered at all in defense of its policy was that it had not undertaken the actions necessary to isolate Megabit service as a stand-alone Qwest retail offering.

The most logical conclusion to be drawn from the evidence of record is that Qwest's refusal to continue to provide Megabit services in these circumstances:

- More than likely is the result of an intention by Qwest to seek to retain voice service by creating consequences to switching voice services that Megabit customers are particularly likely to see as adverse in the current marketplace
- Certainly has the effect of inhibiting competition for voice services (for customers now taking or likely to take Megabit services), whatever Qwest's underlying intention may be.

Qwest's discussion of antitrust principles may be interesting as general background, but it is not determinative here. The Telecommunications Act of 1996 surely does not set as a standard of performance any ILEC conduct that would withstand antitrust scrutiny. ILECs were already subject to that standard. What is necessary to open markets and to promote competition in an industry whose infrastructure is dominated by ILECs is much more to the point. When viewed against this standard, Qwest should not be considered to be in compliance with public interest requirements as long as it maintains a policy of denying its end users Qwest's own Megabit or xDSL services when it loses a voice customer to a CLEC through line sharing.

3. *Line Sharing Over Fiber Loops*

AT&T argued that, in contravention of the *Line Sharing Reconsideration Order* at ¶¶ 10 through 13, Qwest was not obliged by its SGAT to provide line sharing over fiber loops. Rhythms considers the obligation to provide line sharing over the fiber portion of loops to be clear, citing paragraph 10 of the FCC's *Line-Sharing Reconsideration Order*:

> *We clarify that the requirement to provide line-sharing applies to the entire loop even where the incumbent has deployed fiber in the loop (e.g. where the loop is served by a remote terminal).*

Rhythms and New Edge commented that Qwest bears the burden of demonstrating that it is not technically feasible to unbundle loops, including cases where DLC has introduced fiber into the loop.[22] Rhythms also noted that the refusal of Qwest to offer such line sharing in an appropriate manner would make circumstances more difficult for competitors as IDLC installations increased the amount of fiber in the loop portion of Qwest's network.[23] Rhythms and New Edge commented that allowing CLECs to place line cards[24] in remotely deployed Qwest equipment would allow line sharing. Under this scenario, Qwest could make line sharing available by providing:

- An xDSL copper loop from the NID to the customer side of the Qwest remote terminal
- Electronics at the remote terminal to derive the bandwidth necessary
- Transport over the Qwest feeder network from the remote terminal back to the central office.

Qwest argued that there was no apparent dispute over the fact that line sharing over digital loop carrier and fiber would cause garbled signals. Its witness testified that it was not technically feasible to line share, except on a copper loop.[25] Qwest said that the FCC required line sharing only over the copper portion of the loop. Qwest argued that it does what the FCC has required at paragraph 12 of the *Line Sharing Order*, which provides that:

> *Where a competitive LEC has collocated a DSLAM at the remote terminal, an incumbent LEC must enable the competitive LEC to transmit its data traffic from the remote terminal to the central office. The incumbent LEC can do this, at a minimum, by leasing access to the dark fiber element or be leasing access to the subloop element.*

Beyond that, Qwest said, the FCC has merely recognized the possibility of line sharing over fiber portions of loops, which is demonstrated by the issuance of two notices of proposed rulemakings to look at technical feasibility.[26]

---

[22] Comments of Rhythms and New Edge at page 5.
[23] Rhythms Brief at pages 7 and 8.
[24] The comments (at page 10) said that this "plug and play" option would allow the CLEC line card to perform the functions of the DSLAM.
[25] February 27, 2001 Transcript at pages 90 and 91.
[26] Qwest Brief at page 17.

Qwest did offer language that partially addressed this issue, by proposing a new SGAT Section 9.4.1.1:[27]

> *To the extent additional line sharing technologies and transport mechanisms are identified, and Qwest has deployed such technology for its own use, and Qwest is obligated by law to provide access to such technology, Qwest will allow CLECs to line share in that same manner, provided, however, that the rates, terms and conditions for line sharing may need to be amended in order to provide such access.*

Qwest argued that the Illinois Commerce Commission order cited by CLECs did not in fact order Ameritech to provide line sharing over fiber, but rather directed Ameritech to provide as UNEs "Lit Fiber Subloops" and the "High Frequency Portion of copper subloops."[28] That is, according to Qwest, not only different from line sharing over fiber loops, but also exactly what Qwest does offer.

Proposed Issue Resolution: There is no evidence of record that would support a conclusion that Qwest fails to provide any technically feasible form of line sharing over fiber. There were CLEC arguments about whether the SGAT acknowledged the need to address line sharing over fiber loops. The language of Section 9.4.1.1 does so. The only argument against its general propriety would be that it fails to deal on a routine basis with other technologies and methods already proven to be feasible for providing line sharing over fiber facilities. The record will not support a conclusion that there are such methods or technologies. The only one specifically cited in comments and testimony was the "plug and play" option addressed in the comments of Rhythms and New Edge. The feasibility of this method is at issue now before the FCC, which will presumably decide it upon much more than the scant evidence available here. A decision on that option should therefore come from the FCC and, when it does, the language of SGAT Section 9.4.1.1 is already expansive enough to address the option, should it prove a feasible and effective one.

4. Provisioning Interval

Rhythms proposed that Qwest provision line-sharing in three days, and that Qwest further reduce the interval to one day over time, citing an Illinois Commerce Commission order establishing such an interval in an Ameritech docket. Rhythms said that Qwest failed to respond to CLEC evidence that Qwest need only perform a lift-and-lay at the central office in order to provide line sharing. Rhythms also cited testimony from Qwest in support of the proposition that no dispatch

---

[27] Qwest Brief at page 18.

[28] Arbitration Decision on Rehearing, *Covad Communications Company Petition for Arbitration pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Amendment for Line Sharing to the Interconnection Agreement with Illinois Bell Telephone Company d/b/a Ameritech Illinois, and for an Expedited Arbitration Award on Certain Core Issues; Rhythms Links, Inc. Petition for Arbitration pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Amendment for Line Sharing to the Interconnection Agreement with Illinois Bell Telephone Company d/b/a Ameritech Illinois, and for an Expedited Arbitration Award on Certain Core Issues*, Docket Nos. 00-312/00-313 (consol.), 2001 Ill. PUC LEXIS 205 (February 15, 2001), at pages 94 and 95.

of technicians would be required for line sharing.[29] Rhythms argued that the results that Qwest submitted for its retail DSL installations[30] did not support Qwest's claim that it took Qwest 10 days (averaging dispatch and no dispatch orders, with no dispatch averaging 70 percent of the total) on the retail side. Rhythms also said that the paragraph 174 of the *Line Sharing Order* makes it clear that provisioning intervals for xDSL capable loops should be determinative, not parity with the delivery of retail xDSL service.[31]

Rhythms also noted that the FCC made a finding in paragraph 175 of the *Line Sharing Order* that would actually support significantly shorter intervals where no dispatch is required. Specifically, the FCC observed that intervals should be much shorter where the ILEC was already providing the equivalent of line sharing for itself (i.e., already providing data services in addition to voice services to the same customer over the same facilities). Rhythms took this comment as reflecting an FCC assumption that dispatch was generally necessary where the ILEC was not already providing data services at a time when a CLEC requested line sharing. The Qwest data supported an inference of a 30 percent dispatch rate (very generously at that, according to Rhythms).[32] Rhythms closed by inviting attention to the Act's Section 706 admonition to each state commission to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans."

Qwest argued that the FCC required ILECs to provision line sharing under intervals similar to those in which ILECs provide DSL service to their own end users. Qwest noted that the basis upon which the FCC decided to unbundle line sharing as a network element was its concern that failure to do so would inhibit the ability of CLECs to offer the equivalent of a service that ILECs were offering to their retail customers.[33] Qwest said that the five-day line-sharing interval to which it would commit here is significantly less than what it was offering to its own retail customers. Qwest argued that provisioning interval parity with retail operations is the clear standard under the *Line Sharing Order*, which held that:[34]

> *As a general matter, the nondiscrimination obligation requires incumbent LECs to provide to requesting carriers access to the high frequency portion of the loop that is equal to that access the incumbent provides to itself for retail DSL service its customers or its affiliates, in terms of quality, accuracy and timeliness. Thus, we encourage states to require, in arbitration proceedings, incumbent LECs to fulfill requests for line sharing within the same interval the incumbent provisions*

[29] Rhythms Brief at pages 3 and 4, citing *In re Covad Communications & Rhythms Links Inc. Petition for Arbitration to Establish An Amendment for Line Sharing to the Interconnection Agreement with Illinois Bell Telephone Company*, No. 00-0312 et al., Arbitration Decision (August 17, 2000) (Illinois Arb. Order), at pp. 24-27; rehearing granted on other grounds on February 15, 2001(Arbitration Decision on Rehearing).
[30] At the request of the facilitator, without objection from the participants, and with the option (unexercised as it turned out) for the participants to raise questions about the submission.
[31] Rhythms Brief at pages 4 and 5.
[32] Rhythms Brief at page 6.
[33] Third Report and Order in CC Docket No. 98-147, Fourth Report and Order in CC Docket No. 96-98, *In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket Nos. 98-147 & 96-98, FCC 99-355 (Rel. December 9, 1999) ("*Line Sharing Order*") at ¶ 33.
[34] *Line Sharing Order*" ¶ 173 (emphasis added).

> *xDSL to its own retail or wholesale customers, regardless of whether the incumbent uses an automated or manual process.*

Qwest testified that its retail DSL provisioning interval is ten days.[35] Qwest noted that the Rhythms testimony would support at most a day or two on top of the Qwest wholesale interval of five days.[36]

Proposed Issue Resolution: Line sharing is only one of the activities that a CLEC must accomplish to provide xDSL services to an end user. CLECs need to undertake further actions after line sharing is secured. Qwest itself concedes that a day or two would be necessary. Therefore, establishing the line-sharing interval as parity with retail service initiation would place CLECs at a competitive disadvantage. Qwest's brief in effect appears to acknowledge that this conclusion is valid, although it does argue that parity with retail DSL provisioning is the standard. We begin by recommending that the correct standard should be one that promotes parity with Qwest retail performance, provided that it recognize:

- That the extra time required by CLECs to complete work to initiate service needs to be accommodated
- That, to the extent that Qwest's total interval to initiate service includes unnecessary time subsequent to loop provisioning, there is no sound reason for imposing time inefficiencies on CLECs as well.

The current Performance Indicator Descriptions (PID) document addresses loop-related intervals under Performance Measure OP-4. Where the PID does address intervals, it provides an important and perhaps determinative reference point for addressing the adequacy of provisioning intervals to allow CLECs a reasonable opportunity to compete with Qwest for local service customers. However, OP-4 does not adopt a specific standard for line sharing. Therefore, we do not have substantial guidance from the ROC in addressing the CLEC concern about provisioning intervals for line sharing.

The evidence of record does lead to the conclusion that Qwest's five-day interval will allow ample opportunity overall for CLECs to complete remaining work in time to provide end users with xDSL services within time frames that are competitive with what Qwest is now applying. Rhythms criticized the information provided by Qwest in response to a request by the facilitator, but those criticisms focus on factual circumstances that Rhythms could have explored earlier, but chose not to address until its brief. Moreover, the explanations provided in the information were reasonable, and suffered no self-evident inaccuracies or gaps. The information included a rational explanation of the way that Qwest records performance, including the creation of reporting categories, not all of which appear to be applicable to line sharing. That information supports a determination that Qwest's five-day interval is appropriate and, even allowing two days or more for additional CLEC work, will make CLEC service-delivery times competitive with those of Qwest.

[35] February 27, 2001 transcript at page 30.
[36] February 27, 2001 transcript at page 36.

The reasonableness of the five-day interval is also supported by its consistency with the loop intervals for which OP-4 does provide a specific benchmark (i.e., a fixed interval, rather than a parity-with-retail standard). As Rhythms itself noted, unbundled loop intervals are a more meaningful standard than parity with retail service delivery.

Therefore, Qwest's five-day provisioning interval is an appropriate reflection of circumstances that exist today. However, the record does not adequately address the issue of why provisioning need take five days where no dispatch is required. It also is not helpful in determining how to disaggregate the interval if a significantly shorter period were allowed for no-dispatch provisioning. Even more seriously, the need for a total Qwest retail interval approaching 10 days has not been addressed. Qwest's fixed five-day interval is defensible as allowing CLECs a substantial opportunity to meet or beat the 10-day Qwest retail service-initiation interval. If Qwest succeeds in materially shortening the 10-day interval, however, a failure to change the five-day line-sharing interval could leave CLECs disadvantaged. Accordingly, the future variability of the period for DSL services, which we need to recognize are "emerging" services, could render a fixed five-day line-sharing interval inappropriate.

It is perhaps comforting that OP-4 defines the line sharing interval standard as "diagnostic," which indicates that Qwest, the CLEC community, and regulators will be examining performance results and assessing, as time passes, what that information shows about performance comparability and, more importantly, what to do about the standard in response. Based upon this understanding of the status of the PID, the acceptance of Qwest's five-day interval should be with the following conditions:

- It is based upon allowing parity in initiating service to end users as between CLEC and Qwest end users
- It is based on the premise that Qwest provisioning is and remains at roughly 10 days
- It is subject to change if and as the ROC decides to change the PID based upon its consideration of results under the OP-4 diagnostic standard for line sharing
- It is also subject to change as Qwest retail intervals drop, under the general standard that the CLEC line sharing interval should remain at two days less than Qwest's retail interval for xDSL services
- If it can be demonstrated that Qwest is: (a) provisioning more than 25 percent of CLEC line sharing orders without dispatch, (b) providing xDSL service to at least the same percentage of its own end users without dispatch, and (c) there is a demonstrated difference of more than 2 days in provisioning with versus without dispatch, then the CLEC provisioning interval will be disaggregated.

V. Subloop Unbundling

Background – Subloop Unbundling

The FCC recognized that the *First Report and Order* left unfinished the question of access to incumbent networks beginning at points closer to the customer. When it returned to the issue, the FCC found that CLECs sought access to subloop elements to accomplish a number of purposes:

- Connect to incumbent on-premises wire
- Gain access to loops that incumbents fed over IDLC
- Provide advanced services over xDSL.

The FCC determined that a lack of access to unbundled subloops was materially diminishing CLECs ability to offer services, and that the granting of such access would stimulate the development of competitor loops over time. Therefore, the FCC decided to require ILECs to provide access to subloops where technically feasible.[37]

The FCC defines subloops as the portions of the ILEC loop that can be "accessed at terminals in the incumbent's outside plant." An accessible terminal "is a point on the loop where technicians can access the wire or fiber within the cable without removing a splice case."[38]

The FCC intended to create a broad and forward-looking definition of subloops:

> *We believe that a broad definition of the subloop that allows requesting carriers maximum flexibility to interconnect their own facilities at these points where technically feasible will best promote the goals of the Act. Our intention is to ensure that the subloop definition will apply to new as well as current technologies.*

Issues Resolved During This Workshop – Subloop Unbundling

1. Subloop Definition

AT&T said that Qwest's SGAT Section 9.3.1.1 definition of subloops was at variance with the FCC's definition as expressed in paragraph 205 of the *UNE Remand Order*. AT&T also questioned what Qwest meant in establishing under Section 9.3.1.1 a new point identified as the "Service Area Interface."[39] Qwest agreed to change the definition and it explained that the SAI was merely another term for the FDI.[40] This issue can be considered closed.

[37] *UNE Remand Order* at ¶¶ 204 and 205.
[38] *UNE Remand Order* at ¶ 206.
[39] AT&T Comments at page 21.
[40] Stewart Rebuttal at page 17.

2. *Unbundling All Loop Types*

AT&T said that the SGAT should address access at all available speeds, including: (a) 2-wire copper, (b) 2-wire non-loaded copper, (c) 4-wire copper, DS-1 carrier, (d) DS-3 carrier, and (e) OC-3 through OC-xx SONET over fiber. AT&T noted that the SGAT and Interconnection and Resale Resource Guide (IRRG) do not adequately cover any of these elements, access points, or interface speeds and media. AT&T claimed that CLECs would need to have access to Qwest subloop elements at a variety of locations, in a variety of conditions, and to support a variety of network configurations.[41]

Qwest agreed, but noted that loops at DS3 and above have only "feeder" portions and that its cost model for fiber-based loops does not contain a traditional distribution component.[42] This issue can be considered closed; however these workshops leave open the issue of how costs for subloop elements should be modeled for pricing purposes.

3. *Spectrum Restrictions*

AT&T argued that the SGAT Section 9.3.2.1 restriction on spectrum usage for the two-wire distribution subloop element (between 300 and 3000 Hz) should be eliminated, because it would deny CLECs the full use of the element's capabilities, which is not consistent with the *UNE Remand Order* at ¶¶166-176.[43] Qwest testified that it would allow DSLAM and splitter collocation where space permits, thus making access to the high frequency portions of loops available to CLECs.[44] Therefore, this issue can be considered closed.

4. *Subloop Ordering Information*

AT&T asked that Qwest: (a) explain the practical operation of the SGAT Section 9.3.6.1 requirement that "CLEC will use the termination information provided at the completion of the FCP on the LSR for Sub-Loops" and (b) provide in the LSR all the NC/NCI codes for subloop elements that a CLEC might identify.[45] Qwest explained that the process would be similar to the provision of APOT information at the end of a central office collocation installation. Qwest provided a technical publication reference for obtaining NC/NCI code information.[46] This issue can be considered closed.

5. *Rights of Way*

AT&T commented on several aspects of the adjacent collocation that the SGAT contemplates at FCPs. First, AT&T observed that the right of way acquisition provisions of Section 9.3.8.1 were inconsistent with and should be changed to conform to the generally applicable right of way provisions of Section 10.8. Second, AT&T requested SGAT acknowledgement of the right of CLECs to build their own single points of interconnection or access for subloop elements, and to make the connections necessary for such access.[47] Qwest agreed to change the SGAT to make applicable the provisions of SGAT 10.8.

---

[41] AT&T Comments at pages 10 and 11.
[42] Stewart Rebuttal at page 10.
[43] AT&T Comments at page 20.
[44] Stewart Rebuttal at page 17.
[45] AT&T Comments at page 23.
[46] Stewart Rebuttal at page 20.
[47] AT&T Comments at page 25.

AT&T also wanted to add assurances that Qwest would add no other obligations involving securing rights of way or other authorizations from landowners.[48] Qwest said that its changes to Section 9.3.8.1 would serve to give CLECs access to any applicable Qwest rights, but that if additional agreements were needed with landowners, e.g., for cross connecting from CLEC facilities to the FCP, CLECs would be obliged to procure them independently.[49] This issue can be considered closed.

6. Dispute Resolution

AT&T commented that SGAT Section 9.3.8.3 would require it to use dispute resolution or arbitration under Section 252 of the Act to address denial of access to subloop elements. AT&T felt that a more expeditious means of resolving disputes was required, given Qwest incentives not to be cooperative in providing access. [50]

Qwest agreed to remove the language, but noted that the SGAT's generally applicable dispute resolution procedures would apply to these, as well as other disputes.[51] This issue can be considered closed.

7. Copper Feeder and Fiber Subloops

Qwest responded to AT&T's request for subloop access in "fiber to the curb" configurations by saying that the fiber portion of the network in such cases was feeder, not distribution. Qwest agreed that it would provide collocation space or packet-switch unbundling where the conditions for the latter were met (packet switching is addressed separately in this report).[52] Qwest also opposed creating a standard offering for copper feeder subloops, because it projected virtually no demand for them, noting that AT&T declined to answer a Colorado discovery request seeking information about AT&T's projected use of this element.[53] Qwest did agree to make copper feeder subloop elements available by the special request process, through a change to SGAT Section 9.3.1.7.[54] Qwest also said that its agreement to provide dark fiber at accessible terminals, through SGAT Section 9.7, had proven acceptable to AT&T, which sought access to fiber subloops. Qwest also noted that SGAT Section 9.2.2.3.1 provides for access to high-capacity loops at accessible terminals, to which AT&T also agreed.[55]

AT&T's brief agreed to treat these two subloop types as "nonstandard" offerings, which would only be available through Qwest's "Special Request Process." AT&T reserved its opportunity to address general concerns about the special request process (which applies to many situations other than subloop access) in the upcoming workshop on general SGAT terms and conditions.[56] This issue can be considered closed.

---

[48] AT&T Comments at page 25.
[49] Stewart Rebuttal at page 22.
[50] AT&T Comments at page 25.
[51] Stewart Rebuttal at page 23.
[52] Stewart Rebuttal at page 15.
[53] Stewart Rebuttal at page 16.
[54] Qwest Brief at page 54.
[55] Qwest Brief at page 55.
[56] AT&T Brief at pages 66 and 67.

Issues Deferred – Subloop Unbundling

1. Undefined Rates

AT&T recognized that these workshops do not include the evidence necessary to examine the reasonableness of particular rates. Nevertheless, it commented that Qwest should at least be required in SGAT Section 9.3.5 to explain the basis on which Qwest would calculate the rates for recurring charges, nonrecurring charges, and the trouble isolation charge, in order to be able to assess whether or not such charges will be discriminatory.[57] Qwest responded that it would include subloop pricing in SGAT Exhibit A (where prices for all services are generally addressed), but that all pricing issues should be deferred to cost proceedings.[58] Qwest also noted that its cost studies have averaged shorter MTE distribution costs with the costs of its remaining distribution facilities which overall are longer. Any change to this approach, according to Qwest, should only be addressed in cost dockets, where the balancing of policy and economic considerations could be more fully addressed.[59]

It is difficult to see how a conceptual treatment of pricing would be helpful at this point. Whether the prices that Qwest proposes in SGAT Exhibit A will meet all applicable standards, including any discrimination test, will depend upon the specific and detailed means by which Qwest supports them, much as is the case for loops and other UNEs. It is fair to express concern about the basis for prices not yet provided or supported, but it is necessary to defer those questions to proceedings that can address them on the basis of focused and detailed cost information and analysis.

2. Pricing for Overly Broad Definitions of Subloop Categories

AT&T argued that CLEC cost increases would result from the Qwest decision to limit subloops to two categories in SGAT Section 9.3.1.2. By this overly broad approach, AT&T said, Qwest would effectively raise the prices to CLECs, by including general feeder or distribution costs that were not appropriate to the more narrowly defined and more extensive list of subloop elements requested by AT&T.[60]

In its brief, AT&T also argued that subloop pricing for campus environments should be based on narrower costs than included in Qwest's pricing for distribution subloops. This argument is similar to the one made in AT&T's testimony, but it addresses a narrower scope. The issue that AT&T briefed was whether a CLEC should pay the same price for the on-campus portion of a Qwest loop as it does when it takes a subloop that extends from the FDI to a customer's location. AT&T seemed to argue that this issue is more than a pricing issue, and, therefore, should be decided here. However, the brief did not serve to distinguish the problem it cited from those typical of the price "de-averaging" issues that are typically dealt with in pricing proceedings. As is true for the broader issue of costs and pricing, this issue should be deferred to proceedings that can more fully address more general deaveraging issues and, as appropriate, the detailed costs that underlie particular loop portions and functionalities.

---

[57] AT&T Comments at page 20.
[58] Stewart Rebuttal at page 17.
[59] Qwest Brief at page 56.
[60] AT&T Comments at pages 21 and 22.

Issues Remaining in Dispute – Subloop Unbundling

1. Subloop Access at MTE Terminals

AT&T argued that the FCC has made it clear that technically feasible points for gaining access to subloops include accessible terminals at MTEs.[61] In particular, AT&T cited ILEC control over "on premises" wiring as a barrier to competition. AT&T phrased this issue in terms of whether the SGAT was consistent with FCC rules addressing NID access. AT&T cited the *UNE Remand Order* paragraph 233 description of the NID as including:

> *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.*

AT&T further argued that the FCC's redefinition of the NID in this order has special significance in the MTE context. Specifically, AT&T said that the change closed a gap CLECs had in reaching customers in cases where ILECs own or control the on-premises wiring that extends between the NID and wiring of the landlord, the building owner, or presumably the end user. The NID thus became in this context not the demarcation point between LEC and customer facilities, but the physical device connecting distribution plant with premises wiring. The demarcation point in this context could therefore be downstream from the NID (i.e., between the NID and the point where Qwest control over on-premises wiring ended).

The critical aspect of the FCC's order was that it made the demarcation point, rather than the NID, the key factor in determining where a loop stops on the end user side, according to AT&T. Therefore, there could be multiple demarcation points, e.g., one per building or one for every end user located in the building, depending upon location-specific circumstances. Therefore, the demarcation point could be at, within, or outside the NID.[62] AT&T sought assurances that it could get access to premise wiring in accord with the FCC's conception of demarcation points at MTEs.

Qwest's brief considered AT&T's continuing focus on NID definition to be misplaced, because the definition was only relevant when Qwest wanted to require collocation to get subloop access at MTE terminals. Having agreed not to require collocation at MTE terminals, Qwest considered the argument about NID definitions to be without practical import in this context. [63] Nevertheless, Qwest continued by offering a construction of the *UNE Remand Order* that differed from the one urged by AT&T. Qwest cited paragraph 234 as supporting the conclusion

[61] AT&T Brief at page 40, citing *In the Matter of Promotion of Competitive Networks in Local Telecommunications Markets,* WT Docket No. 99-217; *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98; *Review of Sections 68.104 and 68.213 of the Commission's Rules Concerning Connection of Simple Inside Wiring to the Telephone Network,* CC Docket 88-57; *First Report and Order and Further Notice of Proposed Rulemaking in* WT Docket No. 99-217, *Fifth Report and Order and Memorandum Opinion and Order in* CC Docket No. 96-98, and *Fourth Report and Order and Memorandum Opinion and Order in* CC Docket No. 88-57. (rel. October 25, 2000) ("MTE Order")

[62] AT&T Brief at pages 43 and 44.

[63] Qwest Brief at page 37.

that the NID is equivalent to the demarcation point between "carrier and customer premises facilities".

Qwest asserted that AT&T's motivation in seeking a different definition of the NID was to avoid the FCC Rule 319(a)(2)(D) provision that the subloop access is subject to FCC collocation rules. While agreeing to waive collocation requirements at MTE terminals inside buildings, Qwest continued to assert that CLECs must comply with collocation rules when gaining access to subloop elements at accessible terminals, which include MTE terminals.[64]

Proposed Issue Resolution: The framing of the question in terms of NID definition appears to presume that the answer will by definition determine provisioning intervals and the degree of direct or unmediated access CLECs will secure to the points where subloop elements begin and end. For example, if the point of access to the subloop element is within what is described as the NID, then there is a contention that it cannot be subject to collocation requirements; conversely, if it is not within the NID, then there arises the argument that collocation and its 90-day standard intervals apply. There also arises the related argument that Qwest can demand measures, such as separate cross-connection facilities, as part of its right to segregation of facilities in collocation situations.

As one might expect, AT&T took a position on the NID definition question that would eliminate the 90-say collocation intervals, and would allow it fairly free access to the terminal involved. No more surprisingly, Qwest took a contrary position. However, neither position comports with what we consider to be the less dogmatic and a more pragmatic approach that is required here. It is difficult to conceive that the FCC in addressing subloop unbundling had in mind the rote application of collocation and CLEC access rules that have been crafted primarily with reference to more traditional and very different collocation environments; e.g., central offices. In any case, we do not propose a resolution here that will provide simple definitional answers. Such answers cannot be expected to respond to the full range and wide variety of possible field conditions at Qwest's "accessible terminals," i.e., those places where subloop access is required.

The benefits of a more case-specific approach were very well demonstrated on the record of this workshop. We began the discussion of MTE terminal access by addressing a Qwest proposal that would have allowed free CLEC access to Qwest terminals inside buildings in the case of unenclosed, in-building terminals connecting Qwest facilities to the on-premises wiring of end users. However, where the terminal was enclosed, regardless of how substantial or secured that enclosure might be, Qwest would have required a separate CLEC cross-connect block, collocation, and presumably Qwest performance of jumpering between CLEC and Qwest facilities. Moreover, all these steps could be avoided in those cases where the on-premises wiring on the customer-facing side of the Qwest terminal was owned by the building owner, rather than by Qwest.

There ensued a long and very illuminating discussion of the service reliability, safety, work efficiency, cost, and engineering and operating practices of the alternative means for providing CLEC access to such in-building terminals under the various physical and on-premise wiring ownership scenarios that might exist. Photographs depicting the principal possible configurations

[64] Qwest Brief at page 40.

aided that discussion. The discussion was between the engineering and operations personnel of the carriers; it was entirely unencumbered by definitions from FCC orders or presumptions that any particular FCC access rules must apply. From the discussion, it became clear what kind of equipment segregation was necessary from an engineering and operations standpoint, and, in turn, what intervals were appropriate. In other words, we did not begin from arguing which standard, pre-defined FCC situation was most analogous, and end by applying standard conditions or intervals on the basis of who won the definitional argument. Rather, we began from an examination of case-specific circumstances and let an emerging understanding of the particular situation at hand lead to what became a reasonably self-evident set of necessary conditions, limits, and durations.

The clarity of the solution, when viewed from this pragmatic perspective was underscored by Qwest's agreement to drop its previous distinctions between closed and unenclosed terminals. It was gratifying that the parties were able to agree on a solution in this context. It was less appealing to note that, in their briefs, they continued to try to approach the problem in other remaining contexts by relying upon the same collocation and NID arguments.

At least, the problem of collocation and Qwest-mediated access to accessible terminals has been resolved in the case of all in-building (and on-building) terminals. However, the dispute remains for all of the other accessible terminals that exist in Qwest's outside plant. Unfortunately, we do not have a record that will allow for a prior and similarly pragmatic solution in those cases. In fact, making such a record for all possible cases would appear to be unmanageable anyway, given the evidence from all sides confirming the wide variety of circumstances that exist in Qwest's network.

However, we should note that the in-building MTE terminal location appeared to be the one of greatest concern, and therefore greatest likelihood for common CLEC use to gain access to subloop elements. The ability to get to the practical bottom of that case suggests the wisdom of a similar approach to other situations. AT&T clearly prefers advance solutions to as many access types as possible, fearing appropriately that market entry plans could be delayed by the need for time consuming processes, such as BFRs. However, the workshop consideration of this issue showed the benefits of a case-by-case approach. Moreover, it shows that advance solutions can be worked out for particular configuration types, provided that the focus is on the factors relevant to those particular types. Therefore, there is no reason why the development of such solutions need await the time when live customers are waiting for service.

Therefore, the resolution of this issue (outside the context of in- or on-building MTE terminals) should not try to define the problem away generally by recourse to broad FCC NID and collocation definitions and requirements, which are not helpful in this particular context. There should rather be recognition in the SGAT of the need to address the particulars of access to "accessible" terminals for subloop elements. The following SGAT language will accomplish this purpose:

> *(a) For any configuration not specifically addressed in this SGAT, the conditions of CLEC access shall be as required by the particular circumstances. These conditions include: (1) the degree of equipment separation required, (2) the need*

for separate cross-connect devices, (3) the interval applicable to any collocation or other provisioning requiring Qwest performance or cooperation, (4) the security required to maintain the safety and reliability of the facilities of Qwest and other CLECs, (5) the engineering and operations standards and practices to be applied at Qwest facilities where they are also used by CLECs for subloop element access, and (6) any other requirements, standards, or practices necessary to assure the safe and reliable operation of all carriers' facilities.

(b) Any party may request, under any procedure provided for by this SGAT for addressing non-standard services or network conditions, the development of standard terms and conditions for any configuration(s) for which it can provide reasonably clear technical and operational characteristics and parameters. Once developed through such a process, those terms and conditions shall be generally available to any CLEC for any configuration fitting the requirements established through such process.

(c) Prior to the development of such standard terms and conditions, Qwest shall impose in the six areas identified in item (1) above only those requirements or intervals that are reasonably necessary.

2. Requiring LSRs for Access to Premise Wiring at MTEs

AT&T argued that the requirement to submit LSRs to gain access to such subloops unjustifiably discriminates against CLECs. LSRs represent to AT&T a complex and expensive means for acquiring access to facilities that have nominal cost, and which Qwest can use for its own purposes without similar burdens.[65] Rather than submitting an LSR, AT&T proposed that it specify monthly and in aggregate (by MTE terminal) the addresses of the MTEs where a CLEC has obtained access and the cables and pairs it is using there.[66]

AT&T stated that the cable and pair information would suffice to provide Qwest the carrier facility assignment (CFA) information needed to bill CLECs; it is not necessary to use an LSR for providing billing information. AT&T said that Qwest's failure to provide as a late-filed exhibit the promised OBF document addressing subloop access supports a conclusion that there is at least as yet no industry standard that addresses subloop billing information.[67]

AT&T also said that an LSR is not necessary to address maintenance and repair needs. AT&T said that concerns about mistakes or sabotage in installing service at MTE terminals exist whether or not Qwest owns the on-premises wiring, and that Qwest failed to say how an LSR would affect the occurrence of installation problems. AT&T argued that its proposed monthly notifications, combined with its proposal that all parties identify their facilities separately, would be adequate notice to Qwest for maintenance and repair purposes.

[65] AT&T Brief at page 46.
[66] AT&T Brief at page 47.
[67] AT&T Brief at pages 48 and 49.

AT&T proposed language for SGAT Sections 9.3.8.3, 9.3.8.8, and 9.3.8.10, in order to address its proposals for monthly provision of circuit and pair information, billing and payment, and facility identification.

Qwest argued that LSRs represent an industry standard for wholesale orders generally. More specifically, Qwest asserted that the Ordering and Billing Forum, which is the national forum for LSR ordering guidelines, creates the "de facto" standard for ordering. Qwest said that its soon-to-be issued draft solution for subloop unbundling will require an LSR for subloop ordering.[68]

Qwest also said that the LSR information that it requires for subloops is substantially the same as what it requires for loops. Moreover, Qwest noted, AT&T conceded that more than half of the orders involved would require an LSR anyway, because of the prevalence of number porting when local service customers switch carriers. In summary, Qwest argued that the information is necessary for a number of reasons:[69]

- Allowing the CLEC representative to validate that interconnection point information is valid and will be accepted
- Providing billing information without which inefficient manual billing systems would be required
- Providing the information Qwest needs to fulfill its maintenance and repair obligations
- Providing in a readily available format the information necessary to allow customers later to switch to other carriers smoothly
- Preventing unexpected problems in connecting a customer who moves into vacated premises, but wishes to take service from a different carrier than the one serving the customer who vacated
- Putting burdens on technicians to make uninformed decisions about installation or service matters.

Proposed Issue Resolution: AT&T's argument about the low cost and the low incidence of repair for on-premises wiring does not support its proposed long-term solution. Because Qwest is entitled to bill for the wiring if it owns it, it is also entitled to regularity and completeness for billing purposes. LSRs provide an efficient means of getting Qwest's billing systems the information needed; comparable manual methods would not be efficient; and AT&T's solution is simply not rigorous enough to offer Qwest what it is entitled to have when it makes its facilities available for CLEC use as subloop elements.

AT&T similarly errs in concluding that the high reliability of the on-premises wiring makes maintenance and repair needs insufficient to justify LSRs for access to on-premises wiring. High reliability might reduce repair incidences, but it will not eliminate them. Qwest has a legitimate business need to have the information it requires to respond efficiently to repair requests. Moreover, the fact that customers may continue to switch carriers also argues for control over the information about which facilities serve them. Similarly, customers who move into vacated premises are by no means certain to want service from the same carrier who served the prior

[68] Qwest Brief at page 41.
[69] Qwest Brief at pages 42 through 44.

occupant. Allowing for the creation of reliable information without significant delay is also important for these service transfers. LSRs, which will be the standard means of getting such data into Qwest's information systems, serve these purposes more effectively than would AT&T's approach.

Therefore, there should be no general waiver of LSR requirements for CLEC access to Qwest's on-premises MTE wire as a subloop element. However, the issue of whether the LSR process can and should be altered to meet the particular needs of this element remains relevant. Depending on decisions about issues that cannot be resolved here, such as price deaveraging, the administrative costs imposed by a traditional application of LSR requirements could profoundly alter the overall costs of securing access to on-premises wire. We should not lightly adopt requirements that make the processing of requests of a service the most expensive cost of securing it. In addition, the issues of customer switching and cycling of occupants do not necessarily argue for advance LSR submission, provided there is an effective way of providing it soon after a CLEC begins to serve a customer. The undisputed fact that such facilities will have a substantially lower trouble rate also would support a brief delay in the provision of LSR information, provided that other reasons support such a delay.

There are such reasons. AT&T presented evidence that the addition of an LSR period would always put CLECs at a disadvantage relative to Qwest in serving customers. Qwest did note that such a delay would occur in many cases anyway, due to the number of switches that require number portability, which clearly requires an LSR. However, it would appear that for more than a third (at least) of AT&T LSRs involving a change of service provider, number portability is not required.

Therefore, if there is a way to provide for an alternate method of submitting LSRs to avoid costs or delay, the circumstances warrant it. The record makes it clear that such a method exists. If a CLEC provides Qwest with LSR filing, but Qwest holds it in suspense for five days, a CLEC could proceed with connection of its facilities to Qwest's on-premises wiring and begin service delivery. Such an LSR could inform Qwest's systems to begin payment responsibility from the beginning of suspense period, thus obviating any concern about payment for all services delivered. During the five days, Qwest could also secure the circuit identifying information and enter it directly (i.e., not requiring Qwest to route it to the CLEC for re-entry into an LSR for filing with Qwest). Thus, within five days, Qwest would have the data needed to support repair and maintenance, service provider change, and occupant cycling needs. Such a short period would mitigate concerns about these needs under the circumstances unique to on-premises Qwest wiring in MTEs.

Qwest testified that this approach would not impose upon it any substantial inefficiency, and would generally meet its concerns about billing and service issues.[70] This approach would also save CLECs the burden and costs associated with entry of the circuit-identifying information (which would otherwise be secured by Qwest and passed along to CLECs as described elsewhere in this portion of this report). It provides an effective balancing of the concerns of Qwest and AT&T. In contrast, AT&T's approach would be less satisfactory in addressing Qwest's billing and its service concerns. Moreover, the facility tagging requirements, which Qwest would have

[70] February 28, 2001 Transcript at page 237.

to meet at its own expense, introduces inefficiency, and begs the question of why Qwest should tag facilities to support access by CLECs. Therefore, the SGAT should contain a provision as follows:

> *For access to Qwest's on-premises MTE wire as a subloop element, a CLEC shall be required to submit an LSR, but need not include thereon the circuit-identifying information or await completion of LSR processing by Qwest before securing such access. Qwest shall secure the circuit-identifying information, and will be responsible for entering it on the LSR when it is received. Qwest shall be entitled to charge for the subloop element as of the time of LSR submission by CLEC.*

3. CLEC Facility Inventories

SGAT Section 9.3.3.5 requires that Qwest inventory CLEC cable and pair terminations at MTEs. AT&T proposed instead a requirement that Qwest, at its expense, mark its owned or controlled on-premises wire and related facilities, tagging each cable pair currently being used by Qwest to serve an end user. AT&T took the position that, if Qwest had no reason to conduct an inventory earlier, then the entry of a competitor at the MTE terminal adds no reason to perform an activity that only benefits Qwest operationally. Moreover, AT&T's belief in the low failure rate of on-premises wire meant that even Qwest would not gain much in terms of maintenance and repair needs by requiring inventories. AT&T also argued that identifying facilities would be much less intrusive and more effective than inventories as a means of informing technicians providing new services, changing customers over, or maintaining existing ones of which carrier is currently using what facilities at MTEs.[71]

AT&T therefore asked that its facility identification proposal (its proposed SGAT Section 9.3.8.3) replace Qwest's inventorying proposal contained in Section 9.3.3.5. As an alternative to its Section 9.3.8.3 proposal, AT&T asked that it be permitted to provide any termination information deemed necessary when it contacts Qwest to seek a determination of who owns on-premises wiring at MTEs. AT&T also objected to Qwest charges for inventorying CLEC facilities under SGAT Section 9.3.6.4.1.[72]

Qwest's argument focused on whether inventories needed to be completed before, rather than after, CLECs have completed their installation processes. Qwest said that it should precede installation because the inventory is a prerequisite to LSR issuance. Qwest inventories of CLEC facilities provide addressing information for subloop terminations, which are recognizable when a CLEC issues an LSR for a subloop. Qwest argued that the service delay impact of a five-day interval for inventories is mitigated because it need only be done once per MTE, i.e., as part of the CLEC's first subloop order at the MTE. [73]

Proposed Issue Resolution: Qwest did not propose any reason for inventories other than to provide information necessary for LSRs. The inventories, as discussed under the immediately preceding issue, may be performed during the LSR suspense period. For the reasons discussed under the same issue, AT&T's alternate facility identification proposal should not be adopted.

[71] AT&T Brief at pages 52 and 53.
[72] AT&T Brief at page 54.
[73] Qwest Brief at page 47.

4. *Determining Ownership of Inside Wire*

AT&T cited FCC requirements for ILECs to negotiate in good faith to relocate a minimum point of entry (MPOE) within 45 days when requested by the owner, and for ILECs to provide information about the demarcation point between ILEC and owner facilities within 10 days. SGAT Section 9.3.5.4.1 allowed Qwest 10 days (measured from CLEC notification of an intent to provide service at an MTE) to determine what on-premises wire Qwest owned. AT&T would allow CLECs to rely upon an owner's declaration of ownership of on-premises wire, thus negating the need to await Qwest's determination, which could entail a 10-day delay.

Absent an owner's self-declaration of ownership, AT&T would allow Qwest 10 days to determine ownership, but would limit the response period to one day at MTEs where another CLEC had already sought Qwest ownership information. AT&T would also require Qwest to absorb the costs of the ownership determination.[74] AT&T argued that its proposal was reasonable because: (a) Qwest conceded that it too would sometimes need to consult or negotiate with the owner about ownership, (b) paragraphs 54 and 56 of the FCC's *MTE Order* creates a presumption that the owner can make a determination of wire ownership, and (c) Qwest's position that a CLEC would be converting Qwest property absent proof that the owner of the MTE also owned the on-premises wire conflicts with the policy behind the *MTE Order*. AT&T therefore asked that its proposed SGAT Sections 9.3.8.2 and 9.3.8.4 be accepted in lieu of Qwest's proposed Section 9.3.5.4.1.[75]

Qwest supported the existing SGAT language as providing a reasonable way for determining where exactly its maintenance and repair obligations would extend. Qwest considered AT&T's concern to be largely a matter of extending the time before CLECs could be able to provide service.[76]

Proposed Issue Resolution: The issue has two aspects: (a) responsibility for the Qwest costs involved in determining ownership, and (b) whether and by how much the ownership determination should delay CLEC access to subloop UNEs.

The determination of ownership is principally relevant to the question of whether CLECs must pay Qwest costs associated with on-premises MTE wire. Only if Qwest owns the facilities or the rights to their use could it be entitled to payment. The SGAT does not directly address the question of responsibility for ownership determinations. It is reasonable to place upon Qwest the burden of determining facility ownership before it charges for those facilities. Therefore, it should be responsible for the costs of such determination beyond reasonable and minimal costs for examination of its records. Such costs should be based upon the premise that Qwest is obligated to keep adequate and reasonably retrievable records associated with facility ownership. To the extent that failure to do so imposes added burdens, Qwest should absorb them. Qwest should also be entitled to reimbursement for any incremental ownership determination actions that it is forced undertake as a result of bad-faith CLEC actions associated with an assertion of ownership by parties other than Qwest.

[74] AT&T Brief at page 56.
[75] AT&T Brief at pages 56 and 57.
[76] Qwest Brief at page 47.

Much of the pricing for subloop elements remains to be initially determined by Qwest. Qwest should complete the design of its pricing in accord with these requirements.

The timing issue remains to be resolved. AT&T made a valid argument that determining ownership should take only a nominal time period after the issue has already been raised by another CLEC at the same MTE. Moreover, where a CLEC can provide Qwest with a written statement setting forth a reasonably clear, supported, and complete basis for a claim that the MTE owner also owns the on-premises wiring, the period should be reduced. The provision of such information will provide Qwest with information that should help it to narrow the activities necessary to make a reasonable investigation of ownership.

Therefore, SGAT Section 9.3.5.4.1 should be revised to include at its end the following sentence:

> *In the event that there has been a previous determination of on-premises wiring ownership at the same MTE, Qwest shall provide such notification within two (2) business days. In the event that CLEC provides Qwest with a written claim by an authorized representative of the MTE owner that such owner owns the facilities on the customer side of the terminal, the preceding ten (10) day period shall be reduced to five (5) calendar days from Qwest's receipt of such claim.*

5. Intervals

In the event of non-acceptance of its previous arguments about the FCP process, AT&T asked that, for the determination of on-premises wire ownership and the inventorying of circuit terminations, the longest interval for determining ownership and inventorying be not greater than 15 days. AT&T noted that Qwest discussed intervals of up to 30 days for open building terminals and 45 days for closed building terminals.[77]

Qwest began its response on the interval question with a defense of the 10 calendar-day period for determining ownership, which Qwest said was less than the 10 business days to which it was entitled to have under the *MTE Order*.[78] Qwest said that it would, upon completion of the ownership determination, take up to five days for performing an inventory (but only if it were for the first LSR for subloop access at an MTE). Qwest argued that this one-time per-MTE interval for basic infrastructure reasons, which could take up to 15 days, was reasonable and unlikely to delay CLECs, who have their own work (e.g., placing the CLEC terminal and running conduit to the Qwest terminal) to do in any case.[79]

---

[77] AT&T Brief at page 48.

[78] Qwest Brief at page 48, citing First Report and Order and Further Notice of Proposed Rulemaking in WT Docket No. 99-217, Fifth Report and Order and Memorandum Opinion and Order in CC Docket No. 96-98, and Fourth Report and Order and Memorandum Opinion and Order in CC Docket No. 88-57, *In the Matter of Promotion of Competitive Networks in Local Telecommunications Markets, Wireless Communications Association International, Inc. Petition for Rulemaking to Amend Section 1.4000 of the Commission's Rules to Preempt Restrictions on Subscriber Premises Reception or Transmission Antennas Designed to Provide Fixed Wireless Services, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Review of Sections 68.104 and 68.213 of the Commission's Rules Concerning Connection of Simple Inside Wiring to the Telephone Network*, CC Docket No. 96-98 & 88-57, FCC 00-366 (Rel. October 25, 2000) ("*MTE Order*") ¶ 56.

[79] Qwest Brief at pages 49 and 50.

Qwest also noted that AT&T did not specifically criticize the standard collocation interval of 90 days where the SGAT required FCPs. Qwest noted that it had eliminated the FCP requirement for building MTE terminals, limiting it to detached terminals.[80]

Proposed Issue Resolution: FCP requirements have been eliminated for on-premises wiring access in a number of MTE situations; the LSR requirements have been eased; the need for a facility inventory is no longer a prerequisite to LSR issuance; and much of AT&T's argument regarding facility inventorying has been accepted. There is therefore no reason to consider added relief on the issue of intervals.

6. Requirement for Qwest-Performed Jumpering at MTEs

The pre-filed testimony and comments of the parties addressed jumpering generally; i.e., not specifically in the context of MTEs. AT&T argued that the SGAT Section 9.3.6.4 requirement that Qwest run the jumpers from subloop elements or disconnect Qwest equipment allows for abuse by Qwest.[81] Qwest objected to changing the provision, which it said was consistent with the practice of other RBOCs, and which it said was consistent with legal precedent addressing the ability of ILECs to segregate their equipment in collocation contexts.[82] Qwest said that, because segregation was not realistic at FDIs, allowing only Qwest technicians' access to the FDIs for jumpering constituted a reasonable substitute.

The subject of making connections at MTEs occasioned much testimony at the workshop. Qwest agreed to eliminate a distinction that it had been making between enclosed and open terminals that were located in MTE buildings. Qwest agreed to allow CLECs to make connections and to eliminate the requirement of an FCP in either type of terminal.

Qwest also agreed to eliminate requirements that CLECs establish at MTE terminals the separate cross connect field that Qwest earlier required, in order to avoid technician uncertainty about facility ownership.[83] Qwest noted that it had already exceeded requirements by allowing CLECs to run the jumpers at in-building MTE terminals. Qwest was not willing to extend this approach to other MTE terminals; its systems would not support it there.[84]

Proposed Issue Resolution: The recommended solution to the first unresolved subloop issue, *Subloop Access at MTE Terminals*, provided for a case-by-case analysis of the needs and circumstances associated with unique and varying outside plant configurations and conditions. That recommended solution included issues associated with jumpering. The record here does not support allowing CLECs to perform such work outside the context of in- or on-building MTE terminals. However, CLECs can request such authority as described under the first issue and it should be granted to them where its propriety can be supported by showings made in the context of specific requests.

[80] Qwest Brief at page 50.
[81] AT&T Comments at page 24.
[82] Stewart Rebuttal at page 29, citing *GTE v. FCC*, 205 F.3d 416 (D.C. Circuit 2000).
[83] Qwest Brief at page 37.
[84] Qwest Brief at page 52.

7. *Expanding Explicitly Available Subloop Elements*

AT&T argued that the SGAT fails to provide the depth and scope of treatment that is required to reflect the FCC's treatment of subloop unbundling. AT&T began by noting the definition adopted by the FCC:

> *We define subloops as portions of the loop that can be accessed at terminals in the incumbent's outside plant. An accessible terminal is a point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within.*[85]

Therefore, AT&T argued, the SGAT must address the full range of subloop elements and access points contemplated by the FCC, which AT&T listed as including the following, along with any other technically feasible subloop element or access point:

Distribution Facilities	Feeder Facilities
Feeder/Distribution Interface (FDI)	Minimum Point Of Entry (MPOE)
Network Interface Device (NID)	Riser Cable In Multistory Buildings
Inside Wire	Peripheral Distribution Facilities
Wire Closets	Digital Loop Carrier Cabinets
Single Point of Interface (SPOI)	Central Office Terminal, COSMIC or MDF
Pole or Pedestal	

The following comment summarizes AT&T's overall view of the required SGAT content in the area of subloops: [86]

> *Qwest uses a wide variety of equipment types, configurations, and media in its local network. To adequately address all configurations that a CLEC may need to access, Qwest must present both general and specific obligations to cover the CLEC's range of subloop needs.*

AT&T also objected to the requirement that access other than through the "standard" means prescribed by SGAT Section 9.3.4 be decided through the BFR process. AT&T argued that this process should be limited to deciding technical feasibility, which is not at issue for subloop elements where the FCC has already determined technical feasibility. AT&T recommended that the SGAT be changed to provide for access to all available subloop elements.[87]

Qwest responded that it agreed to provide access to subloop elements at all technically feasible points and accessible terminals. It said that, given the "very limited" demand for subloops to date and the very large number of potential subloop access points, it would be impractical to develop standard offerings for more than the most likely expected circumstances.[88] Qwest recommended that the SGAT's remote-premise collocation provisions be used to establish clear demarcation points for subloop elements and access.

---

[85] *UNE Remand Order* at ¶ 206.
[86] AT&T Comments at page 11.
[87] AT&T Comments at page 23.
[88] Stewart Rebuttal at pages 9 and 10.

Qwest believed that the establishment of demarcation points through the collocation procedures would allow for the application of many of the aspects securing the feeder and distribution subloop elements, which the SGAT does address in some detail. Qwest considered this approach to be consistent with the requirements of the FCC's August 10, 2000 *Order on Reconsideration and Second Further Notice of Proposed Rulemaking* in CC Docket No. 98-147.

Qwest did agree to change the provisions requiring the use of the BFR process for other than the SGAT's standard subloop elements. Qwest offered to use instead the ICB (individual case basis) process. Qwest cited the example of feeder/distribution interfaces, of which it said there were more than 70,000 in its network, all of them subject to different field conditions and local regulations that can impose difficulties in using them as access points to subloop elements.[89]

Qwest's brief then moved further on this issue by offering the Special Request Process for additional subloop offerings for which there is not substantial "reasonably foreseeable demand." It considered this process adequate to make added offerings available, should they prove to be needed.

Proposed Issue Resolution: The participants agreed that Qwest's loop plant comprises a wide range of configurations and circumstances. It is not appropriate to expect Qwest to undertake the effort to design standard offerings for every conceivable case, without reference to potential demand for each. AT&T did little more than list all the conceivable types of unbundling that might be of concern to it in the future. Where there was one of particular interest or importance, e.g., access to MTE terminals and on-premise wiring, AT&T gave specific information about its needs and plans and about the details of gaining the access it felt it needed. In other cases, AT&T did not do the same.

It is appropriate to examine the alleged gaps in the SGAT in light of claimed needs. It is not appropriate to criticize Qwest for a failure to address configurations about which no CLEC provided any concrete expression of current or near term need. In these circumstances, Qwest's offering of the special request process allows for the consideration of such offerings when they become more tangible. There is also no reason why that process, once it identifies what terms and conditions are appropriate to specific circumstances, cannot serve to establish generally available offerings where appropriate. Finally, we will address the specifics of the Special Request Process at the upcoming workshop on general SGAT terms and conditions. To the extent that it is not efficient enough to address this particular need as well as it might, changes to it can be addressed at that time.

[89] Stewart Rebuttal at pages 13 and 14.

VI. Packet Switching

Background – Packet Switching

Some networks divide messages into units, which are typically called packets, frames, or cells. Packet switches route these message units among network users. The FCC considers the DSLAM a part of the functionality of packet switching. DSLAMs split the voice and data signals carried over copper wire. The voice portion is transmitted toward a typical telecommunications switch, while the data signals are transmitted to a packet switch. Overall, the FCC defines packet switching as:[90]

> *The function of routing individual data units, or "packets," based on address or other routing information contained in the packets.*

The FCC did not unbundle packet switching in the *First Report and Order* because it considered the record inadequate to support it. However, the *UNE Remand Order* did require ILECs to unbundle packet switching when four conditions are met: [91]

- Qwest has provided end users with loops aided by digital loop carrier or a systems that replaces copper with fiber optic equipment in distribution facilities
- Qwest does not have spare copper loops that will provide adequate home run capability
- Qwest has not permitted CLECs to deploy CLEC DSLAMs at Qwest remote terminals or other suitable interconnection points in the area in question
- Qwest has deployed packet switching capability for its own use.

Issued Resolved During This Workshop – Packet Switching

1. Defining Packet Switching

AT&T commented that the SGAT Section 9.20.1 definition of packet switching was not consistent with that required by paragraph 304 of the *UNE Remand Order*.[92] Qwest agreed to modify the definition in a manner that proved acceptable to the parties in workshops in another state.[93] This issue can be considered closed.

[90] *UNE Remand Order* at ¶ 304.
[91] AT&T Comments at page 45, citing the *UNE Remand Order* at ¶ 313.
[92] AT&T Comments at pages 56 and 57.
[93] Stewart Rebuttal at page 27.

2. Defining the Condition Regarding No CLEC Collocation of DSLAMS

AT&T commented that SGAT Section 9.20.2.1 did not conform to the requirements of FCC Rule 51.319, without specifying where in particular the problem lay.[94] Qwest agreed to change the condition to better match FCC language addressing the condition applicable to circumstances involving the failure of Qwest to permit collocation of CLEC DSLAMs.[95] This issue can be closed as it relates to the specific wording of this condition; however, disputed issues about the application of the condition remain for resolution below.

3. Access at Any Feasible Point

AT&T commented that SGAT Sections 9.20.2.2 through 9.20.2.5 should be broadened to make it clear that access to packet switching could be gained at any technically feasible point.[96] Qwest changed SGAT Sections 9.20.2.2 and 9.20.2.3 to address this concern.[97] This issue can be considered closed.

4. Availability of CLEC-Specified Packet Switching Options

AT&T asked for clarification of what Qwest meant by the SGAT Section 9.20.2.6 reference to "as available" CLEC options. Qwest testified that this section's intent was to allow CLECs to choose all available switching-equipment options, not only those currently being used by Qwest for its own end users.[98] This issue can be considered closed.

5. Limiting Access to Packet Management Systems

Qwest uses these systems to provision the virtual channel for packet network service. AT&T expressed concern about the SGAT Section 9.20.2.7 prohibition on CLEC access to those systems.[99] Qwest responded that it is not possible to build a firewall that will allow more than one entity to have access. Qwest did commit to give access that Qwest would mediate, through use of service orders, and to allow direct CLEC access should an acceptable means of partitioning be developed in the future.[100] This issue can be considered closed.

6. Separate Rate Elements for Packet Switching Components

AT&T expressed concern that the establishment of separate rate elements for the Customer Channel, the Switch Loop Capability, and the Switch Interface Port, suggested the existence of not one, but three separate UNEs.[101] Qwest replied that there is only one packet switching UNE, but that the way it costed the element produced three rate elements, which had the benefit of allowing CLECs to save costs if they could self-provision the associated transport elements. Qwest also acknowledged that the reasonableness of the magnitudes of these elements would be better considered in cost dockets.[102] Therefore, this issue can be considered closed for the purposes of these proceedings.

---

[94] AT&T Comments at page 57.
[95] Stewart Rebuttal at page 29.
[96] AT&T Comments at page 57.
[97] Stewart Rebuttal at page 30.
[98] Stewart Rebuttal at page 30.
[99] AT&T Comments at page 58.
[100] Stewart Rebuttal at page 31.
[101] AT&T Comments at page 58.
[102] Stewart Rebuttal at page 31.

7. Satisfying the Condition Relating to DSLAM Collocation Denial

In response to concerns about how CLECs could make the SGAT Section 9.20.4 showing of a denial of access to remotely deploy a DSLAM, Qwest worked with CLECs to modify the section to specify available methods.[103] The incorporation of those methods into the section closes this issue. Qwest made a similar change to respond to an AT&T request to specify how a CLEC could comply with the connectivity requirement of this SGAT section.[104]

8. Maintenance and Repair Responsibilities

AT&T commented that SGAT Section 9.20.5 should be modified to provide for certain joint CLEC/Qwest responsibilities, such as cooperative testing.[105] Qwest asked for more specification about the nature of such activities. Qwest interpreted the lack of AT&T follow up on this issue in other states' workshops as an indication that the issue was closed.[106] The lack of AT&T response or briefing of this issue indicates that it can be considered closed.

Issues Remaining in Dispute – Packet Switching

1. Availability of Spare Copper Loops

AT&T commented that Qwest is increasingly using digital loop carrier (DLC) technology to:

- Multiply the number of loops that its facilities can serve (a practice known as "pair gain")
- Extend loops to geographically remote areas
- Enable Qwest to provide advanced services.

AT&T said that this increased use of DLC has increased CLEC difficulties in providing competitive DSL services, because there are fewer continuous copper loops connecting end users with Qwest central offices. CLECs either need appropriate electronics on the DLC system, room to remotely deploy a DSLAM that can be connected to the end user's copper subloop, or a continuous, suitable (which generally means of not too long a physical distance) copper loop between the end user and the Qwest central office (a "home run" copper loop).[107]

Therefore, AT&T said, the FCC required Qwest to provide unbundled packet switching (which will allow a CLEC to secure a loop that will provide advanced services of the same quality as Qwest or any data affiliate provides) when the four applicable conditions were met in an area where CLECs want to serve end users:[108]

- Qwest has provided end users with loops aided by digital loop carrier or a systems that replaces copper with fiber optic equipment in distribution facilities
- Qwest does not have spare copper loops that will provide adequate home run capability

[103] Stewart Rebuttal at page 32.
[104] Stewart Rebuttal at page 33.
[105] AT&T Comments at page 59.
[106] Stewart Rebuttal at page 33.
[107] AT&T Comments at pages 45 and 46.
[108] AT&T Comments at page 45, citing the *UNE Remand Order* at ¶ 313.

- Qwest has not permitted CLECs to deploy CLEC DSLAMs at Qwest remote terminals or other suitable interconnection points in the area in question
- Qwest has deployed packet switching capability for its own use.

AT&T argued that providing home run copper loops, even where they are available, will not enable CLECs to provide services at the same quality that Qwest can provide in cases where Qwest does not use such loops, but has remotely deployed DSLAMs. Such Qwest DSLAMs shorten the distance that signals travel over copper, thus enabling higher rates of data transfer. AT&T cited the example of ADSL, over which the data transfer rate more than quintuples if the copper portion is reduced from 18,000 to 9,000 feet.[109]

In summary, according to AT&T, giving CLECs access to home-run-copper loops will still leave them at a significant disadvantage, when Qwest can transfer signals at much higher rates in areas where its remotely deployed DSLAMs shorten the copper portion of its connection with end users. CLECs, according to AT&T need to be able to: (a) collocate their DSLAMs at the same place that Qwest has done so, or (b) gain access to Qwest's packet switching as a UNE, in order to be able to deliver service at the same level of quality.

Therefore, AT&T recommended that the SGAT Section 9.20.2.1.2 copper loop condition be changed as follows:[110]

> *There are ~~no~~ insufficient copper loops available capable of adequately supporting the xDSL services the requesting carrier seeks to offer.*

The term "insufficient" would address circumstances where there are some, but not enough, spare copper loops to support a CLEC's general business offering of DSL to a neighborhood. The term "adequately" would presumably address the comparability of data transfer rates issue.

Qwest objected to these changes, noting that the SGAT's recitation of the condition followed the FCC's wording and that AT&T's wording would extend Qwest's obligation beyond what the FCC has required. Qwest cited as support for this "no new obligations" standard FCC decisions in other Section 271 proceedings.[111] Qwest also argued that the term "adequately" introduces vagueness to an otherwise clear standard – a standard that unambiguously provides that the condition is met where the available copper loops are not "capable of supporting the xDSL services the CLEC chooses to offer." Qwest also argued that the term "insufficient" also introduces vagueness into what should be a customer-by-customer analysis of availability. Qwest also noted that this issue is likely to be without much practical significance, given the need of Qwest to have remotely deployed DSLAMs, which is another condition that must be met. Qwest said that it would only have remotely deployed its DSLAMs where the available loops will not support xDSL service; therefore, if this other condition has been met, so too will the available copper loop condition, in all probability.[112]

[109] AT&T Comments at page 48.
[110] AT&T Brief at page 12.
[111] Qwest Brief at pages 3 and 4.
[112] Qwest Brief at pages 5 and 6.

Proposed Issue Resolution: As a threshold matter, Qwest inappropriately seeks to extend the FCC's standard for its own review of Section 271 applications in a way that would make it in effect a limit on state consideration of any issue where the FCC has failed to adopt its own rule or guideline. This argument certainly finds no support in the cited FCC language, which merely says that the FCC will not use its own authority to address itself issues of general significance on which the FCC either has not spoken or has not gone as far as some CLECs wish. Nothing in the language cited by Qwest would support the proposition that states must limit themselves to the precise boundaries set out by the FCC in its orders. The applicable standard under the Act and FCC rules and orders is not in precise conformity with FCC rulings. States may not speak where the FCC has appropriately precluded additional or different state requirements; otherwise, their contribution to the development of competitive markets in their jurisdictions is presumably welcome and certainly proper.

Therefore, we revert to the question of whether Qwest may exclude access to packet switching as a UNE where either of the two conditions exists:

- The spare loops are so long that they will not support data transfer rates at speeds Qwest can offer to the same end users that CLECs would have to serve over such home run loops (the "adequacy" issue)
- There are some spare copper loops in a neighborhood, but not enough to support CLEC efforts to serve there (the "sufficiency" issue).

Qwest's argument that the term "adequacy" would introduce vagueness is correct. The SGAT already says that the test for determining necessary loop capability is not some pre-defined technical standard or data transfer rate, but the services that the CLEC wishes to offer (which include that transfer rate). If a CLEC should wish to offer xDSL services that match all the characteristics of the service that Qwest is providing, then Qwest cannot meet its obligations by providing a copper loop that can only provide a level of service less than that, even if the loop could provide some defined level of DSL service. Moreover, if Qwest is actually providing xDSL service at a level higher than what it guarantees as part of its retail offerings, then the home-run copper loop that Qwest makes available to a CLEC must support the higher actual service level, not merely the level that Qwest guarantees to its end users.

Because the SGAT already provides that copper loops must support services that are at parity if that is what a CLEC requests, and because the ability to deliver service at parity is what AT&T sought, there is no need to alter the SGAT to give CLECs adequate protection.

AT&T's sufficiency argument does not have merit. The FCC has made it clear that where copper loops are available and sufficient (as defined immediately above), providing them constitutes full satisfaction of Qwest's requirements. Moreover, AT&T has presented no evidence to support a conclusion that satisfaction of its actual orders for services needs through a combination of copper loops and unbundled packet switching is discriminatory, or that it would impede CLEC ability to compete for customers. AT&T's addition of sufficiency also would change the basis for determining copper loop availability from the number of orders (or end users) involved to the number that AT&T would like to serve, assuming, one would imagine, that its marketing plans succeeded. Giving CLECs the ability to alter Qwest's obligations on the basis of expectations

(i.e., the customers that AT&T "seeks" to serve) as opposed to firm orders for facility access could have the effect of eviscerating the FCC's conditions. The problem is exacerbated where CLECs can self-define those expectations. It is preferable to address orders as they come, filling them first from available copper loops (assuming that those loops will support the parity of service that AT&T sought), particularly given the complete lack of evidence to support a conclusion that doing so will impose any unfair or otherwise inappropriate burdens on CLECs.

2. *Denial of DSLAM Collocation*

The ability to collocate CLEC DSLAMs at remote Qwest terminals should help to overcome the problem of a lack of suitable "home run" copper loops.[113] However, AT&T objected to Qwest's contention that the ability to collocate DSLAMs would not be a significant problem. AT&T predicted that collocating its DSLAMs would not prove to be a commonly available solution. AT&T cited the need for a concurrence of too many circumstances to make this alternative commonly available:[114]

- A location that would accommodate physical or virtual collocation of the CLEC DSLAM
- Power, heating, ventilation, and air conditioning to operate equipment
- Enough copper pairs downstream to reach enough customers to use the DSLAM at an economically viable portion of its capability
- Sufficient facilities upstream with enough bandwidth to connect to the CLEC's data network.

AT&T commented that remote terminals and other Qwest field locations where CLECs could remotely deploy DSLAMS serve only limited numbers of customers; therefore, CLECs would have great difficulty in gaining the economies of scale necessary to justify such deployment.[115] Therefore, AT&T sought a change in SGAT Section 9.20.2.1.3, in order to expand the standard from actual denial of collocation by Qwest to economic infeasibility of CLEC DSLAM collocation. AT&T argued that the significant costs and lead time (due to right of way acquisition and installation) and the small numbers of customers to be served from such DSLAMs would make it "extremely difficult" for CLECs to make enough money to justify deployment of their own facilities.[116] AT&T argued that Qwest can gain adequate economies of scale by deploying DLC and DSLAMs, because Qwest does so to "serve most of or the entire base of customers assigned to the remote terminal," whether or not they take advanced services. CLECs, however, would not be likely to capture enough customers for advanced services alone to make support the costs of remotely deployed DSLAMs.[117] Rhythms similarly argued that the economics of DSLAM collocation would make that option ineffective for CLECs.

AT&T recommended changing SGAT Section 9.20.2.1.3 as follows:

---

[113] It proved impossible not to digress long enough to note that getting a home run here puts one at a disadvantage; however, this is undoubtedly not the greatest irony induced by efforts to make CLECs and ILECs partners in delivering local exchange service to end users.
[114] AT&T Comments at pages 49 through 51.
[115] AT&T Comments at page 53.
[116] AT& T Brief at page 13.
[117] AT&T Brief at page 13.

> *Qwest has placed a DSLAM for its own use in a remote Qwest Premises but: (i) Qwest has not permitted CLEC to collocate its own DSLAM at the same remote Qwest Premises, or (ii) from CLEC's perspective it would be uneconomical for CLEC to collocate its own DSLAM at the same Qwest Premises, or (iii) collocating a CLEC's DSLAM at the same Qwest Premises will not be capable of supporting xDSL service at parity with the service that can be offered through Qwest's Unbundled Packet Switching.*

Qwest argued that AT&T and Rhythms provided no evidentiary support for their argument about economics, and that, in any case, their request exceeded the scope of these workshops by asking for the introduction of new obligations. Qwest also argued that *Iowa Utilities Board*, 119 S.Ct. 721 (1999), requires the imposition of more than nominal added costs to meet the impairment of competition test for unbundling.[118]

Proposed Issue Resolution: As an initial matter, AT&T's language solution substantially overreaches even its own definition of the problem. It does so by making a CLEC's own and not unbiased perspective on economics the basis for deciding whether the FCC's established conditions for the unbundling of packet switching should be overridden. However, even language that left the decision to an objective standard or decision maker would still depend upon an assumption that there is a substantial difference in the economics of DLSAM deployment between CLECs and Qwest. Apart from broad claims that were not supported by any specific analysis or quantification, there is nothing in the record to support this assumption. The failure to support those claims with evidence is particularly compelling in a case where, as here, a number of CLECs want to add an entirely new requirement to those already deemed appropriate by the FCC. In fact, much more than an addition to the FCC requirements is anticipated; the request is to replace an operational condition with an economic one, which would serve to redefine the applicable FCC standard entirely.

It is difficult to imagine that the FCC has utterly failed to consider any relevant economic considerations. Certainly, we should not here consider them without at least a substantial showing that there are significant economic differences in CLEC versus Qwest deployment. Nothing prevented the participants from discovery and testimony that would specifically address such economic differences. The failure to provide any level of quantification of that difference is material, given the *Iowa Utilities Board* standard for economic impairment.

There is simply no sound basis for deciding that the FCC conditions regarding DSLAM collocation should be supplemented by the addition of an economic feasibility test.

3. *ICB Pricing*

AT&T commented that Qwest has presented no testimony about its prices or provisioning practices for unbundled packet switching. AT&T argued that it was not sufficient to offer ICB pricing.[119] AT&T cited the *Louisiana II* order as authority for the proposition that checklist compliance may be denied for failure to specify any price at all for an element, noting as well that true up commitments are not sufficient where no pricing method has been established.

[118] Qwest Brief at pages 6 and 7.
[119] AT&T Comments at page 56.

Therefore, AT&T argued that Qwest must at least insert specific prices, not merely ICB pricing, into the SGAT.[120]

Qwest's brief noted that the company is currently developing packet switching prices, which it believes it will have established before it makes its Section 271 filing with the FCC. In any event, Qwest argued that its ICB approach would be an adequate interim solution for purposes of Section 271.[121]

Proposed Issue Resolution: Neither Qwest nor the CLEC participants to these workshops has anticipated that cost and price issues would be addressed in cases where recourse to detailed cost studies and analysis would be necessary. There is, quite simply, no evidence of record to warrant a conclusion that price methods, other than ICBs, can now be supported. It is fairly clear that Qwest agrees conceptually that ICB pricing will not remain the general rule after it completes its pending price development effort. It would prove to be of substantial benefit to complete that effort in time for state commission review as soon as possible. However, there is presently no basis for anticipating what that review will produce. From the state perspective, ICB pricing subject to eventual true up is the only currently feasible approach.

4. *Unbundling Conditions as a Prerequisite to Ordering*

AT&T argued that CLECs would suffer competitive disadvantage under SGAT Section 9.20.4.1. That section would require the 90-day collocation process, after which the CLEC would learn that collocation had been denied. Then, only after that denial, would the CLEC be able to order packet switching as a UNE. AT&T argued that this long interval would allow Qwest to market its own advanced services, and to provide them on a timelier basis. Therefore, AT&T sought a change that would permit:[122]

- Simultaneous processing of DSLAM collocation and packet switching UNE requests
- An interval of 10 days or less for Qwest to reject DSLAM collocation requests.

Qwest interpreted this request as contrary to the FCC's packet switch unbundling Rule 319(c)(3)(B), and as a request to ask the participating states to go beyond what the FCC has required.[123] Qwest noted that it did agreed to streamline the processes involved in unbundling packet switching by:

- Disclosing to CLECs the locations where Qwest has remotely deployed DSLAMs
- Providing a space availability report indicating where there is not space at such locations
- Providing, on CLEC request, a list of locations where Qwest has made decisions to remotely deploy future DSLAMs

Qwest argued that these measures were sufficient to mitigate the timing disparity claimed to exist between Qwest and CLEC ability to provide the services at issue.[124]

---

[120] AT&T Brief at page 20.
[121] Qwest Brief at page 16.
[122] AT&T Brief at pages 21 and 22.
[123] Qwest Brief at page 9.
[124] Qwest Brief at page 11.

Proposed Issue Resolution: The central aspect of AT&T's concern appeared to be the risk that 90 days would pass before a CLEC would learn that it could not collocate its DSLAMs. However, the combination of Qwest's disclosures about its current and future DSLAM locations and the issuance of space availability reports should provide substantially faster notice that AT&T had anticipated. Thus, the introduction of a 10-day collocation denial notice period does not appear to be warranted. However, no evidence or argument was presented to show any necessity for packet switching service requests to await DSLAM collocation denials. Because imposing a sequential ordering requirement can extend the date when CLECs can make service available, and because there is no demonstrated support for the requirement, the SGAT should make clear that Qwest should be required to respond to DSLAM collocation orders and packet switching orders in parallel.

5. *Line Card "Plug and Play"*

Sprint argued for the right to allow CLECs to place their line cards into Qwest's DSLAM (an option known as "plug and play"). Sprint also argued that CLECs should not be limited to the option of extraordinarily long copper loops where Qwest does not have to rely upon "an all-copper solution" and therefore has access that is better suited to providing DSL services. The problem with home run copper loops was addressed earlier under the *Availability of Spare Copper Loops* issue. Specifically, Sprint argued that it should have access to the plug and play option where Qwest uses "next generation" DLC, where line cards will provide the functionality of the splitter and the DSLAM.[125] Sprint noted that this option would obviate the need for the "crushing expense of adjacent collocation at remote terminals."[126]

Rhythms and New Edge also commented that Qwest should be required to permit CLECs to place their line cards into Qwest's remotely deployed terminals. The comments asserted that the option should be required because CLECs "would be impaired in providing line-sharing to end users." The comments noted that this scenario would require CLECs to obtain from Qwest a loop from the customer NID to the customer side of Qwest's remote terminal, electronics at the remote terminal, and transport from the other side of the terminal back to the central office.[127]

Qwest opposed the plug and play option, arguing that:[128]

- The FCC is now considering the issue, but has yet to conclude whether it is appropriate; Section 271 proceedings are not an appropriate forum for imposing new obligations
- The record here does not address the technical feasibility of this option
- Plug and play requires the functionality of the DSLAM to be effective; therefore, allowing it at would be tantamount to eliminating the four conditions that the FCC said were appropriate prerequisites to unbundling packet switching.

Proposed Issue Resolution: The CLEC concern about extraordinarily long copper loops was addressed under the issue heading of *Availability of Spare Copper Loops* above. That resolution

[125] Sprint Brief at page 3.
[126] Sprint Brief at page 5.
[127] Comments of Rhythms and New Edge at pages 10 and 11.
[128] Qwest Brief at pages 12 through 15.

mitigates here any claim of need, whatever its merits might otherwise be. Moreover, as Qwest notes, the technical feasibility of this option is now being addressed at the FCC. Particularly given the pendency of the FCC proceedings, there is insufficient evidence on this record to support the conclusion that technical feasibility has been established.

Finally, as Qwest also noted, allowing the plug and play option would in effect eviscerate the current FCC standard. Absent substantial evidence to support a conclusion that CLECs would generally be denied a meaningful opportunity to compete, unless that standard is fully rewritten, there is no basis for criticizing the general reliance that Qwest places upon it in the development of its SGAT. There has been, as noted above, an almost complete lack of tangible evidence addressing the degree of inherent "diseconomy" CLECs would face if the FCC rule were to stand largely intact. We have only conclusory statements from those who would benefit from the change that is at issue.

VII. Dark Fiber

Background – Dark Fiber

Paragraph 174 of the *UNE Remand Order* provides that the loop element includes dark fiber. The FCC defined dark fiber as fiber that has not been activated by connection to electronics, but that is nevertheless "in place and easily called into service." The FCC analogized such dark fiber to vacant copper wire that is ready for service when required. Paragraph 325 of that FCC order similarly treats the dedicated transport element as including fiber that is in place, but that is unlit by electronics. Thus, the FCC has decided that the loop and transport elements to which CLECs can gain access may consist of dark fiber.

Issues Resolved During This Workshop – Dark Fiber

1. Dark Fiber Forecasts

AT&T expressed concern with the language contained in SGAT Section 9.7.2.2. AT&T suggested that language be added to permit a CLEC to submit a nonbonding, good-faith forecast of dark fiber to Qwest. Qwest expressed concern that it would be required to build to the forecasts.[129] Qwest has removed the language for SGAT Section 9.7.2.2 with no objection from AT&T in its brief. This issue can be considered closed.

2. Access to Dark Fiber Without Collocation

WCOM requested that Qwest modify its SGAT language to permit access to Dark Fiber without collocation in a Qwest central office.[130] Qwest proposed to amend SGAT Section 9.7.2.12 as follows:

> *CLEC must have established Collocation or other technically feasible means of network demarcation pursuant to section 9.1.4 of this Agreement at both terminating points of the UDF-IOF or at the Serving Wire Center of either the UDF-Loop or the E-UDF unless loop and transport combinations are ordered. Qwest will provide fiber cross connects at the serving Wire Center to connect UDF-Loop or E-UDF with UDF-IOF if such are ordered in combination. No Collocation is required in intermediate Central Offices within a UDF or at Central Offices where CLEC's UDFs are cross connected. CLEC has no access to UDF at those intermediate Central Offices.*

AT&T, Sprint, and other CLECs did not object to Qwest's proposed language. This issue can be considered closed.

[129] AT&T Comments at page 4.
[130] Stewart Direct page 3.

3. Testing

CLECs expressed concern that the SGAT would require a CLEC to call repair personnel directly when there arose at the time of installation a problem with dark fiber. Qwest responded by proposing to conduct continuity testing with the CLEC. The proposed testing would be performed jointly with the CLEC on the "Plant Test Date." The continuity test would allow the CLEC to test whether the fiber was working prior to the "Due Date."[131] To incorporate this change, Qwest proposed to modify the SGAT Sections 9.7.2.17 and 9.7.2.17.1. There was no objection to the proposed change, which is generally responsive to the concerns raised. Therefore, this issue can be considered closed.

4. Addition of E-UDF rate elements.

AT&T requested SGAT language for an E-UDF rate element and a more general review of dark fiber rate elements.[132] Qwest proposed revisions to Section 9.7.5 to address AT&T's concern. AT&T did not raise it as an unresolved issue in its brief. Therefore, this issue can be considered closed.

5. Purchase of a Single Dark Fiber Strand

A number of CLECs requested the ability to purchase a single strand of dark fiber. In the Colorado workshop Qwest proposed to modify SGAT Section 9.7.2.4 as follows:

> *Qwest will provide Unbundled Dark Fiber to CLEC in increments of two (2) strands (by the pair). In addition, after May 31, 2001, Qwest will provide Unbundled Dark Fiber to CLEC in increments of one (1) strand. CLEC may obtain up to twenty five percent (25%) of available dark fibers or four (4) dark fiber strands, whichever is greater, in each fiber cable segment over a twelve (12) month period. Before CLEC may order additional UDF on such fiber cable segment, CLEC must demonstrate efficient use of existing fiber in each cable segment. Efficient use of interoffice cable segments is defined as providing a minimum of OC-12 termination on each fiber pair. Efficient use of loop fiber is defined as providing a minimum of OC-3 termination on each fiber pair. Efficient use of E-UDF is defined as providing a minimum of OC-3 termination on each fiber pair. CLEC may designate 5% of its fibers along a fiber cable segment, or 2 strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the termination requirements in this paragraph.*

In addition, Qwest indicated that it intended to modify the Dark Fiber Inquiry form and internal procedures to incorporate this change by May 31, 2001.[133] The SGAT for the multistate proceeding was also modified to reflect the Qwest's proposed language.

AT&T, Sprint, and other CLECs did not object to the proposed wording of the SGAT in their brief. However, AT&T did identify another technical publication in which Qwest had committed to modifying it as necessary to be consistent with the SGAT but had not completed the task as committed. AT&T identified it as an unresolved issue.

[131] Stewart Direct at page 6.
[132] Karen Stewart Affidavit for Colorado Workshop, page 4
[133] Karen Stewart Affidavit for Colorado Workshop, page 4

6. Provisioning and Ordering Processes

AT&T expressed concern with the SGAT Section 9.7.3.2 provisions that address the processes for provisioning and ordering of dark fiber. AT&T requested that Qwest provide CLECs with more specific outlines of these processes.[134] Qwest modified Section 9.7.3.2 of the SGAT. AT&T did not raise any objection in its brief. Therefore, this issue can be considered closed.

7. Dark Fiber at Collocation Build-Out Completion

CLECs questioned whether dark fiber would be available when collocation build outs were completed. Qwest indicated that it believed that the most effective option to address this concern was to allow CLECs to "reserve" dark fiber.[135] Qwest also deleted the requirement for a CLEC to enter into an Interconnection Agreement before dark fiber could be reserved. Qwest proposed to modify SGAT Section 9.7.3.5 as follows:

> *CLEC may reserve dark fiber for CLEC during Collocation builds. Prior to reserving space, CLEC must place an inquiry pursuant to section 9.7.3.1 of this Agreement and receive a UDF Inquiry Response that reflects that the route to be reserved is available. CLEC is also strongly encouraged to request a Field Verification that the route to be reserved is available. If CLEC does not obtain Field Verification, CLEC assumes the risk that records upon which the UDF Inquiry Response is based may be in error. CLEC may reserve UDF for thirty (30), sixty (60), or ninety (90) days. CLEC may extend or renew reservations if there is delay in completion of the Collocation build. All applicable UDF recurring charges specified in sections 9.7.5.2 will be assessed at the commencement of the reservation.*

There was no objection to the changed language, which generally addressed the concerns raised. Therefore, this issue can be considered closed.

8. Cross Connect Charges

AT&T requested that Qwest confirm that the non-recurring cross connect charges would not apply if the cross connection was already in place when a CLEC placed a UDF order. AT&T's reasoning was that the non-recurring charge covered the cost of performing the cross-connect work.

Qwest modified SGAT Sections 9.7.5.2.1(c), 9.7.5.2.2(c), and 9.7.5.3(c) to reflect that cross-connection non-recurring charges would not apply where the cross connection is already in place at the time the CLEC placed a UDF order. Qwest indicated that it would continue the recurring charges that are intended to recover the cost of having a cross connection in place.

There was no objection to the changed language, which generally addressed the concerns raised. Therefore, this issue can be considered closed.

[134] AT&T Comments at page 6.
[135] Karen Stewart Affidavit for Colorado Workshop, page 2

Issues Remaining in Dispute - Dark Fiber

1. Affiliate Obligations to Provide Access to Dark Fiber

AT&T contended that Sections 251(c)(3) and 252(d)(1) of the Act obligate Qwest to make the in-region dark fiber of affiliates, specifically Qwest Communications International, Inc ("QCI"), available to CLECs. AT&T argued that Section 251(c)(3) obligates ILECs to provide non-discriminatory access to network elements on an unbundled basis at any technically feasible point, and under rates and conditions that are fair, just, and reasonable. According to AT&T, Qwest and its affiliates comprise "successors and assigns" under Section 251(h) of the Act, which makes them subject to ILEC unbundling duties thereunder.[136]

AT&T asserted that the United States Court of Appeals for the District of Columbia in an SBC/Ameritech merger approval interpreted "successor and assigns" broadly enough to include the affiliates of the ILEC that provide telecommunication services. In addition, AT&T cited the circuit court's rejection of the FCC conclusion in the SBC/Ameritech Merger Order that the "advance services affiliate" was not such a "successor and assign" as long as it complied with various structural and traditional safeguards. The Court said:

> [T]*he Commission is using language designed by Congress as an added limitation on an ILEC's ability to offer telecommunications services as a statutory device to ameliorate §251(c)'s restriction. We do not think that in the absence of the successor and assign limitation an ILEC would be permitted to circumvent § 251(c)'s obligations merely by setting up an affiliate to offer telecommunications services. The Commission is thus using the successor and assign limitation as a form of legal jujitsu to justify its relations of §251's restrictions.*[137]

AT&T recognized that this decision addressed advanced-service affiliates, but argued that a failure to require QCI and its affiliates to be subject to unbundling would permit Qwest to avoid the requirements of §251 by offering and investing in network infrastructure through its wholly owned subsidiaries. AT&T therefore recommended that Qwest be required to add language to the SGAT that clarifying that QCI and its affiliates are obligated to unbundle the in-region facilities of Qwest's affiliates.

In response, Qwest contended that Qwest Corporation is the only US WEST Communications Inc. successor that provides local telecommunications services in the seven-state region. Qwest argued that the QCI affiliates have neither provided, nor have they acquired, any affiliate that provides local exchange service. Further, according to Qwest, QCI's affiliates do not meet the "successor or assign" requirements of §251(h) of the Act. Qwest contended that the FCC has ruled that a "successor" for the purposes of §251(h) of the Act occurs if there is a substantial enough continuity between the companies to allow a conclusion that one entity has stepped into the shoes of or replaced another.[138] Qwest asserted that only Qwest among QCI's affiliates meets this requirement.

---

[136] AT&T Brief at pages 30 and 31.
[137] AT&T Brief at page 31.
[138] Qwest Brief at page 4.

Qwest continued by arguing that the terms of §251(c) apply only to ILECs. Qwest contended that the Act specifically defines ILECs as local exchange carriers that meet certain specified conditions (e.g. a person or entity that, on after such date… became a "successor or assign" of a member of NECA). Qwest asserted that the FCC has ruled that, "a BOC affiliate should not be deemed an incumbent LEC subject to the requirements of section 251(c) solely because it offers local exchange service; rather, section 251(1) applies only to entities that meet the definition of an incumbent LEC under section 251(h)," in particular that section's "successor or assign" test.[139]

Qwest also argued that section 251(c) does not extend to an ILEC's long-distance operations or network. In particular, Qwest contended that the FCC in its *Advance Services Remand Order*, found no merit to requiring GTE and Sprint to unbundle their long distance networks.[140] Qwest asserted that, in a later appeal (still pending), the FCC asserted that the unbundling of an ILECs' affiliated networks would not serve the "underlying goal" of sections 251 and 252. Qwest pointed out that AT&T filed a brief in that proceeding supporting the FCC's position that the obligations of sections 251 and 252 are specifically directed to an incumbent's local service networks, in apparent contradiction to the position taken in this proceeding.[141] Qwest concluded by stating that its affiliates are providing operator and long distance services; therefore, any dark fiber held by them would be a part of a long distance facility, which is exempt from unbundling.

Proposed Issue Resolution: AT&T's argument depends principally upon the notion that Qwest cannot deny the applicability of the "successor and assign" provision of Section 251(h) on the grounds that QCI and its affiliates were not providing local service on the date the Act was enacted. However, AT&T does not confront the issues raised by the fact that they are not doing so now either, except through Qwest. The relevance of what affiliates do, with respect to providing telecommunications services is clear, even accepting AT&T's reading of the FCC's conclusion in the Qwest merger proceeding and in the D.C. Circuit opinion in the *ASCENT* case. In both circumstances, the issue was the use of an affiliate to bypass the obligations imposed on an ILEC under the Act.

The record here contains no evidence that the Qwest corporate structure has been developed or is being used to deny access to dark fiber in cases where it would, absent such structure, be required to be made available. In fact, AT&T has not grounded its argument at all on such a plan or scheme, choosing instead to rely upon the cases cited to support an obligation of all Qwest affiliates to unbundle generally, exactly as if they were Qwest itself. AT&T has cited no authority for such a proposition, nor is its propriety evident. Its application would eradicate for ILECs any distinction in lines of business, treating a non-ILEC as if it were an ILEC, apparently on the sole basis of its having affiliation with and some of the same kinds of facilities that ILECs use to provide local service. The notion that Congress envisioned such an interpretation is nowhere evident in the Act, nor is it even consistent with general utility regulatory principles, which allow for utilities to separate regulated and nonregulated operations (if done properly) without making them equally subject to regulation.

[139] Qwest Brief at pages 6 and 7.
[140] Qwest Brief at page 7.
[141] Qwest Brief at page 8.

Thus, there is no basis in the record for requiring dark fiber or other unbundling by affiliates because they are successors and assigns. However, it should be noted that this conclusion is not a blanket one applicable no matter what activities Qwest and its affiliates decide to undertake in concert. The cases cited by AT&T clearly do indicate that scrutiny is appropriate where there is a claim that corporate separation is being used to reduce the obligations of an ILEC from what they would otherwise be.

Interestingly, however, that claim, not made or supported by any evidence here, is not likely to ever be particularly material in the particular case at hand, which is dark fiber. The reason is that, where an affiliate is making access to such fiber routinely available to an ILEC affiliate, it can be concluded that such fiber constitutes part of the ILEC's facilities generally and already subject to unbundling.

The particularly interesting feature of dark fiber in this situation is that it represents a form of in-place inventory. By definition, it is currently not being used, but represents capacity that can generally be called to use in short order. If an ILEC decided, for example, to acquire a general right to use such fiber from a third party when and as needed, Qwest certainly could not deny similar access to a CLEC merely on the basis that the inventory was technically owned by a third party. The issue would be Qwest's rights and ability to get access to it. Certainly it would be inconceivable to imagine that a switch to third party sale/leasebacks of all types of network facilities would defeat CLEC access to them.

The same general standard should apply to a second-party arrangement (i.e., a lease or right-to-use agreement with an affiliate) as would apply to a third-party arrangement (e.g., Qwest rights to dark fiber that arise under a lease with a financial institution or under a right of use agreement with a customer). That standard should be that if Qwest has access rights for itself, it should not refuse to use them to provide access rights for CLECs.

The difficulty in applying such a standard to the second-party situation lies in the different ways that such access-rights agreements are likely to be recorded. Third-party arrangements of this type would be likely to be of a significant enough economic size to warrant formal agreements and clear and complete records. One should not expect otherwise for arrangements of consequence between parties who do not broadly share the same objectives and goals. The same is not true for second-party arrangements, where commonality of purpose, goals, and interests in net results can be expected to lead often to less formal arrangements. Thus, the application of the standard envisioned here needs to recognize that second-party arrangements are likely to be less formal or structured.

Accordingly, Qwest should be required to provide access not only to what it owns directly, but to all dark fiber to which it has a right to access for local telecommunications use under agreements with any other party, affiliated or not. Moreover, the test should not be the type of form of such agreement, but rather the nature and degree of the access that it provides to Qwest. The addition of the following language to the end of SGAT Section 9.7.1 will accomplish this result:

> *Deployed Dark Fiber facilities shall not be limited to facilities owned by Qwest, but will include in place and easily called into service facilities to which Qwest*

has otherwise obtained a right of access, including but not limited to capitalized Indefeasible Right to Use (IRUs) or capitalized leases. Qwest shall not be required to extend access in a manner that is inconsistent with the restrictions and other terms and conditions that apply to Qwest's access; however, in the case of access obtained from an affiliate: (a) the actual practice and custom as between Qwest and the affiliate shall apply in the event that it provides broader access than does any documented agreement that may exist, and (b) any terms restricting access by CLECs that are imposed by the agreement with the affiliate (excluding good-faith restrictions imposed by any agreement with a third party from whom the affiliate has gained rights of access) shall not be applied to restrict CLEC access.

2. Access to Dark Fiber in Joint Build Arrangements

AT&T contended that the Act and the FCC Orders call for the conclusion that CLECs should be permitted to lease dark fiber that exists in "joint build arrangements" with third parties. Such arrangements, according to AT&T, comprise those that permit either Qwest, the third party, or both to use the other party's conduit, innerduct, or fiber to transport telecommunications traffic. Qwest testified that it would make available dark fiber in joint build arrangements up to Qwest's side of the meet point. Qwest refused to permit CLECs to obtain access to any rights Qwest may have to the use of the "third party facilities."[142]

AT&T contended that Section 251(c) and 47 C.F.R. §§51.307 and 309 require Qwest to provide nondiscriminatory access to poles, ducts, and right of way. According to AT&T, to the extent that joint build arrangements may give Qwest control of facilities or a right of way on a third party's network, Qwest should be obligated to give the CLEC the same access. AT&T said that, without access to third-party facilities, CLECs would be unable to compete in communities where joint build arrangements exist.[143] AT&T asserted that Qwest must demonstrate that it is providing nondiscriminatory access to its poles, ducts, and right-of-ways at just and reasonable rate, terms and conditions.

Qwest stated it willingness to unbundle dark fiber that it owns. Qwest contended that it cannot and would not unbundle dark fiber belonging to other entities.[144] Qwest also argued that AT&T failed to provide a legal justification for how Qwest could unbundle an asset of a third party.

Proposed Issue Resolution: The standard to which Qwest should be held here is similar to that set forth in the proposed resolution of the immediately preceding issue. It has nothing to do with the fiber ownership criterion that Qwest would apply.

The primary consideration is whether the agreement with the third party gives Qwest, with respect to the fiber owned by the third party, sufficient access rights to make it analogous to facilities that "carriers keep dormant but ready for service" and that are "in place and easily called into service." These are the key tests that the FCC applies in defining dark fiber to which

[142] February 27, 2001 transcript at page 233.
[143] AT&T Brief at pages 32 and 33.
[144] Qwest Brief at page 9.

CLECs are entitled.[145] The language set forth in the proposed resolution of the immediately preceding issue accommodates this definition.

The secondary consideration is whether Qwest will have acted in good faith with respect to the imposition of any limits on its ability to make available to CLECs the Qwest fiber access rights obtained from the third party. There will certainly be cases where Qwest cannot enter agreements that it needs with third parties, except where Qwest is willing to restrict access rights to its own use. However, it should not be presumed that this will always be the case; where it is not, Qwest should not have the ability to "tie its own hands" in a manner that, while unlikely to hurt Qwest at all, may later become an undue constraint on competition. Qwest may be forced to deal with insistent third parties on terms that are not friendly to future competition, but it should not benefit from its own failure to accommodate future CLEC access. The "good faith" provision of the language recommended to resolve the immediately preceding dispute accomplishes this goal.

3. *Applying a Local Exchange Usage Requirement to Dark Fiber*

AT&T objected to the SGAT Section 9.7.2.9 application of the local usage test that the FCC issued with regard to Enhanced Extended Links ("EELs"). AT&T argued that the usage test when applied to dark fiber is prohibited by the FCC's *UNE Remand Order* and the FCC's rules. AT&T contended that 47 C.F.R. §51.309(b) explicitly provides for CLEC access to all unbundled elements unless the FCC provides an exception.[146] To support its position AT&T quoted 47 C.F.R. §51.309(b):

> *A telecommunications carrier purchasing access to an unbundled network element may use such network element to provide exchange access services to itself in order to provide interexchange services to subscribers.*

Finally, AT&T asserted that the requirement could not be implemented, because the FCC test cannot be applied to dark fiber. AT&T concluded that Qwest should be required to remove Section 9.7.2.9 from the SGAT.

Qwest responded that EELs comprise combinations of the loop UNE and the transport UNE. Qwest said that dark fiber is not a UNE per se, but rather "a flavor of loop and transport," like EELs, which are a combination of loop and transport under paragraphs 477 and 480 of the *UNE Remand Order*. Therefore, according to Qwest, the local traffic exchange restriction should be applied to dark fiber loop and transport combinations.[147] Qwest said that the FCC imposed the restriction to prevent unbundling requirements from interfering with access charge and universal service reform. Qwest argued that eliminating the local service restriction on dark fiber and transport unbundling would present a threat to access revenues and universal service.[148] Qwest asserted that SGAT Section 9.7.2.9 is proper under the FCC's *Supplemental Order Clarification* and should be maintained.

---

[145] *UNE Remand Order* at ¶ 174 for loops; a similar definition for transport is set forth at ¶ 325.
[146] AT&T Brief at page 36.
[147] Qwest Brief at page 10.
[148] Qwest Brief at page 10.

Proposed Issue Resolution: Paragraph 174 of the *UNE Remand Order* says that the loop element can consist of dark fiber. Paragraph 325 says that the transport element can consist of dark fiber. Paragraph 480 says that EELs are not a separate UNE, but consist of "an unbundled loop" that "is connected to unbundled dedicated transport." Thus, when a CLEC secures access to dark fiber that provides the functionality of a loop that is connected to dedicated transport, it secures an EEL, which is a combined loop and transport element. That dark fiber makes up this combination does not give it a different identity as a UNE.

The FCC has said that:[149]

> *IXCs may not substitute an incumbent LEC's unbundled loop-transport combinations for special access services unless they provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer.*

There is no doubt that a loop-transport combination that includes dark fiber remains a loop-transport combination. The logic behind the FCC's concern about access charges is in no way diminished because the facilities providing the combination were unlit before a CLEC gained access to them. The fact that access charges associated with many users might be avoided (instead of the one contemplated in the preceding quote) hardly serves to lessen the concern. Increased measurement difficulty (which, moreover, was an issue first raised in AT&T's brief, and not supported by any evidence) does not call for elimination of the rule in those cases where the harm it seeks to avoid is the greatest. Therefore, AT&T's argument is without foundation.

4. Consistency With Technical Publications

AT&T noted that SGAT Section 9.7.2.18 incorporated by reference Technical Publication 77383. AT&T determined that the publication's terms were inconsistent with the commitments Qwest has made in the language of the SGAT. According to AT&T, Qwest promised to provide a draft of the modifications to language that made it compliant with the SGAT by March 1, 2001. AT&T indicated that Qwest failed to provide the required language. Therefore, AT&T proposed that, until Qwest submits language for the publication conforming to the requirements of the SGAT on dark fiber, the Commission should find Qwest not in compliance with this section of the 271 requirements.[150]

Qwest in its brief did not identify Section 9.7.2.18 as in dispute.

Proposed Issue Resolution: This issue can be addressed, if the parties have not already resolved it by then, in the upcoming workshop on general SGAT terms and conditions. We have already adopted the general proposition that the hierarchy among the SGAT, technical publications, operations guidelines and procedures, and the other documents that it will take to make the Qwest/CLEC relationship operate effectively can best be addressed in a general fashion. To the extent that any participant still considers this issue to require special treatment then, it may be raised at that time.

---

[149] *Supplemental Order Clarification,* In the Matter of Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, FCC 00-183 (rel. June 2, 2000) ¶8.
[150] AT&T Brief at pages 34 and 35.

PHX/JHERRON/1204164.1/67817.150

STATEMENT OF GENERALLY AVAILABLE TERMS AND CONDITIONS FOR INTERCONNECTION, UNBUNDLED NETWORK ELEMENTS, ANCILLARY SERVICES, AND RESALE OF TELECOMMUNICATION SERVICES PROVIDED BY QWEST CORPORATION

Multi State SGAT "lite"

Final Emerging Services Language for IDAHO

Filing March 20, 2001

9.3 Sub-loop Unbundling

9.3.1 Description

9.3.1.1 A ~~Sub-loop is defined as any portion of the loop that it is technically feasible to access in U S WEST's terminals in outside plant, i.e. an accessible terminal, pole, pedestal, Feeder Distribution Interface (FDI) or Minimum Point Of Entry (MPOE) including inside wire (owned by U S WEST). An accessible terminal is any point on the Loop where technicians can access the wire or fiber within the cable without removing a splice case and/or digging up or trenching underground to reach the wire within.~~

~~9.3.1.2 Two types of standard Sub-Loops are available.~~

~~a) Two-Wire Unbundled Distribution Loop~~

~~b) DS1 Capable Unbundled Feeder Loop~~

~~9.3.1.3 Sub-Loop Unbundling is only available after a CLEC-requested Field Connection Point (FCP) has been installed at the technically feasible accessible terminal. The FCP provides a demarcation point for the termination of the U S WEST-provided Sub-Loop, and the necessary cross-connections to the CLEC-provided facilities. The FCP shall be located in direct proximity to the U S WEST Sub-Loop facility accessed by CLEC. The FCP shall be ordered pursuant to Section 9.3.7 herein.~~

~~9.3.2 Two-Wire Unbundled Distribution Loop~~

~~9.3.2.1 The Two-Wire Unbundled Distribution Loop is a U S WEST provided facility from the U S WEST FCP at the FDI to the demarcation point or Network Interface Device (NID) at the end-user location. The Two-Wire Unbundled Distribution Loop includes, but is not limited to, distribution facilities that serve Multiple Dwelling Units (MDUs). The Two-Wire Unbundled Distribution Loop is suitable for local exchange-type services within the analog voice frequency range of 300 to 3000 Hz. CLEC obtains access to this unbundled element at the FDI through an established FCP arrangement, and at the end-user location through the NID.~~

~~9.3.3 DS1 Capable Unbundled Feeder Loop~~

~~9.3.3.1 DS1 Capable Unbundled Feeder Loop is a digital transmission path that is provisioned from a U S WEST Central Office Network Interface, which consists of a DSX-1 panel or equivalent, to the Fiber Distribution Interface (FDI) located at the FCP.~~

~~9.3.3.2 The DS1 Capable Unbundled Feeder Loop transports bi-directional DS1 signals with a nominal transmission rate of 1.544 Mbit/s.~~

~~**9.3.4 Terms and Conditions**~~

~~9.3.4.1 Access to unbundled loop elements may be made, to the extent technically feasible, through the use of the Field Connection Point Process at any technically feasible Feeder Distribution Interface (FDI) and utility room in a multi-dwelling unit.~~

~~9.3.4.2 CLEC obtains access to the DS1 Capable Unbundled Feeder Loop at the U S WEST Wire Center through established Collocation arrangements, and at the FDI through the FCP. The CLEC must provide the necessary space and meet all premise requirements noted in the technical publication DS1 Capable Sub-Loop.~~

~~9.3.4.3 Standard access to a Sub-Loop will be at the Feeder Distribution Interface (FDI) through the establishment of a Field Connection Point (FCP). Non-standard access will be submitted via the BFR process in this Agreement.~~

~~**9.3.5 Rate Elements**~~

~~9.3.5.1 Sub-Loop Non-Recurring Charge - CLEC will be charged a non-recurring basic installation charge pursuant to Exhibit A for each Sub-Loop ordered by CLEC.~~

~~9.3.5.2 Sub-Loop Recurring Charge - The CLEC will be charged a monthly recurring charge pursuant to Exhibit A for each Sub-Loop ordered by CLEC.~~

~~9.3.5.3 Sub-Loop OSS Charge - The CLEC shall be charged pursuant to Exhibit A to recover the cost of the OSS modifications necessary to provide CLEC access to portions of U S WEST's feeder and distribution network facilities on an unbundled, sub-loop basis.~~

~~9.3.5.4 Sub-Loop Trouble Isolation Charge - CLEC will be charged a Trouble Isolation Charge pursuant to Section 12.3.4 when trouble is reported but not found on the U S WEST facility.~~

~~**9.3.6 Ordering**~~

~~9.3.6.1 CLEC may only submit orders for Sub-loop elements after the FCP is in place. CLEC will use the termination information provided to them at the completion of the FCP on the LSR for Sub-Loops.~~

~~9.3.6.2 CLEC can order sub-loop elements through the Operational Support Systems described in section 12.~~

~~9.3.6.3 CLEC shall identify Sub-loop elements by NC/NCI codes.~~

~~**9.3.7 Field Connection Point Description**~~

~~9.3.7.1 Field Connection Point allows a CLEC to interconnect with U S WEST outside of the central office location where it is technically feasible.~~

~~Field Connection Point allows a CLEC to access Unbundled Sub-Loops. The Field Connection Point must be in place before Sub-Loop orders are processed. Access to FCP's at the FDI are generally available. Requests for other Field Connection Point configurations will be considered on an individual case basis. The only use of the FDI Field Connection Point is to provide access to U S WEST Sub Loops.~~

~~9.3.7.2 Feeder Distribution Interface (FDI) Field Connection Point – A FDI Field Connection Point arrangement requires a CLEC to build and place their equipment adjacent to the U S WEST FDI location. U S WEST will place a cable between the field connection point and U S WEST's Feeder Distribution Interface. U S WEST will perform the splice at the Field Connection Point. Each Provider will only have access to their own facilities. CLEC will have access to the FCP for maintenance purposes.~~

~~9.3.8 Terms and Conditions~~

~~9.3.8.1 With the exception specified in subparagraph (a) below, U S WEST is not required to build additional space for the purpose of accessing sub-loop elements. U S WEST shall not preclude CLEC from constructing its own facilities adjacent to U S WEST's facilities. CLEC shall obtain any necessary authorizations or rights of way required and shall coordinate its facility placement with U S WEST, when placing their facilities adjacent to U S WEST's facilities. Obstacles that CLEC may encounter from cities, counties, electric power companies, property owners and similar third parties, when it seeks to interconnect its equipment at Sub-loop access points, will be the responsibility of CLEC to resolve with the municipality, utility, property owner or other third party.~~

~~(a) If CLEC seeks access to Two-Wire Unbundled Distribution Loops that serve an MDU, and there is no accessible MPOE or other accessible terminal to which CLEC can access such subloop elements, and U S WEST and CLEC are unable to negotiate a reconfigured single point of interconnection to serve the MDU, U S WEST will construct a single point of access at or near the property line of the MDU that is fully accessible to and suitable for CLEC. In such instance, CLEC shall pay U S WEST a nonrecurring charge according to Exhibit A.~~

Subloop is defined as any portion of the loop that it is technically feasible to access at terminals in Qwest's outside plant, including inside wire. An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole, pedestal, network interface device, minimum point of entry, single point of Interconnection, main distribution frame, remote terminal, Feeder Distribution Interface (FDI), or Serving Area Interface (SAI).

9.3.1.1.1 Building terminals within or physically attached to a privately owned building in a Multi-Tenant Environment (MTE) are one form of accessible terminal. Throughout Section 9.3 the Parties obligations around such "MTE terminals" are segregated because Subloop terms and conditions differ between MTE environments and non-MTE environments.

9.3.1.1.1.1 MTE Terminals: Accessible terminals within a building in a MTE environment or accessible terminals physically attached to a building in a MTE environment. Qwest Premises located on real property that constitutes a campus environment, yet are not within or physically attached to a non-Qwest owned building, are not considered MTE Terminals.

9.3.1.1.1.2 Detached Terminals: All accessible terminals other than MTE Terminals.

9.3.1.2 Standard Subloops available.

(a) Two-Wire/Four Wire Unbundled Distribution Loop

(b) DS1 Capable Unbundled Feeder Loop

(c) Two-Wire/Four Wire Non-loaded Distribution Loop

(d) Intrabuilding Cable Loop

9.3.1.3 Standard Subloop Access

9.3.1.3.1 Accessing Subloops in Detached Terminals: Subloop Unbundling is available after a CLEC requested Field Connection Point (FCP) has been installed within or adjacent to the Qwest accessible terminal. The FCP is a demarcation point connected to a terminal block from which cross-connections are run to Qwest Subloop elements.

9.3.1.3.2 Accessing Subloops in MTE Terminals: Subloop Unbundling is available after CLEC has notified Qwest of its intention to Subloop unbundle in the MTE, an inventory of CLEC's terminations has been created, and CLEC has constructed a cross-connect field at the building terminal.

9.3.1.3.2.1 Reserved for Future Use

9.3.1.3.2.2 Reserved for Future Use

9.3.1.4 Field Connection Point

9.3.1.4.1 Field Connection Point (FCP) is a demarcation point that allows CLEC to interconnect with Qwest outside of the Central Office location where it is technically feasible. The FCP interconnects CLEC facilities to a terminal block within the accessible terminal. The terminal block allows a technician to access and combine Unbundled Subloop elements. When a FCP is required, it must be in place before Subloop orders are processed.

9.3.1.4.2 Placement of a FCP within a Qwest Premises for the sole purpose of creating a cross-connect field to support Subloop unbundling constitutes a "Cross-Connect Collocation."

9.3.1.4.2.1 The terms, conditions, intervals and rates for Cross-Connect Collocation are found within section 9.3.

9.3.1.4.2.2 To the extent that CLEC places equipment in a Qwest Premises that requires power and or heat dissipation, such Collocation is governed by the Terms of Section 8 and does not constitute a Cross-Connect Collocation.

9.3.1.4.3 A FCP arrangement can be established either within a Qwest accessible terminal, or, if space within the accessible terminal is legitimately exhausted and when technically feasible, CLEC may place the FCP in an adjacent terminal. CLEC will have access to the equipment placed within the Collocation for maintenance purposes. However, CLEC will not have access to the FCP Interconnection point.

9.3.1.5 MTE Point of Interconnection (MTE-POI)

9.3.1.5.1 A MTE-POI is necessary when CLEC is obtaining access to the Distribution Loop or Intrabuilding Cable Loop from an MTE Terminal. CLEC must create the cross-connect field at the building terminal that will allow CLEC to connect its facilities to Qwest's Subloops. The demarcation point between CLEC and Qwest's facilities is the MTE-POI.

9.3.1.6 Once a state has determined that it is technically feasible to unbundle Subloops at a designated accessible terminal, Qwest shall either agree to unbundle at such access point or shall have the burden to demonstrate, pursuant to the dispute resolution provisions of this Agreement, that it is not technically feasible, or that sufficient space is not available to unbundle Subloop elements at such accessible terminal.

9.3.1.7. Qwest shall provide access to additional Subloop elements to CLEC where facilities are available pursuant to the Special Request Process in Exhibit F.

9.3.2 Standard Subloops Available

9.3.2.1 Distribution Loops

9.3.2.1.1 Two-Wire/Four-Wire Unbundled Distribution Loop: a Qwest provided facility from the Qwest accessible terminal to the demarcation point or Network Interface Device (NID) at the end-user location. The Two-Wire/Four-Wire Unbundled Distribution Loop is suitable for local exchange-type services. CLEC can obtain access to this unbundled element at any technically feasible accessible terminal.

9.3.2.1.2 Two-Wire/Four-Wire Non-Loaded Distribution Loop: a Qwest provided facility without load coils and excess bridge taps from the Qwest accessible terminal to the demarcation point or Network Interface Device (NID) at the end-user location. When CLEC requests a Non-Loaded Unbundled Distribution Loop and there are none available, Qwest

will contact CLEC to determine if CLEC wishes to have Qwest unload a Loop. If the response is affirmative, Qwest will dispatch a technician to "condition" the Distribution Loop by removing load coils and excess bridge taps (*i.e.*, "unload" the Loop). CLEC may be charged the cable unloading and bridge tap removal non-recurring charge in addition to the Unbundled Loop installation non-recurring charge. If a Qwest technician is dispatched and no load coils or bridge taps are removed, the non-recurring conditioning charge will not apply. CLEC can obtain access to this unbundled element at any technically feasible accessible terminal.

9.3.2.1.3 Intrabuilding Cable Loop: a Qwest provided facility from the building terminal inside a MTE to the demarcation point at the end user customer premises inside the same building. This Subloop element only applies when Qwest owns the intrabuilding cable.

9.3.2.1.4 To the extent CLEC accesses Subloop in a campus environment from an accessible terminal that serves multiple buildings, CLEC can access these Subloops by ordering a Distribution Loop pursuant to either Section 9.3.2.1.1 or 9.3.2.1.2. A campus environment is one piece of property, owned by one person or entity, on which there are multiple buildings.

9.3.2.2 Feeder Loops

9.3.2.2.1 DS1 Capable Unbundled Feeder Loop is a digital transmission path that is provisioned from a Qwest Central Office Network Interface, which consists of a DSX-1 panel or equivalent, to the accessible terminal. The DS1 Capable Unbundled Feeder Loop transports bi-directional DS1 signals with a nominal transmission rate of 1.544 Mbit/s.

9.3.3 MTE Terminal Subloop Access: Terms and Conditions

9.3.3.1 Access to Distribution Loops or Intrabuilding Cable Loops at an MTE Terminal within a non-Qwest owned MTE is done through an MTE-POI. Remote Collocation is not necessary because CLEC can access the Subloop without placing facilities in a Qwest Premises.

9.3.3.2 To obtain such access, CLEC shall complete the "MTE-Access Ordering Process" set forth in Section 9.3.5.4.

9.3.3.3 The optimum point and method to access Subloop elements will be determined during the MTE Access Ordering Process. The Parties recognize a mutual obligation to interconnect in a manner that maintains network integrity, reliability, and security. CLEC may access the MTE Terminal as a test access point.

9.3.3.4 CLEC will work with the MTE building owner to determine where to terminate its facilities within the MTE. CLEC will be responsible for all work

associated with bringing its facilities into and terminating the facilities in the MTE. CLEC shall seek to work with the building owner to create space for such terminations without requiring Qwest to rearrange its facilities.

9.3.3.5 If there is space in the building for CLEC to enter the building and terminate its facilities without Qwest having to rearrange its facilities, CLEC must seek to use such space. In such circumstances, an inventory of CLEC's terminations within the MTE shall be input into Qwest's systems to support Subloop orders before Subloop orders are provisioned. Qwest shall have five (5) calendar days from receipt of a written request from CLEC, in addition to the interval set forth in Section 9.3.5.4.1, to complete an inventory of CLEC's terminations and submit the data into its systems. Qwest may seek an extended interval if the work cannot reasonably be completed within the stated interval. In such cases, Qwest shall provide written notification to CLEC of the extended interval Qwest believes is necessary to complete the work. CLEC may dispute the need for, and the duration of, an extended interval, in which case Qwest must request a waiver from the Commission to obtain the extended interval.

9.3.3.6 If CLEC connects Qwest's Subloop element to CLEC's facilities using any temporary wiring or cut-over devices, CLEC shall remove them and install permanent wiring within thirty (30) calendar days. All wiring arrangements, temporary and permanent, must adhere to the National Electric Code.

9.3.3.7 If there is no space for CLEC to place its building terminal or no accessible terminal from which CLEC can access such Subloop elements, and Qwest and CLEC are unable to negotiate a reconfigured Single Point of Interconnection (SPOI) to serve the MDU, Qwest will either rearrange facilities to make room for CLEC or construct a single point of access that is fully accessible to and suitable for CLEC. In such instances, CLEC shall pay Qwest a non-recurring charge, which shall be ICB, based on the scope of the work required.

9.3.3.7.1 If Qwest must rearrange its MTE Terminal to make space for CLEC, Qwest shall have forty-five (45) calendar days from receipt of a written request from CLEC to complete the rearrangement. Qwest may seek an extended interval if the work cannot reasonably be completed within forty-five (45) calendar days. In such cases, Qwest shall provide written notification to CLEC of the extended interval Qwest believes is necessary to complete the work. CLEC may dispute the need for, and the duration of, an extended interval, in which case Qwest must request a waiver from the Commission to obtain an extended interval.

9.3.3.7.2 If Qwest must construct a new Detached Terminal that is fully accessible to and suitable for CLEC, the interval for completion shall be negotiated between the Parties on an individual case basis.

9.3.3.7.3 CLEC may cancel such MTE Access request prior to Qwest completing the work by submitting a written notification via certified mail to its Qwest account manager. CLEC shall be responsible for payment of all costs previously incurred by Qwest as well as any costs necessary to restore the property to its original condition.

9.3.3.8 At no time shall either Party rearrange the other Party's facilities within the MTE or otherwise tamper with or damage the other Party's facilities within the MTE. If such damage accidentally occurs, the Party responsible for the damage shall immediately notify the other and shall be financially responsible for restoring the facilities and/or service to its original condition. Any intentional damage may be reported to the proper authorities and may be prosecuted to the full extent of the law.

9.3.4 Detached Terminal Subloop Access: Terms and Conditions

9.3.4.1 Except as to access at an MTE Terminal, access to unbundled Subloop elements at an accessible terminal must be made through a Field Connection Point (FCP) in conjunction with either a Cross-Connect Collocation or, if power and/or heat dissipation is required, a Remote Collocation.

9.3.4.2 To the extent that the accessible terminal does not have adequate capacity to house the network interface associated with the FCP, CLEC may opt to use Adjacent Collocation to the extent it is technically feasible. Such adjacent access shall comport with NEBS Level 1 safety standards

9.3.4.2.1 Reserved for Future Use

9.3.4.3 Field Connection Point

9.3.4.3.1 Qwest is not required to build additional space for CLEC to access Subloop elements. When technically feasible, Qwest shall allow CLEC to construct its own structure adjacent to Qwest's accessible terminal. CLEC shall obtain any necessary authorizations or rights of way required (which may include obtaining access to Qwest rights of way, pursuant to section 10.8 of this Agreement) and shall coordinate its facility placement with Qwest, when placing their facilities adjacent to Qwest facilities. Obstacles that CLEC may encounter from cities, counties, electric power companies, property owners and similar third parties, when it seeks to interconnect its equipment at Subloop access points, will be the responsibility of CLEC to resolve with the municipality, utility, property owner or other third party.

~~9.3.8.2 The optimum point and method to access Sub-Loop elements will be determined during the Field Connection Point process. The Parties agree that they will not have direct access to the other Party's network.~~9.3.4.3.2 The optimum point and method to access Subloop elements will be determined during the Field Connection Point process. The Parties recognize a mutual obligation to interconnect in a manner that maintains network integrity, reliability, and security.

~~9.3.8.3 If the Parties are unable to reach an agreement on the design of the FCP through the Field Connection Point Process, the Parties may utilize the Dispute Resolution process pursuant to Section 5.18 (Dispute Resolution). Alternatively, CLEC may seek arbitration under Section 252 of the Act with the Commission, wherein U S WEST shall have the burden of demonstrating to the~~

~~Commission that there is insufficient space or that the requested interconnection is not technically feasible.~~

~~9.3.8.4 CLEC must identify the size and type of cable that will be terminated in the U S WEST FCP location. U S WEST will terminate the cable into the U S WEST FDI if termination capacity is available. If termination capacity is not available, U S WEST will expand the FDI at the request of the CLEC. The CLEC will be responsible for placing the cable from the U S WEST FCP to their equipment. U S WEST will perform all of the initial splicing at the FCP.~~

~~9.3.8.5 CLEC must arrange for power to its own equipment.~~

~~9.3.8.6 If U S WEST denies a request for FDI Field Connection Point, U S WEST will provide to the CLEC documentation stating why the request was denied during the feasibility quote process.~~

~~9.3.8.7 CLEC may cancel a Field Connection Point request prior to the completion of the request by U S WEST by submitting a written request by certified mail to the U S WEST Account Manager. CLEC shall be responsible for payment of all costs incurred by U S WEST.~~

~~9.3.9 Rate Elements~~

~~9.3.9.1 Feeder Distribution Interface Field Connection Point – CLEC will complete a Field Connection Point request form. U S WEST will develop a quote for the work to be performed based on the information provided by the CLEC on the Request Form. U S WEST will recover the Filed Connection Point cost through individual case basis non-recurring charges.~~

~~9.3.9.2 Feasibility Fee – U S WEST will charge a feasibility fee to recover cost of reviewing the site and engineering work that must be completed to determine if a site is available.~~

~~9.3.9.3 Quote Preparation Fee - U S WEST will charge a fee to recover all cost associated with developing a FDI Field Connection Point quote.~~

~~9.3.9.4 Construction Fee – U S WEST will charge a fee to recover all cost for building the FDI Field Connection point. This fee will cover the cost of augmenting the FDI location so that three CLECs can interconnect at that point. If CLEC is the first provider in the FDI-FCP, it will pay the quoted price. If CLEC is the second provider in the FDI-FCP, it will pay the initial CLEC 50% of U S WEST's quoted price. If CLEC is the third CLEC in the FDI-FCP, it will pay each of the original two CLECs 17% of U S WEST's quoted price.~~

~~9.3.10 Repair and Maintenance~~

~~U S WEST will maintain all of its equipment and the CLEC is responsible for maintaining all of its equipment.~~

~~9.3.11 Ordering – FDI Field Connection Point~~

~~9.3.11.1 CLEC shall submit a Field Connection Point Request Form to a U S WEST Account Representative. The Field Connection Point Request Form must be completed in its entirety.~~

~~9.3.11.2 Upon receipt of the Field Connection Point Request Form, U S WEST will initiate a feasibility study and FCP quote. Within thirty (30) calendar days from receipt of correctly completed Field Connection Point Request Form, U S WEST will notify the CLEC if a location is technically feasible and U S WEST will develop and send a quote. The Feasibility Study and quote will be valid for thirty (30) calendar days from feasibility and quote notification.~~

~~9.3.11.3 U S WEST will construct the FCP within 120 calendar days of receipt of payment from CLEC.~~

~~9.3.11.4 After construction is complete, the CLEC will be notified of its termination location which will be used for ordering Sub-Loops.~~

9.3.4.3.3 CLEC must identify the size and type of cable that will be terminated in the Qwest FCP location. Qwest will terminate the cable in the Qwest accessible terminal if termination capacity is available. If termination capacity is not available, Qwest will expand the FDI at the request of CLEC if technically feasible, all reconfiguration costs to be borne by CLEC. In this situation only, Qwest shall seek to obtain any necessary authorizations or rights of way required to expand the terminal. It will be the responsibility of Qwest to seek to resolve obstacles that Qwest may encounter from cities, counties, electric power companies, property owners and similar third parties. The time it takes for Qwest to obtain such authorizations or rights of way shall be excluded from the time Qwest is expected to provision the Collocation. CLEC will be responsible for placing the cable from the Qwest FCP to its equipment. Qwest will perform all of the initial splicing at the FCP.

9.3.4.3.4 CLEC may cancel a Collocation associated with a FCP request prior to Qwest completing the work by submitting a written notification via certified mail to its Qwest account manager. CLEC shall be responsible for payment of all costs previously incurred by Qwest.

9.3.4.3.5 If the Parties are unable to reach an agreement on the design of the FCP through the Field Connection Point Process, the Parties may utilize the Dispute Resolution process pursuant to the Terms and Conditions Dispute Resolution Section. Alternatively, CLEC may seek arbitration under Section 252 of the Act with the Commission, wherein Qwest shall have the burden to demonstrate that there is insufficient space in the accessible terminal to accommodate the FCP, or that the requested Interconnection is not technically feasible.

9.3.4.4 At no time shall either Party rearrange the other Party's facilities within the accessible terminal or otherwise tamper with or damage the other Party's facilities. If such damage accidentally occurs, the Party responsible for the damage shall immediately notify the other and shall be financially responsible

for restoring the facilities and/or service to its original condition. Any intentional damage may be reported to the proper authorities and may be prosecuted to the full extent of the law.

9.3.5. Ordering/Provisioning

9.3.5.1 All Subloop Types

9.3.5.1.1 CLEC can order Subloop elements through the Operational Support Systems described Section 12.

9.3.5.1.2 CLEC shall identify Subloop elements by NC/NCI codes.

9.3.5.2 Additional Terms for Detached Terminal Subloop Access

9.3.5.2.1 CLEC may only submit orders for Subloop elements after the FCP is in place. The FCP shall be ordered pursuant to Section 9.3.5.5. CLEC will populate the LSR with the termination information provided at the completion of the FCP process.

9.3.5.2.2 Qwest shall dispatch a technician to run a jumper between its Subloop elements and CLEC's Subloop elements. CLEC shall not at any time disconnect Qwest facilities or attempt to run a jumper between its Subloop elements and Qwest's Subloop elements without specific written authorization from Qwest.

9.3.5.2.3 Once the FCP is in place, the Subloop provisioning intervals contained in Exhibit C shall apply.

9.3.5.3 Reserved for Future Use

9.3.5.3.1 Reserved for Future Use

9.3.5.3.2 Reserved for Future Use

9.3.5.3.3 Reserved for Future Use

9.3.5.3.4 Reserved for Future Use

9.3.5.3.5 Reserved for Future Use

9.3.5.3.6 Reserved for Future Use

9.3.5.4 Additional Terms for MTE Terminal Subloop Access - MTE-Access Ordering Process

9.3.5.4.1 CLEC shall notify its account manager at Qwest in writing of its intention to provide access to customers that reside within a MTE. Upon receipt of such request, Qwest shall have up to ten (10) calendar days to notify CLEC and the MTE owner whether Qwest believes it or the MTE owner owns the intrabuilding cable.

9.3.5.4.2 If the MTE owner owns the facilities on the customer side of the terminal, CLEC may obtain access to all facilities in the building in accordance with Section 9.5 concerning access to unbundled NIDs.

9.3.5.4.3 If Qwest owns the facilities on the customer side of the terminal, CLEC shall notify Qwest in writing of whether the building owner has provided space for CLEC to enter the building and terminate its facilities or whether Qwest must rearrange facilities or construct new facilities to accommodate such access. Upon receipt of such notification, the intervals set forth in Section 9.3.3 shall begin.

9.3.5.4.4 CLEC may only submit orders for Subloop elements after the inventory is complete and, if necessary, the facilities are rearranged and/or a new facility constructed. CLEC will populate the LSR with the termination information provided at the completion of the inventory process.

9.3.5.4.5 If CLEC ordered Intrabuilding Cable Loop, CLEC shall dispatch a technician to run a jumper between its Subloop elements and Qwest's Subloop elements to make a connection at the MTE-POI. If CLEC ordered a Subloop type other than Intrabuilding Cable Loop, Qwest will dispatch a technician to run a jumper between CLECs Subloop elements and Qwest's Subloop elements to make a connection at the MTE-POI. In addition, CLEC shall not at any time disconnect Qwest facilities or attempt to run a jumper between its Subloop elements and Qwest's Subloop elements without specific written authorization from Qwest.

9.3.5.4.5.1 When CLEC accesses a MTE Terminal, it shall employ generally accepted best engineering practices in accordance with industry standards. CLEC shall clearly label the cross-connect wires it uses. CLEC wiring will be neatly dressed. When CLEC accesses Subloops in MTE Terminals, it shall adhere to Qwest's Standard MTE Terminal Access Protocol unless the Parties have negotiated a separate document for such Subloop access. If CLEC requests a MTE Terminal access protocol that is different from Qwest's Standard MTE Terminal Access Protocol, Qwest shall negotiate with CLEC promptly and in good faith toward that end.

9.3.5.4.5.2 Access to Intrabuilding Cable Loop at MTE Terminals without a cross-connect field:

9.3.5.4.5.2.1 To the extent CLEC seeks access to a MTE Terminal that does not contain a cross-connect field, CLEC shall not rearrange Qwest's facilities.

9.3.5.4.5.2.2 To the extent CLEC seeks access to a MTE Terminal that does not contain a cross-connect field, but that is connected to an adjacent MTE Terminal with a cross-connect field, CLEC shall access each Subloop via

the adjacent MTE Terminal with a cross-connect field.

9.3.5.4.5.2.3 To the extent CLEC seeks access to a MTE Terminal that does not contain a cross-connect field and is not connected to an adjacent MTE Terminal with a cross-connect field, CLEC shall access each Subloop in such a MTE Terminal using a bridging clip that overlays Qwest's termination pin for the particular end user customer on the connecting terminal block, and CLEC shall replace the Qwest line protector dedicated to that end user customer with a service denial protector or equivalent DC continuity interruptor. The details of this practice shall be contained within the MTE Terminal access protocol referenced in section 9.3.5.4.5.1.

9.3.5.4.5.2.4 CLEC shall be wholly and completely responsible for any service outage, equipment failure, property damage or any and all other damages to person or property that is caused by the failure to adhere to sections 9.3.5.4.5.1 or 9.3.5.4.5.2 or the MTE Terminal access protocol referenced in section 9.3.5.4.5.1.

9.3.5.4.6 Once inventory is complete and, if necessary, the facilities are rearranged and or a new facility constructed, the Subloop provisioning intervals contained in Exhibit C shall apply.

9.3.5.5 FCP Ordering Process

9.3.5.5.1 CLEC shall submit a Field Connection Point Request Form to Qwest along with its Collocation Application. The FCP Request Form shall be completed in its entirety.

9.3.5.5.2 After construction of the FCP and Collocation are complete, CLEC will be notified of its termination location, which will be used for ordering Subloops.

9.3.5.5.2.1 The following constitute the intervals for provisioning Collocation associated with a FCP, which intervals shall begin upon completion of the FCP Request Form and its associated Collocation Application in their entirety:

9.3.5.5.2.1.1 Any Remote Collocation associated with a FCP in which CLEC will install equipment requiring power and/or heat dissipation shall be in accordance with the intervals set forth in Section 8.4.

9.3.5.5.2.1.2 A Cross-Connect Collocation in a Detached Terminal shall be provisioned within ninety (90) calendar days from receipt of a written request by CLEC.

9.3.5.5.2.1.3 Reserved for Future Use

9.3.5.5.2.1.4 Reserved for Future Use

9.3.5.5.2.1.5 Qwest may seek extended intervals if the work cannot reasonably be completed within the set interval. In such cases, Qwest shall provide written notification to CLEC of the extended interval Qwest believes is necessary to complete the work. CLEC may dispute the need for and the duration of, an extended interval, in which case Qwest must request a waiver from the Commission to obtain an extended interval.

9.3.6 Rate Elements

9.3.6.1 All Subloop Types

9.3.6.1.1 Subloop Recurring Charge - CLEC will be charged a monthly recurring charge pursuant to Exhibit A for each Subloop ordered by CLEC.

9.3.6.1.2 Subloop Trouble Isolation Charge - CLEC will be charged a Trouble Isolation Charge pursuant to the Support Functions – Maintenance and Repair Section when trouble is reported but not found on the Qwest facility.

9.3.6.2 Reserved for Future Use

9.3.6.2.1 Reserved for Future Use

9.3.6.3 Additional rates for Detached Terminal Subloop Access:

9.3.6.3.1 Cross-Connect Collocation Charge: CLEC shall pay the full non-recurring charge for creation of the Cross-Connect Collocation set forth in Exhibit A upon submission of the Collocation Application. The FCP Request Form shall not be considered completed in its entirety until complete payment is submitted to Qwest.

9.3.6.3.2 Any Remote Collocation associated with a FCP in which CLEC will install equipment requiring power and/or heat dissipation shall be in accordance with the rate elements set forth in Section 8.3.

9.3.6.3.3. Subloop Non-Recurring Jumper Charge: CLEC will be charged a non-recurring basic installation charge for Qwest running jumpers within the accessible terminal pursuant to Exhibit A for each Subloop ordered by CLEC.

9.3.6.4 Additional Rates for MTE Terminal Subloop Access

9.3.6.4.1 Subloop Non-recurring Charge - CLEC will be charged a non-recurring charge for the time and materials required for Qwest to complete the inventory of CLEC's facilities within the MTE such that Subloop orders can be submitted and processed.

9.3.6.4.2. Subloop Non-Recurring Jumper Charge – If CLEC ordered a Subloop type other than Intrabuilding Cable Loop, CLEC will be charged a non-recurring basic installation charge for Qwest running jumpers within the accessible terminal pursuant to Exhibit A for each Subloop ordered by CLEC.

9.3.7. Repair and Maintenance

9.3.7.1 Detached Terminal Subloop Access: Qwest will maintain all of its facilities and equipment in the accessible terminal and CLEC will maintain all of its facilities and equipment in the accessible terminal.

9.3.7.2 MTE Terminal Subloop Access: Qwest will maintain all of its facilities and equipment in the MTE and CLEC will maintain all of its facilities and equipment in the MTE.

9.4 Line Sharing

9.4.1 Description

Line Sharing provides CLEC with the opportunity to offer advanced data services simultaneously with an existing end user's analog voice-grade (POTS) service on ~~the same copper loop (the Shared Loop). CLEC will access the unused high frequency portion of the Shared Loop while the voice portion of the Shared Loop will~~a single copper loop referred to herein as the "Shared Loop" or "Line Sharing", by using the frequency range above the voice band on the copper loop. This ~~be used for analog voice-grade POTS service. A~~frequency range will be referred to herein as the High Frequency Spectrum Network Element ("HUNE"). A POTS splitter separates the voice and data traffic and allows the copper loop to be used for simultaneous data transmission and POTS service. The~~voice-grade~~ POTS service must be provided to the end user by ~~U S WEST.~~
Qwest. This section does not prohibit Line Splitting, which is addressed in Section 9.21.

9.4.1.1. Line Sharing occurs on the copper portion of the loop (i.e., copper loop or shared copper distribution). Qwest provides CLECs with the network elements to transport data from Qwest remote terminals including unbundled dark fiber, DS1 capable loop, and OCN. Qwest also provides CLECs with the ability to comingle its data with Qwest's pursuant to Section 9.20 with Unbundled Packet Switching. To the extent additional Line Sharing technologies and transport mechanisms are identified, and Qwest has deployed such technology for its own use, and Qwest is obligated by law to provide access to such technology. Qwest will allow CLECs to line share in that same manner, provided, however, that the rates, terms and conditions for Line Sharing may need to be amended in order to provide such access.

9.4.2 Terms and Conditions

9.4.2.1 ~~General~~

~~9.4.2.1.1 The end user must have dial tone originating from a U S WEST End Office Switch in the Wire Center where the Shared Loop is being requested.~~

~~9.4.2.1.2 CLEC gains access to the Shared Loop at the U S WEST Wire Center through established Collocation arrangements.~~

~~9.4.2.1.3 The splitter must be provided by the CLEC. The splitter must satisfy at least one of the following criteria: (a) the splitter meets the requirements for central office equipment collocation set by the FCC in its March 31, 1999 order in CC Docket No. 98-147; or (b) as they are developed, appropriate technical standards.~~

~~9.4.2.1.4 The voice and data signals carried by Shared Loops are "split" by the splitter located in a U S WEST Wire Center.~~

~~9.4.2.1.5 The technology used by CLEC will be within the Power Spectrum Density (PSD) mask parameters set forth in ANSI T1E1.413 or other applicable industry standards. Such technologies are currently limited to ADSL and RADSL. In the future, additional technologies may be used by CLECs, to the extent those technologies meet the PSD mask parameters set forth in the above ANSI or other applicable industry standards. Spectrum management is the subject of a pending NPRM (First Report and Order Notice of Proposed Rulemaking, Deployment of Wirelines, Services Offering Advanced Telecommunications Capability— CC Docket Number 98-147). U S WEST will comply with Spectrum Management rules issued by the FCC and standards defined by the ANSI Standards Subcommittee. T1E1.4.~~

~~9.4.2.2 Splitter in CLEC Collocation area~~

~~9.4.2.2.1 The CLEC-provided splitter shall be provided, installed and maintained by CLEC in CLEC's Collocation space.~~

~~9.4.2.2.2 U S WEST will either re-designate existing or install new TIE Cables in order to accommodate the capacity requests of CLEC.~~

~~9.4.2.2.3 Interconnection Tie Pairs and TIE Cables. There are two types of ITP arrangements for connecting the U S WEST network to the CLEC provided splitter, depending on whether the CLEC elects to use an ICDF or direct connections.~~

~~9.4.2.2.3.1 CLEC may elect to use an ICDF. In this instance, one ITP carries the combined voice/data signal from the COSMIC/MDF loop termination to the ICDF and a second ITP carries the voice only signal from the ICDF to the COSMIC/MDF switch termination. For each Shared Loop, two pairs of the TIE cable must be used: one pair of the TIE Cable will carry the voice/data from the ICDF to the CLEC provided splitter, and the second pair will carry the voice-only signal from the CLEC provided splitter to the ICDF.~~

~~9.4.2.2.3.2 CLEC may elect to use direct connections between the CLEC-provided Splitter and the COSMIC/MDF. In this instance, U S WEST will provide one TIE Cable between each module of the COSMIC/MDF and the CLEC-provided splitter. One pair in the TIE Cable will carry the combined voice/data signal from the COSMIC/MDF loop termination to the CLEC-provided splitter in the CLEC's Collocation Space. A second pair in the TIE Cable will carry the voice-only signal from the CLEC-provided splitter to the switch termination on the COSMIC/MDF. These TIE Cables will be dedicated to the CLEC's use, and, as a result, the full cost of the necessary Mechanized Engineering and Layout for Distributing Frame (MELD) run, cable placement, and cable termination, and associated COSMIC/MDF hardware to terminate a TIE Cable on each outside plant and switch equipment module of the COSMIC/MDF will be assessed to CLEC in accordance with Section 8 (Collocation). U S WEST will provide, for each Shared Loop, the TIE Cable pair assignments.~~

~~9.4.2.2.4 The demarcation point will be the place where the combined voice and data loop is connected to the ICDF, or where CLEC chooses a direct connection to the COSMIC/MDF, where the combined voice and data loop originates from CLEC's Collocation.~~

~~9.4.2.3 Splitter in Common Area of Central Office~~

~~9.4.2.3.1 U S WEST will install and maintain CLEC provided splitter in the common area of the Central Office as close to the ICDF as possible.~~

~~9.4.2.3.2 U S WEST will provide cabling on behalf of CLEC or CLEC may provide all cables between their collocation and the ICDF, between their Collocation and the splitter data ports, and between the splitter and the ICDF. CLEC may choose to utilize existing cables from their Collocation to the ICDF.~~

~~9.4.2.3.3 POTS splitter plug-in card augmentation will be the responsibility of CLEC to provide and install.~~

~~9.4.2.3.4 U S WEST may co-mingle multiple CLEC owned splitter shelves per bay.~~

~~9.4.2.3.5 The demarcation point will be at the splitter end of the TIE-cable connecting the CLEC collocation and the splitter.~~

~~**9.4.3 Rate Elements**~~

~~9.4.3.1 Recurring Rates for Shared Loop~~

~~9.4.3.1.1 Shared Loop Charge - A monthly recurring charge for the use of the Shared Loop.~~

~~9.4.3.1.2 OSS Costs - A monthly recurring charge to recover upgrades to U S WEST Operational Support Systems required to accommodate Line Sharing.~~

~~9.4.3.1.3 Interconnection Tie Pair (ITP) -- Charges for the quantity of ITPs used by the CLEC's specific application apply.~~

~~9.4.3.1.4 Collocation Terminations – Charges for Collocation Terminations apply pursuant to Section 8 (Collocation).~~

~~9.4.3.2 Non-Recurring Rates for Shared Loop~~

~~9.4.3.2.1 Basic Installation for Shared Loop – A non-recurring charge for each Shared Loop installed by U S WEST.~~

~~9.4.3.2.2 Conditioning Charges – Based on the pre-order loop make-up, the CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the Loop. After the Shared Loop is ordered and the design layout record is reviewed by CLEC, it is CLEC's responsibility to determine if the Shared Loop meets the technical parameters set forth by the specific data service. If CLEC requests loop conditioning, conditioning charges specified in Exhibit A shall apply for unloading cable pairs in the event that non-loaded Loops are not available.~~

~~9.4.3.3 Non-Recurring for Collocation Augment~~

~~9.4.3.3.1 Engineering -- A rate based on time and materials to augment existing Collocation with re-designation of existing cables between the CLEC's collocation and the intermediate frame.~~

~~9.4.3.4 Maintenance and Repair~~

~~9.4.3.4.1 Trouble Isolation Charge – Trouble isolation charges are applied in accordance with Section 12.3.4.~~

~~9.4.3.4.2 Other Labor – Any labor incurred by U S WEST on behalf of CLEC for any specific customer request other than Trouble Isolation or repair of U S WEST facilities will be charged to CLEC using the Other Labor charge.~~

~~9.4.3.5 Rates for Splitter in Common Area~~ General

9.4.2.1.1 To order the HUNE, CLEC must have a POTS splitter installed in the Qwest Wire Center that serves the end user as provided for in this Section, and the end user must have dial tone originating from a Qwest switch in that Wire Center. CLEC must provide the end user with, and is responsible for, the installation of a splitter, filter(s) and/or other equipment necessary for the end user to receive separate voice and data service across a single copper loop.

9.4.2.1.2 Reserved for Future Use

9.4.2.1.3 CLEC may use the HUNE to provide any xDSL services that will not interfere with analog voiceband transmissions in accordance with FCC rules. Such services currently are limited to ADSL, RADSL Multiple Virtual Lines (MVL) and G.lite. In the future, additional services may be used by CLEC to the extent those services are deemed acceptable for Line Sharing Deployment under applicable FCC rules.

9.4.2.1.4 CLEC may not order the HUNE on a given copper loop if Qwest, or another Telecommunications Carrier, is already using the high frequency spectrum, unless the end user disconnects the original Telecommunications Carrier's high-frequency service.

9.4.2.1.5 CLEC may request, and Qwest will provide, conditioning of Shared Loops to remove load coils, excess bridged taps, or electronics subject to the charges for loop conditioning in Exhibit A. Qwest will perform requested conditioning, including de-loading and removal of excess bridged taps, unless Qwest demonstrates in advance that conditioning a Shared Loop will significantly degrade the end user's analog voice-grade POTS service. Based on the pre-order make-up of a given copper loop, CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the loop.

9.4.2.1.6 Qwest will provide CLEC with access to the HUNE through POTS splitters installed in Qwest Wire Centers. POTS splitters may be installed in Qwest Wire Centers in either of the following ways at the discretion of CLEC: (a) via the standard Collocation arrangements set forth in the Collocation Section; or (b) via Common Area Splitter Collocation as set forth in this Section. Under either option, POTS splitters will be appropriately hard-wired or pre-wired so that Qwest is not required to inventory more than two (2) points of termination.

9.4.2.1.7 Reserved for Future Use

9.4.2.2 CLEC Collocation Area Splitter

9.4.2.2.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will either purchase the POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to taxes, shipping and handling. The POTS splitters must meet the requirements for Central Office equipment Collocation set by the FCC. CLEC will be responsible for installing and maintaining the POTS splitters in its Collocation areas within Qwest Wire Centers.

9.4.2.2.2 CLEC may designate some or all of its existing TIE Cables

for use in connection with Line Sharing. Qwest will perform any necessary TIE Cable reclassifications, frame re-stenciling, and related work for which it is responsible and that is required to provision Line Sharing. Charges will apply pursuant to Exhibit A of the Agreement.

9.4.2.2.3 Two (2) ITPs and two (2) TIE Cables will be needed to connect POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC™/MDF loop termination, to an appropriate ICDF. From this frame, one (1) TIE Cable will carry both voice and data traffic to the POTS splitter located in CLEC's Collocation area. The voice and data traffic will be separated at the POTS splitter. The data traffic will be routed to CLEC's network within its Collocation area. The voice traffic will be routed to the COSMIC™/MDF switch termination, via the ICDF, using a second TIE Cable and a second ITP.

9.4.2.2.4 Interconnection Tie Pairs and TIE Cables. There are two (2) types of ITP arrangements for connecting the Qwest network to the CLEC provided splitter, depending on whether CLEC elects to use an ICDF or direct connections.

9.4.2.2.4.1 CLEC may elect to use an ICDF. In this instance, one ITP carries the combined voice/data signal from the COSMIC™/MDF loop termination to the ICDF and a second ITP carries the voice only signal from the ICDF to the COSMIC™/MDF switch termination. For each Shared Loop, two pairs of the TIE cable must be used: one pair of the TIE Cable will carry the voice/data from the ICDF to the CLEC provided splitter, and the second pair will carry the voice-only signal from the CLEC provided splitter to the ICDF.

9.4.2.2.4.2 CLEC may elect to use direct connections between the CLEC-provided splitter and the COSMIC™/MDF. In this instance, Qwest will provide one TIE Cable between each module of the COSMIC™/MDF and the CLEC-provided splitter. One pair in the TIE Cable will carry the combined voice/data signal from the COSMIC™/MDF loop termination to the CLEC-provided splitter in CLEC's Collocation space. A second pair in the TIE Cable will carry the voice-only signal from the CLEC-provided splitter to the switch termination on the COSMIC™/MDF. These TIE Cables will be dedicated to CLEC's use, and, as a result, the full cost of the necessary Mechanized Engineering and Layout for Distributing Frame (MELD™) run, cable placement, and cable termination, and associated COSMIC™/MDF hardware to terminate a TIE Cable on each outside plant and switch equipment module of the COSMIC™/MDF will be assessed to CLEC in accordance with Section 8 (Collocation). To minimize CLECs cost, to the extent feasible, Qwest shall consolidate CLECs requirements with the requirements of Qwest and other CLECs into a single MELD™ run whenever feasible. Costs of such consolidated MELD™ runs shall be prorated among the Parties, including Qwest. Qwest will provide, for each Shared Loop, the TIE Cable pair assignments.

9.4.2.2.5 The demarcation points between Qwest's network and CLEC's network will be the place where the combined voice and data loop is connected to the ICDF, or where CLEC chooses a direct connection to the COSMIC™/MDF, where the combined voice and data loop originates from CLECs Collocation

9.4.2.3 Common Area Splitter Collocation

9.4.2.3.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire centers in one of the following locations: (a) in a relay rack as close to CLEC's DS0 termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or, in Wire Centers with network access line counts of less than 10,000, on the Cosmic™/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC either may purchase POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to, taxes, shipping and handling, and any similar charges assessed on Qwest by vendors in connection with the purchase of POTS splitters. The POTS splitters must meet the requirements for Central Office equipment Collocation set by the FCC. Qwest will be responsible for installing and maintaining the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC.

9.4.2.3.2 Two (2) ITPs and four (4) TIE Cables will be needed to connect the POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC™/MDF loop termination, to an appropriate ICDF. From this frame, one (1) TIE Cable will carry both voice and data traffic to the POTS splitter. The voice and data traffic will be separated at the POTS splitter, and the separated voice and data traffic will be routed to the ICDF via separate TIE Cables (i.e., the second and third TIE Cables). At the ICDF, the data traffic will be routed to CLEC's Collocation area via a fourth TIE Cable, and the voice traffic will be routed to the COSMIC™/MDF switch termination, via a second ITP. CLEC can also elect a direct connect option pursuant to Section 8.3.1.11.2.

9.4.2.3.3 Qwest will provide the cabling used for TIE Cables between the POTS splitter and the ICDF. The POTS Splitter Tie Cable Connection Charge will apply.

9.4.2.3.4 The demarcation point between Qwest's network and CLEC's network will be at the place where the data loop leaves the POTS splitter on its way to CLEC's Collocated equipment.

9.4.3 Line Sharing Deployment

9.4.3.1 New applications for installation of POTS splitters will be processed in the manner outlined in the Collocation Section for Cageless or Common Collocation.

9.4.3.2 CLEC may submit applications for additional DSO TIE Cable terminations and/or reclassifications to support Line Sharing. Qwest will process any such applications for augmentation and/or reclassification of DSO TIE Cable terminations under intervals as outlined below in this Section.

9.4.3.3 Augmentation intervals will be thirty (30) days, subject to the following terms and conditions identified below:

9.4.3.3.1 Intentionally Left Blank

9.4.3.3.2 Intentionally Left Blank

9.4.3.3.3 The interval for reclassification will be fifteen (15) days, subject to the following terms and conditions. If requested reclassification engineering results in additional requirements for DSO TIE Cable termination or TIE Cable support, the interval will default to thirty (30) days.

9.4.3.3.4 Intentionally Left Blank

9.4.3.3.5 In the event CLEC, or Qwest acting as purchasing agent for CLEC, is unable to procure any equipment needed to complete all work required by applications submitted to Qwest by CLEC, including but not limited to, POTS splitters or cabling, Qwest will install the subject equipment when it becomes available. If Qwest is acting as purchasing agent for CLEC and is unable to procure equipment to complete all work in a timely manner, CLEC may provide Qwest with the subject equipment. CLEC will be notified by Qwest of the required material on-site date for the affected Wire Center(s) and CLEC will have two (2) business days to determine if it will be able to provide the subject equipment in advance of the material on-site date. If CLEC does not notify Qwest in writing of its intent to provide the subject equipment within this two (2) business days period, or if the subject equipment is not provided in a timely manner, Qwest will install the subject equipment when available.

9.4.4 Rate Elements

9.4.4.1 Recurring Rates for Shared Loop

9.4.4.1.1 Shared Loop Charge - A monthly recurring charge for the use of the Shared Loop will apply.

9.4.4.1.2 OSS Charge - A monthly recurring charge to recover upgrades to Qwest Operational Support Systems required to

accommodate Line Sharing will apply.

9.4.4.2 Non-Recurring Rates for the Shared Loop

9.4.4.2.1 Basic Installation Charge for Shared Loop – A non-recurring charge for each Shared Loop installed will apply.

9.4.4.2.2 If CLEC requests conditioning of a Shared Loop, a non-recurring conditioning charge specified in Exhibit A will apply for removal of load coils and excess bridged taps. If the conditioning significantly degrades the voice services on the loop to the point it is unacceptable to the end user, CLEC shall pay the conditioning charge in Exhibit A to recondition the loop.

9.4.4.3 Non-Recurring Rates for Tie Cable Reclassification

9.4.4.3.1 Reclassification Charge – A non-recurring charge will apply, based on time and materials for reclassification of existing TIE cable capacity, by among other things, reclassification of existing TIE cables for Line Sharing, frame restenciling, and any other work performed between CLEC's Collocation and the intermediate distribution frame required to provision Line Sharing.

9.4.4.4 Non-Recurring Rates for Maintenance and Repair

9.4.4.4.1 Trouble Isolation Charge – A non-recurring charge for Trouble isolation will be applied in accordance with the Support Functions – Maintenance and Repair Section.

9.4.4.4.2 Additional Testing – CLEC may request Qwest to perform additional testing, and Qwest may decide to perform the requested testing on a case-by-case basis. A non-recurring charge will apply in accordance with Exhibit A.

9.4.4.5 Rates for Common Area Splitter Collocation

~~9.4.3.5.1 Splitter Shelf Charge – This charge recovers installation and ongoing maintenance associated with splitter installation, bay installation, lighting costs, aerial support structures, grounding charge and engineering labor.~~9.4.4.5.1 Splitter Shelf Charge – This charge recovers installation and ongoing maintenance associated with splitter installation, bay installation, lighting costs, aerial support structures and grounding charge for splitters either in a bay, on the IDF, or on the MDF/COSMIC™. These are both recurring and non-recurring charges.

~~9.4.3.6 Splitter TIE Cable Connections – The cost of each TIE cable connection to the splitter. This includes cables and associated blocks per 100 pair between the splitter and the intermediate frame.~~

~~**9.4.4 Ordering Process**~~

~~9.4.4.1 Shared Loop~~

~~9.4.4.1.1 As a part of the pre-order process, CLEC can access loop characteristic information through the Loop Information Tool described in Section 12.2.1.4.~~

~~9.4.4.1.2 Prior to placing an order for Shared Loop, CLEC must obtain a Proof of Authorization from the end user customer in accordance with Section 5.3 (Proof of Authorization).~~

~~9.4.4.1.3 Splitter Meet Points for Shared Loop will be provided on a separate form specifically for Shared Loop requests. CLEC will provide both TIE Cable Splitter Meet Points at the ICDF. U S WEST will administer all cross connects/jumpers.~~

~~9.4.4.1.4 Basic Installation "lift and lay" procedure will be used for all Shared Loop orders. Under this approach, the U S WEST technician "lifts" the Loop from its current termination and "lays" it on a new termination connecting to CLEC's equipment.~~

~~9.4.4.1.5 Orders will carry a standard 5-day interval.~~

~~9.4.4.1.6 CLEC shall not place orders for Shared Loops until TIE Cables have been completed to the CLEC provided splitter.~~

~~9.4.4.2Splitter Collocation~~

~~9.4.4.2.1 This section only applies to situations where CLEC orders placement of the splitter in a common area.~~

~~9.4.4.2.2 New Splitter bay ordered at the same time as a new Collocation – This may be ordered via a single Collocation application form and ordering processing charge. CLEC must submit a new Collocation application form and the applicable fee to U S WEST requesting the Shared Loop. Standard intervals will apply.~~

~~9.4.4.2.3 New splitter bay or shelf requested with an existing Collocation – CLEC must submit a new Collocation application form and the applicable fee to U S WEST requesting the Shared Loop.~~

~~9.4.4.3 TIE Cable Re-designation~~

~~9.4.4.3.1 Re-designation of existing TIE Cable to accommodate Shared Loop – To the extent CLEC has existing TIE Cables extending from an ICDF to the CLEC's Collocation space, CLEC may request these pre-existing TIE Cables be redesignated for use with Line Sharing. CLEC shall request such redesignation through the same process used to order new TIE Cables.~~

~~**9.4.5 Repair and Maintenance**~~

~~9.4.5.1 U S WEST will be responsible for repairing voice services and the physical line between the network interface device at the customer premise and the point of demarcation in the central office. CLEC will be responsible for repairing data services. Each entity will be responsible for maintaining its own equipment. The CLEC will be responsible for splitter maintenance and repair when the splitter is in the Collocation space. U S WEST will be responsible for maintenance and repair of splitter in the common area~~

~~9.4.5.2 When U S WEST provides inside wire maintenance services to an end user, U S WEST will only be responsible for testing and repairing the inside wire for voice grade services. U S WEST will not test, repair, or upgrade inside wire to clear trouble calls associated with CLEC's data service. U S WEST will not repair any CPE equipment provided by CLEC. U S WEST will not dispatch a technician to clear inside wire trouble tickets associated with CLEC's data service.~~

~~9.4.5.3 CLEC will validate that the end user has a data only problem before issuing a trouble ticket to U S WEST.~~

~~9.4.5.4 In the case of trouble reported by an end user on their voice grade POTS service, if U S WEST determines the cause of the reported trouble is the CLEC's data equipment, U S WEST will:~~

~~a) Notify CLEC and request CLEC immediately test the trouble on the CLEC's data service.~~

~~b) If the end user's voice grade POTS service is so degraded that the customer cannot originate or receive voice grade calls, and CLEC has not immediately cleared its trouble, U S WEST may take unilateral steps to temporarily restore the end user's voice grade POTS service.~~

~~c) Upon completion of steps (a) and (b) above, U S WEST may temporarily remove the CLEC-provided splitter from the end user's loop and switch port.~~

~~d) Upon notification from CLEC that the malfunction in the CLEC's data service has been cleared, U S WEST will restore the CLEC's data service by restoring the splitter on the customer's line.~~

~~e) Upon completion of the above steps, the CLEC will be charged a Trouble Isolation Charge (TIC) to recover U S WEST's cost for isolating and temporarily removing the malfunctioning data service from the customer's line.~~

~~f) U S WEST shall not be liable for damages of any kind for temporary disruptions to CLEC's data service that are the result of the above steps taken to restore the end user's voice grade POTS service.~~

~~9.4.5.5 Before initiating any activity on the Shared Loop that may effect the end user customer voice grade service, CLEC shall attempt to notify the end user customer.~~

~~9.4.5.6 U S WEST and CLEC will work together to address customer initiated repair requests and to prevent adverse impacts to the customer.~~9.4.4.5.2 POTS Splitter Charge – A non-recurring charge will apply for the cost of each POTS splitter purchased by Qwest on behalf of CLEC. This charge will cover the cost of the POTS splitter, plus any associated costs incurred by Qwest to order the POTS splitter.

9.4.4.5.3 Engineering – A non-recurring charge will apply for the planning and engineering associated with placing POTS splitters in the Central Office, either in a bay, on the IDF, or on the MDF/COSMIC™.

9.4.4.6 POTS Splitter TIE Cable Connections Charge – A non-recurring charge will apply for the cost of each TIE Cable connected to the POTS splitters. This charge will cover both the TIE cables and associated blocks per one hundred (100) pair between the POTS splitter and the intermediate distribution frame or splitter bay.

9.4.4.7 The rates for each of the aforementioned Line Sharing rate elements are set forth in Exhibit A. All of these rates are interim and will be subject to true up based on either mutually agreed to permanent rates or permanent rates established in a Line Sharing cost proceeding conducted by the Commission. In the event interim rates are established by the Commission before permanent rates are set, the interim rates set forth in Exhibit A will be changed to reflect the interim rates set by the Commission; however, no true up will be performed until mutually agreed to permanent rates are established or permanent rates are set established by the Commission.

9.4.5 Ordering Process

9.4.5.1 Shared Loop

9.4.5.1.1 As a part of the pre-order process, CLEC can access loop characteristic information through the Loop Information Tool described in the Support Functions Section. CLEC will determine, in its sole discretion, whether to order the HUNE across any specific copper loop. Qwest and CLEC will work together to modify the Loop Information Tool to better support Line Sharing. CLEC shall accept the risk that the loop selected may not be suitable for providing the type of xDSL service CLEC seeks to provide.

9.4.5.1.2 The appropriate Splitter Meet Points dedicated to the POTS splitters will be provided on the Line Sharing Actual Point of Termination (APOT) form one (1) day prior to the Ready for Service date or at an interval ordered by the Commission or further agreed to by Qwest and CLEC in writing. CLEC will provide on the LSR, the appropriate frame terminations which are dedicated to POTS splitters. Qwest will

administer all cross connects/jumpers on the COSMIC™/MDF and ICDF.

9.4.5.1.3 Basic Installation "lift and lay" procedure will be used for all Shared Loop orders. Under this approach, a Qwest technician "lifts" the Loop from its current termination in a Qwest Wire Center and "lays" it on a new termination connecting to CLEC's Collocated equipment in the same Wire Center.

9.4.5.1.4 Qwest will provision the Shared Loop within the standard unbundled loop provisioning interval as defined in Exhibit C.

9.4.5.1.5 CLEC shall not place initial orders for Shared Loops until all infrastructure work necessary to provision Line Sharing in a given Qwest Wire Center, including, but not limited to, POTS splitter installation and TIE Cable reclassification or augmentation has been completed. Upon CLEC request at any time, including before placing an order, Qwest will arrange for a wire center walkthrough to verify the line sharing installation including APOT Information and associated databases, wiring and stenciling in the Qwest Wire Center.

9.4.5.1.6 Prior to placing an LSR for Shared Loop, CLEC must obtain a Proof of Authorization from the end user customer in accordance with the Proof of Authorization Section.

9.4.5.2 Common Area Splitter Collocation

9.4.5.2.1 This Section only applies to situations where CLEC orders placement of the splitter in a common area.

9.4.5.2.2 New POTS splitter shelves may be ordered via a single Collocation application form and quote preparation fee. Standard intervals as contained in Exhibit C will apply.

9.4.5.2.3 New POTS splitter shelves may be ordered with an existing Collocation. CLEC must submit a new Collocation application form and the applicable fee to Qwest. Standard Cageless and/or Common Collocation intervals as contained in Exhibit C will apply.

9.4.5.3 TIE Cable Reclassification

9.4.5.3.1 To the extent CLEC has existing DSO TIE Cable terminations extending from an intermediate distribution frame to its Collocation space, CLEC may request that these existing DSO TIE Cable terminations be reclassified for use with Line Sharing. CLEC shall request such reclassification through the same process used to order new terminations.

9.4.6 Repair and Maintenance

9.4.6.1 Qwest will allow CLEC to access Shared Loops at the point where the combined voice and data loop is cross-connected to the POTS splitter.

9.4.6.2 Qwest will be responsible for repairing voice services provided over Shared Loops and the physical line between network interface devices at end user premises and the point of demarcation in Qwest Wire Centers. Qwest will also be responsible for inside wiring at end user premises in accordance with the terms and conditions of inside wire maintenance agreements, if any, between Qwest and its end users. CLEC will be responsible for repairing data services provided on Shared Loops and is entitled to test the entire frequency range of the loop facility. Qwest and CLEC each will be responsible for maintaining its equipment. The entity that controls the POTS splitters will be responsible for their maintenance.

9.4.6.3 Qwest and CLEC will continue to develop repair and maintenance procedures for Line Sharing and agree to document final agreed to procedures in a methods and procedures document that will be made available on Qwest's website: http://www.uswest.com/wholesale/productsServices/irrg/TABL1-0.html. In the interim, Qwest and CLEC agree that the following general principles will guide the repair and maintenance process for Line Sharing.

9.4.6.3.1 If an end user complains of a voice service problem that may be related to the use of a Shared Loop for data services, Qwest and CLEC will work together with the end user to solve the problem to the satisfaction of the end user. Qwest will not disconnect the data service provided to an end user over a Shared Loop without the written permission of CLEC unless the end user's voice service is so degraded that the end user cannot originate or receive voice grade calls and/or the end user authorizes Qwest to disconnect the data service. Qwest will notify CLEC whenever this occurs upon voice trouble ticket closure.

9.4.6.3.2 Qwest and CLEC are responsible for their respective end user base. Qwest and CLEC will have the responsibility for resolution of any service trouble report(s) initiated by their respective end users.

9.4.6.3.3 Qwest will test for electrical faults (e.g. opens, and/or foreign voltage) on Shared Loops in response to trouble tickets initiated by CLEC. When trouble tickets are initiated by CLEC, and such trouble is not an electrical fault (e.g. opens, shorts, and/or foreign voltage) in Qwest's network, Qwest will assess CLEC the TIC Charge.

9.4.6.3.4 When trouble reported by CLEC is not isolated or identified by tests for electrical faults (e.g. opens, shorts, and/or foreign voltage), Qwest may perform additional testing at the request of CLEC on a case-by-case basis. CLEC may request that Qwest perform additional testing and Qwest may decide not to perform requested testing where it believes, in good faith, that additional testing is unnecessary because the test requested has already been performed or otherwise duplicates the results of a previously performed test. In this case, Qwest will provide CLEC with the relevant test results on a case-by-case basis. If this additional testing uncovers electrical fault trouble (e.g. opens, shorts, and/or foreign

voltage) in the portion of the network for which Qwest is responsible, CLEC will not be charged by Qwest for the testing. If this additional testing uncovers a problem in the portion of the network for which CLEC is responsible, Qwest will assess the appropriate miscellaneous charge.

9.4.6.4 When POTS splitters are installed in Qwest Wire Centers via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase the capacity of the POTS splitters. CLEC will leave one unused, spare splitter card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.

9.4.6.5 When POTS splitters are installed in Qwest Wire Centers via standard Collocation arrangements, CLEC may install test access equipment in its Collocation areas in those Wire Centers for the purpose of testing Shared Loops. This equipment must meet the requirements for Central Office equipment set by the FCC in its March 31, 1999 Order in CC Docket No. 98-147.

9.4.6.6 Qwest and CLEC will work together to address end user initiated repair requests and to prevent adverse impacts to the end user.

9.4.7 Other

9.4.7.1 Reserved for Future Use

9.7 Unbundled Dark Fiber

9.7.1 Description

9.7.1 —Unbundled Dark Fiber (UDF) is a deployed, unlit pair of fiber optic cable or strands that connects two points within ~~U S WEST's~~Qwest's network. UDF is a single transmission path between two ~~U S WEST Wire Centers or between a U S WEST Wire Center and an end user customer premise~~Qwest Wire Centers, or between a Qwest Wire Center and a CLEC Wire Center, or between a Qwest Wire Center and either an appropriate outside plant structure or an end user customer premises in the same LATA and state. UDF exists in ~~two~~three (3) distinct forms: (a) UDF Interoffice Facility (UDF-IOF), which constitutes an ~~existing~~deployed route between two ~~U S WEST~~Qwest Wire Centers; and (b) UDF-Loop, which constitutes a deployed loop or section of a ~~an existing loop between a U S WEST Wire Center and either a fiber distribution panel located at an appropriate outside plant structure or an end-user customer premises.~~ deployed loop between a Qwest Wire Center and an end-user customer premises; and (c) Extended UDF (E-UDF) which constitutes a deployed route between a Qwest Wire Center and a CLEC Wire Center. Deployed Dark Fiber facilities shall include Dark Fiber Qwest has obtained with capitalized Indefeasible Right to Use (IRUs) or capitalized leases that do not prohibit Qwest's ability to provided access to another person or entity.

9.7.2 Terms and Conditions

9.7.2.1 ~~U S WEST~~Qwest will provide CLEC with non-discriminatory access to ~~UDF-IOF and UDF-Loop. U S WEST will provide UDF of substantially the same quality as the fiber facilities that U S WEST uses to provide service to its own end user customers within a reasonable time frame.~~UDF in accordance with section 9.1.2. Qwest will provide UDF of substantially the same quality as the fiber facilities that Qwest uses to provide retail service to its own end user customers.

9.7.2.2 ~~CLEC will provide U S WEST with non-discriminatory access to UDF-IOF and UDF-Loop. CLEC will provide UDF of substantially the same quality as the fiber facilities that CLEC uses to provide service to its own end user customers within a reasonable time frame.~~Reserved for Future Use

9.7.2.3 ~~U S WEST~~Qwest will provide CLEC with access to ~~existing~~deployed Dark Fiber facilities. CLEC shall be responsible for obtaining and connecting electronic equipment, whether light generating or light terminating equipment, to the Dark Fiber. ~~U S WEST will not remove, and CLEC shall be permitted to use,~~Qwest will not remove, and CLEC shall be permitted to use, regenerating ~~regenerating equipment that already exists in mid-span.~~

~~9.7.2.4 U S WEST will provide Unbundled Dark Fiber to CLEC in increments of two strands (by the pair).~~

~~9.7.2.5 U S WEST shall not have an obligation to unbundle Dark Fiber in the following circumstances:~~

~~a) U S WEST will not unbundle Dark Fiber utilized for maintenance or reserved for maintenance spare. U S WEST shall not reserve more than 5% of the fibers in a sheath for maintenance or maintenance spare.~~

~~b) U S WEST will not unbundle Dark Fiber that, as of the day CLEC submits its order for Unbundled Dark Fiber, U S WEST has already designated for use in an approved, or pending job on behalf of U S WEST or another CLEC.~~

~~c) U S WEST will not be required to unbundle Dark Fiber if U S WEST demonstrates to Commission by a preponderance of the evidence that such unbundling would create a likely and foreseeable threat to its ability to provide its services as required by law. In such circumstances, U S WEST shall be relieved of its unbundling obligations during the pendancy of the proceeding before Commission.~~

~~9.7.2.6 U S WEST will provide CLEC with access to the existing Dark Fiber in its network in either single-mode or multi-mode. During the inquiry process, U S WEST will inform CLEC of the availability of single-mode and multi-mode fiber.~~

~~9.7.2.7 Specifications, interfaces and parameters for Dark Fiber are described in U S WEST's Technical Publication 77383.~~

~~9.7.2.8 CLEC is responsible for trouble isolation before reporting trouble to U S WEST.~~

~~9.7.2.9 CLEC shall not use UDF as a substitute for special or switched access services, except to the extent CLEC provides "a significant amount of local exchange traffic" to its end users over the UDF as set forth by the FCC.~~

~~9.7.2.10 Upon reasonable notification to the CLEC as defined by Commission, U S WEST reserves the right to reclaim in part or in whole, UDF previously obtained by the CLEC. This condition would arise in those cases where U S WEST is in jeopardy of meeting or maintaining control of its obligation to provide services as required by law.~~

~~9.7.2.11 U S WEST will not combine a Dark Fiber element with another Unbundled Network Element or U S WEST services, or CLEC facilities. CLEC is responsible for connecting Dark Fiber with CLEC fiber optic terminal or other equipment.~~

~~9.7.2.12 CLEC must have Collocation at both ends of the UDF-IOF or at the Serving Wire Center of the UDF-Loop.~~

~~9.7.2.13 For UDF-Loop, CLEC is responsible for all work activities at the end-user premise. All negotiations with the premise end-user and or premise owner are solely the responsibility of the CLEC.~~

~~9.7.2.14 For a UDF-Loop terminating at an existing end-user premise FDP, U S WEST will provide to the CLEC an optical "jumper", not to exceed 30 feet in length, connected to the U S WEST UDF-Loop FDP.~~

~~9.7.2.15 CLEC is responsible for all permits, licenses, bonds, or other necessary legal authority and permission, at the CLEC's sole expense, in order to perform its obligations to gain access to UDF at an outside plant structure. The CLEC shall contact all owners of public and private Rights-of-Way to obtain their permission required to perform the necessary work to access UDF. CLEC facilities shall be placed and maintained in accordance with the requirements and specifications of applicable Fiber Communications Standards, the National Electrical code, the National Electrical Safety Code, the rules and regulations of the Occupational Safety and Health Act, and any governing authority having jurisdiction. Access to Right-of-Way shall be in accordance with Section 10.8 (Access to Poles, Ducts, Conduit, and Right-of-Way).~~

~~9.7.2.16 The CLEC will incur all costs associated with returning the UDF to its original condition when they disconnect UDF.~~equipment that already exists in mid-span.

9.7.2.4 Qwest will provide Unbundled Dark Fiber to CLEC in increments of two (2) strands (by the pair). In addition, after May 31, 2001, Qwest will provide UDF to CLEC in increments of one (1) strand. CLEC may obtain up to twenty five percent (25%) of available dark fibers or four (4) dark fiber strands, whichever is greater, in each fiber cable segment over a twelve (12) month period. Before CLEC may order additional UDF on such fiber cable segment,

CLEC must demonstrate efficient use of existing fiber in each cable segment. Efficient use of interoffice cable segments is defined as providing a minimum of OC-12 termination on each fiber pair. Efficient use of loop fiber is defined as providing a minimum of OC-3 termination on each fiber pair. Efficient use of E - UDF is defined as providing a minimum of OC -3 termination on each fiber pair. CLEC may designate five percent (5%) of its fibers along a fiber cable segment, or two (2) strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the termination requirements in this paragraph.

9.7.2.5 Qwest shall not have an obligation to unbundle Dark Fiber in the following circumstances:

(a) Qwest will not unbundle Dark Fiber that Qwest utilizes for maintenance or reserves for maintenance spare for Qwest's own use. Qwest shall not reserve more than five percent (5%) of the fibers in a sheath, or two (2) strands, whichever is greater, for maintenance or maintenance spare for Qwest's own use.

(b) Qwest will not be required to unbundle Dark Fiber if Qwest demonstrates to the Commission by a preponderance of the evidence that such unbundling would create a likely and foreseeable threat to its ability to meet its carrier of last resort obligations as established by any regulatory authority. Qwest shall initiate such proceeding within seven (7) calendar days of denying CLEC's request (by written notice) to unbundle dark fiber where such fiber is available. In this proceeding, Qwest shall not object to using the most expeditious procedure available under state law, rule or regulation. Qwest shall be relieved of its unbundling obligations, related to the specific Dark Fiber at issue, pending the proceeding before the Commission. If Qwest fails to initiate such pending proceeding within such seven (7) day period, CLEC's request to unbundle Dark Fiber shall be reinstated and the ordering and provisioning processes of Section 9.7.3 shall continue.

9.7.2.6 Qwest will provide CLEC with access to the deployed Dark Fiber in its network in either single-mode or multi-mode. During the inquiry process, Qwest will inform CLEC of the availability of single-mode and multi-mode fiber.

9.7.2.7 Specifications, interfaces and parameters for Dark Fiber are described in Qwest's Technical Publication 77383.

9.7.2.8 CLEC is responsible for trouble isolation before reporting trouble to Qwest.

9.7.2.9 CLEC shall not use UDF as a substitute for special or switched access services, except to the extent CLEC provides "a significant amount of local exchange traffic" to its end users over the UDF as set forth by the FCC (See 9.23.3.7.2).

9.7.2.10 Upon thirty (30) calendar days notification to CLEC, Qwest may initiate a proceeding to reclaim Dark Fiber strands from CLEC that were not serving end user customers at the time of Qwest's notice to CLEC. In such

proceeding, Qwest shall have the burden to prove that Qwest needs such fiber strands in order to meet its carrier of last resort obligations as established by any regulatory authority. In such proceeding, CLEC shall not object to using the most expeditious procedure available under state law, rule or regulation. CLEC shall be entitled to retain such strands of UDF for any purpose permitted under this Agreement pending the proceeding before the Commission; provided, however, that such use shall be at CLEC's sole risk of any reclamation approved by the Commission, including the risk of termination of service to end user customers. CLEC may designate five percent (5%) of its fibers along a fiber cable segment, or two (2) strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the reclamation requirements in this paragraph.

9.7.2.11 Reserved for Future Use.

9.7.2.12 CLEC must have established Collocation or other technically feasible means of network demarcation pursuant to section 9.1.4 of this Agreement at both terminating points of the UDF-IOF or at the Serving Wire Center of either the UDF-Loop or the E –UDF unless loop and transport combinations are ordered. Qwest will provide fiber cross connects at the serving Wire Center to connect UDF-Loop or E-UDF with the UDF-IOF if such elements are ordered in combination. No Collocation is required in intermediate Central Offices within a UDF or at Central Offices where CLEC's UDFs are cross connected. CLEC has no access to UDF at those intermediate Central Offices.

9.7.2.12.1. CLEC-to-CLEC connections with UDF for the mutual exchange of traffic is permissible pursuant to the provisions in Section 9.7.

9.7.2.13 For UDF-Loop, CLEC is responsible for all work activities at the end-user premises. All negotiations with the premises end-user and or premises owner are solely the responsibility of CLEC.

9.7.2.14 For a UDF-Loop terminating at an existing end-user premises FDP, Qwest will provide to CLEC an optical "jumper", not to exceed thirty (30) feet in length, connected to the Qwest UDF-Loop FDP.

9.7.2.15 The Remote Collocation provisions and §9.3.8.1 of this Agreement apply where CLEC needs to gain access to UDF at an outside plant structure.

9.7.2.16 CLEC will incur all costs associated with disconnecting the UDF from its side of the network demarcation point.

9.7.2.17 Qwest and CLEC will jointly participate in continuity testing within the provisioning interval established in Exhibit C. Qwest and CLEC must coordinate on the date and time for this continuity testing. As part of their respective duties regarding this continuity test, Qwest shall furnish a light detector at one termination point of the UDF, and CLEC shall furnish light generating equipment at the other termination point of the UDF as described below:

9.7.2.17.1 UDF-IOF: Qwest and CLEC shall mutually agree on the Wire Center at which Qwest must provide a light detector and the Wire Center at which CLEC must provide light generating equipment.

9.7.2.17.2 UDF-Loop: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the appropriate outside plant structure or end-user customer premises.

9.7.2.17.3 E-UDF: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the CLEC Wire Center.

9.7.2.18. If, within ten (10) days of the date Qwest provisioned an order for UDF, CLEC demonstrates that the UDF pair(s) provisioned over requested route do not meet the minimum parameters set forth in Technical Publication 77383, and if the trouble is in the Qwest UDF facility, not due to fault on the part of CLEC, then Qwest will at no additional cost, attempt to repair the UDF as it relates to Qwest cross-connects and jumpers. If Qwest cannot repair the UDF to the minimum parameters set forth in Technical Publication 77383, Qwest will replace the UDF if suitable UDF pair(s) are available, at no additional non-recurring charge. If Qwest cannot replace the UDF upon receipt of a CLEC disconnect order, Qwest will refund the non-recurring charges associated with the provisioning excluding IRI, FVQP and Field Verification and will discontinue all recurring charges.

9.7.2.19 Qwest shall allow CLEC's to access UDF loops, or sections of UDF loops, at accessible terminals including FDPS or equivalent in the Central Office, customer premises or at Qwest owned outside plant location (e.g CEV, RT or hut).

9.7.2.20 Qwest shall allow CLEC to access Dark Fiber that is a part of a meet point arrangement between Qwest and another Local Exchange Carrier if CLEC has an Interconnection agreement containing access to Dark Fiber with the connecting Local Exchange Carrier. Qwest rates, terms and conditions shall apply to the percentage of the route owned by Qwest.

9.7.3 Ordering Processes

Ordering processes and installation intervals are as follows:

~~9.7.3.1 Prior to placing an order for UDF, CLEC must first establish a Collocation arrangement in each of the necessary U S WEST Wire Centers. The CLEC must establish proper ICDF demarcation points as part of their collocation build in order to accommodate the UDF optical terminations.~~

~~9.7.3.2~~9.7.3.1 The first step of the UDF ordering process is the inquiry process. ~~The CLEC must submit a UDF inquiry throughtheir account team.~~ The UDF inquiry is used to determine the availability of UDF between ~~the two requested locations, UDF-IOF or UDF-Loop. The CLEC must specify the two U S WEST~~any two requested locations: between two (2) Qwest Wire Centers, between a Qwest Wire Center and an end user premises, or between a Qwest

Wire Center and ~~offices or End-user Premise location and the number of fibers requested. U S WEST will inform CLEC of the availability of dark fiber that will meet the CLEC's request, if any, within 10 business days for an Initial Records Inquiry (IRI) and 30 business days for a Mid-Point Structure Inquiry (MPSI).~~an appropriate outside plant structure, or a Qwest Wire Center and a CLEC Wire Center.

9.7.3.1.1 CLEC must submit a UDF inquiry through its account team. CLEC must specify the two (2) locations and the number of fibers requested.

9.7.3.1.2 Qwest will notify CLEC, within the interval set forth in Exhibit C of this Agreement, that: (i) UDF is available to satisfy CLEC's request, (ii) UDF is not available to satisfy CLEC's request; or (iii) Qwest, in writing, denies CLEC's request pursuant to Section 9.7.2.5 (b), Qwest shall provide written notice of denials pursuant to (iii) above.

9.7.3.1.3 If there is UDF available, the UDF Inquiry Response will contain up to five (5) available UDF routes between the CLEC-specified end locations. If additional routes are available, Qwest will notify CLEC that such additional routes exist and negotiate how that additional information will be made available.

9.7.3.2 CLEC will establish network demarcation points to accommodate UDF optical terminations via Collocation or other technically feasible means or network demarcation pursuant to Section 9.1.4 of this Agreement. If Collocation and or other network demarcation arrangements have not been completed, CLEC must have obtained preliminary APOT address information (CFA – Carrier Facility Assignment) for its network demarcation points in each Qwest Wire Center where the UDF terminates prior to placing an order for UDF. When preliminary APOT has been established and delivered to CLEC, Qwest can begin processing the UDF provisioning order upon receipt of the UDF provisioning request. If the preliminary APOT address is changed by CLEC, a new provisioning time line for UDF must be established.

9.7.3.3 Based on the CLEC request ~~(UDF-Loop or UDF-IOF), there are two possible scenarios.~~ (UDF-Loop, UDF-IOF or E -UDF), there are two (2) possible termination scenarios.

~~**Termination at a Mid-Point Structure**~~

9.7.3.3.1 ~~If spare fiber is available, and the CLEC chooses to proceed, and the request is for UDF-Loop going to a mid-point~~**Termination at an Outside Plant Structure**: If CLEC requests UDF-Loop going to an outside plant structure such as a Controlled Environmental Vault (CEV), or Remote Terminal (RT), the ~~CLEC will submit the~~Remote Collocation provisions of this Agreement will apply. ~~Field Verification Quote Preparation (FVQP) form. U S WEST will~~ Qwest will prepare and submit to~~the~~ CLEC a quote along with the original Field Verification Quote Preparation form (FVQP) within the interval set forth in Exhibit C. ~~FVQP within 20 business days of the submission of the FVQP~~

~~form by the CLEC.~~ Quotes are on an Individual Case Basis (ICB) and will include costs and ~~number of days required to provision the service.~~ an interval in accordance with Exhibit C.

9.7.3.3.2 ~~U S WEST will begin the provisioning process upon notification from the CLEC to proceed and the receipt of 50% of the quoted amount. The notification to proceed is accomplished by completing, signing and returning the original FVQP to the account manager. The account manager will notify the CLEC when provisioning is complete and the remaining quoted amount, the non-recurring charges, and recurring charges will be billed.~~

~~**Termination at U S WEST Wire Center or End-user Premise**~~Reserved for Future Use

9.7.3.3.3 **Termination at Qwest Wire Center, End-user Premises or CLEC Wire Center:** If spare fiber is available, and~~the~~ CLEC chooses to proceed, and the request is for ~~a UDF-IOF or a~~UDF-IOF, UDF-Loop going to an end-user ~~premise, U S WEST~~premises, or E-UDF going to a CLEC Wire Center, Qwest will begin the provisioning process upon notification from~~the~~ CLEC to proceed and the receipt of ~~50%~~fifty percent (50%) of the non-recurring charges. The notification to proceed is accomplished by completing, signing and returning the original inquiry request to the account manager. Provisioning ~~of~~intervals for this type of request are set forth in ~~will take 20 business days. The~~Exhibit C. CLEC will be notified that provisioning is complete and the remaining non-recurring charges and associated recurring charges will be billed.

9.7.3.4 An order may be canceled any time up to and including the service date. Cancellation charges will apply.

9.7.3.5 CLEC may reserve dark fiber for CLEC during Collocation builds. Prior to reserving space, CLEC must place an inquiry pursuant to section 9.7.3.1 of this Agreement and receive a UDF Inquiry Response that reflects that the route to be reserved is available. CLEC is also strongly encouraged to request a Field Verification that the route to be reserved is available. If CLEC does not obtain Field Verification, CLEC assumes the risk that records upon which the UDF Inquiry Response is based may be in error. CLEC may reserve UDF for thirty (30), sixty (60), or ninety (90) days. CLEC may extend or renew reservations if there is delay in completion of the Collocation build. All applicable UDF recurring charges specified in sections 9.7.5.2 will be assessed at the commencement of the reservation. Non-recurring charges for provisioning and cross connects will be assessed at the time of installation.

9.7.4 Maintenance and Repair

9.7.4.1 The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and ~~U S WEST~~Qwest cross connections will be repaired by ~~U S WEST.~~Qwest. Maintenance and Repair processes are contained in ~~Section~~

~~12 (Operational~~the Support Functions Section of this ~~Support Systems (OSS)).~~Agreement

9.7.4.2. If it is determined that the UDF does not meet the minimum parameters of Technical Publication 77383 without fault of CLEC, and if the trouble is in the Qwest UDF facility, then Qwest will attempt to repair the UDF as it relates to Qwest cross-connects and jumper at no additional cost. If Qwest cannot repair the UDF to the minimum parameters set forth in Technical Publication 77383, then Qwest will replace the UDF at no additional cost if suitable UDF pair(s) are available. If Qwest cannot replace the UDF with available pairs, then it, upon receipt of a CLEC disconnect order, will discontinue the recurring charges effective as of the date of the commencement of the trouble.

9.7.5 Rate Elements

9.7.5.1 Dark Fiber rates are contained in Exhibit A of this Agreement and include the following elements:

(a) Initial Records Inquiry (IRI). This rate element is a pre-order work effort that investigates the availability of UDF. This is a one-time charge for each route check requested by~~the~~ CLEC. A simple IRI determines if UDF is available between two Qwest Wire Centers or between a Qwest Wire Center and ~~U S WEST will bill the CLEC the IRI immediately upon receipt of the inquiry.~~

~~b) Mid-Point Structure Inquiry (MPSI) (Loop only). This rate element is a pre-order records research effort that (1) includes IRI to determine the availability of UDF and (2) records research to locate the closest~~Qwest customer premises. A complex IRI determines if UDF is available between a Qwest Wire Center and an outside structure (CEV, Hut, etc.) along the Loop fiber route. ~~U S WEST will locate the closest point in~~ Qwest will bill CLEC the IRI immediately upon receipt of the inquiry. The IRI is a record search and does not guarantee the availability of UDF.

~~which access is available (via an existing structure and FDP).~~

~~c)~~(b) Field Verification and Quote Preparation (FVQP). This rate element is a pre-order work effort to estimate the cost of providing UDF access to~~the~~ CLEC at locations other than ~~U S WEST~~Qwest Wire Centers or an end-user premises. ~~U S WEST~~Qwest will prepare a quote which will explain what work activities, timeframes, and costs are associated with providing access to this FDP location. This quote will be good for ~~90 calendar days. This charge is not applied when the demarcation points are in a Wire Centers or an end-user premises.~~thirty (30) calendar days. The FVQP is not necessary when the request is between Qwest Wire Centers or between a Qwest Wire Center and customer premises (i.e., IRI). If FVQP is applicable pursuant to this section and CLEC orders UDF that has been reserved after a Field Verification has been performed, then the charge for FVQP will be

reduced by the amount of the Field Verification charge assessed in the context of the reservation.

(c) Field Verification. This rate element is a work effort performed at CLEC's option before placing a request to reserve UDF to verify the availability of UDF that CLEC desires to reserve.

9.7.5.2 The following rate elements are used once the availability of UDF has been established and~~the~~ CLEC chooses to access UDF.

9.7.5.2.1 Unbundled Dark Fiber - IOF Rate Elements

(a) UDF-IOF Termination (Fixed) Rate Element. This rate element ~~has both~~is a recurring ~~and non-recurring component~~rate element and provides a termination at the interoffice FDP within the ~~U S WEST~~Qwest Wire Center. Two UDF-IOF terminations apply per pair. Termination charges apply for each intermediate office terminating at an FDP or like cross-connect point.

(b) UDF-IOF Fiber Transport, (Per ~~Mile)~~Pair) Rate Element. This rate element has both a recurring and a non-recurring component and applies per pair. This rate element provides a transmission path between ~~U S WEST~~Qwest Wire Centers. ~~This~~The recurring component of this rate element is~~a~~ mileage sensitive ~~element~~ based on the route miles of the UDF rounded up to the next mile.

(c) UDF-IOF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component and is used to extend the optical connection from the IOF FDP to~~the~~ CLEC's optical demarcation point (ICDF). ~~Two~~A minimum of two (2) UDF-IOF fiber cross-connects ~~apply~~ apply per pair. Cross-connect charges apply for each intermediate office terminating at an FDP or like cross-connect point. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-IOF.

9.7.5.2.2 Unbundled Dark Fiber - Loop Rate Elements

~~a) UDF-Loop Fiber Non-Recurring Charge: This rate element includes the termination and cross connects at both ends.~~

~~b) UDF-Loop Fiber Recurring Charge: This rate element include transport per pair calculated as the average mileage between the originating U S WEST Wire Center and the End-user Premise and the terminations and cross connects at both ends.~~

(a) UDF-Loop Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at either the customer premises or an appropriate outside plant structure. Two

UDF-Loop terminations apply per pair.

(b) UDF-Loop Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path between the Qwest Serving Wire Center and either the customer premises or an appropriate outside plant structure.

(c) UDF-Loop Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-Loop.

9.7.5.2.3 Extended Unbundled Dark Fiber Rate Elements

(a) E-UDF Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at the CLEC Wire Center. Two E-UDF terminations apply per pair.

(b) E-UDF Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path between the Qwest Serving Wire Center and the CLEC Wire Center.

(c) E-UDF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for E-UDF.

9.20 Unbundled Packet Switching

Qwest shall provide CLEC with Unbundled Packet Switching in a non-discriminatory manner according to the following terms and conditions.

9.20.1 Description

9.20.1.1 Unbundled Packet Switching provides the functionality of delivering and routing packet data units via a virtual channel to a CLEC demarcation point. Unbundled Packet Switching includes use of a distribution loop and virtual transport facilities as well as the DSLAM functionality with the routing and addressing functions of the packet switch necessary to generate the virtual channel.

9.20.2 Terms and Conditions

9.20.2.1 CLEC may obtain Unbundled Packet Switching only when all four (4) of the following conditions are satisfied in a specific geographic area:

9.20.2.1.1 Qwest has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section.

9.20.2.1.2 There are no spare copper loops available capable of supporting the xDSL services the requesting carrier seeks to offer.

9.20.2.1.3 Qwest has placed a DSLAM for its own use in a Remote Qwest Premises but has not permitted CLEC to collocate its own DSLAM at the same Remote Qwest Premises or collocating a CLEC's DSLAM at the same Qwest Premises will not be capable of supporting xDSL services at parity with the services that can be offered through Qwest's Unbundled Packet Switching.

9.20.2.1.4 Qwest has deployed Packet Switching capability for its own use.

9.20.2.2 A demarcation point must be established to the Qwest packet switch serving the DSLAM of the end user customer to which the CLEC is providing data services.

9.20.2.3 Qwest will provide CLEC with virtual channels at a physical network demarcation point such as a DSX-1 or DSX-3 in the Central Office in which the packet switch is located.

9.20.2.4 The ATM virtual channels provided to CLEC shall conform with ATM User-to-Network Interface (UNI) specifications as described in ITU-T 1.371/ATM Forum.

9.20.2.5 CLEC must specify the number of virtual channels, the bit rate for each virtual channel, and the quality of service for each virtual channel. Qwest will commit to satisfy the request to the extent feasible. Qwest will provide CLEC with Unspecified Bit-Rate (UBR) for each channel, and a minimum bit rate.

9.20.2.6 Qwest will provision CLEC specified options as available for each virtual channel in its OSS.

9.20.2.7 Qwest shall provide CLEC with Packet Network Management capacity through its service order activities. CLEC shall have access to Qwest's Packet Network Management Systems if, and only if, such Packet Network Management System capacity can be partitioned and made available to CLEC.

9.20.2.8 CLEC shall provide the customer premises modem. Customer premises equipment including modem and filters must be compatible with specific DSLAM equipment deployed by Qwest.

9.20.3 Rate Elements

9.20.3.1 Unbundled Packet Switch Customer Channel – This rate element consists of two (2) rate sub elements: DSLAM functionality and virtual transport.

9.20.3.1.1 DSLAM - –Both a non-recurring rate and a recurring rate shall apply. Rates will vary depending on the following factors: (a) Uncommitted Bit Rate or, (b) Committed Bit Rate at 256 Kbps, 512 Kbps, 768 Kbps, 1 Mbps, or 7 Mbps.

9.20.3.1.2 Virtual Transport – This includes virtual loop transport from the DSLAM to the Qwest Wire Center and virtual interoffice transport from the Wire Center serving the end-user customer to the Wire Center containing the packet switch. Both a non-recurring rate and a recurring rate shall apply. If CLEC provisions its own transport, then this rate element shall not apply.

9.20.3.2 Unbundled Packet Switch Loop Capability – This element includes loop facilities between the remote DSLAM and the end user customer premises and will vary depending on the type of loop elements, which may be either a dedicated loop or Shared Loop. If CLEC provisions its own transport from the end user customer to the DSLAM, this rate element shall not apply.

9.20.3.3 Unbundled Packet Switch Interface Port - CLEC obtains the Unbundled Packet Switch Interface Port currently contained within Qwest's network. This port may be a DS1 or DS3 port on a packet switch allowing virtual channels to be connected and transmitted to CLEC network.

9.20.4 Ordering Process

9.20.4.1 Prior to placing an order for Unbundled Packet Switching, CLEC must have provided Qwest a Collocation application, Collocation space availability report pursuant to Section 8.2.1.9, or a Collocation forecast to place a DSLAM in a Qwest Remote Premises containing a Qwest DSLAM and been denied such access.

9.20.4.1.1. Upon CLEC request, Qwest will disclose the location of all DSLAM's Qwest has deployed in Remote Premises throughout the state.

9.20.4.2 Prior to placing an order for Unbundled Packet Switch Customer Channel, CLEC must have established or be in the process of establishing continuity between CLEC network and an Unbundled Packet Switch Interface Port.

9.20.4.3 To order Unbundled Packet Switching, CLEC will place two (2) orders via an LSR, which orders will be provisioned according to the intervals set forth in Exhibit C once the continuity as set forth in the preceding section is established.

9.20.4.3.1 Network Interface Order to establish connectivity between CLEC network and Qwest Unbundled Packet Switch Interface Port: CLEC must specify bandwidth requirement of DS1 or DS3. Qwest will combine transport UNE to Unbundled Packet Switch Interface Port.

9.20.4.3.2 Customer channel order to establish linkage between end-user customer equipment and Qwest's packet network: CLEC must

specify remote DSLAM address, end-user customer address, quality of service requested, and bit-rate requested.

9.20.5 Maintenance and Repair

Maintenance and Repair of Unbundled Packet Switching are the sole responsibility of Qwest. Maintenance and Repair processes are contained in Section 12.

PHX/JHERRON/1204172.1/67817.150

STATEMENT OF GENERALLY AVAILABLE TERMS AND CONDITIONS FOR INTERCONNECTION, UNBUNDLED NETWORK ELEMENTS, ANCILLARY SERVICES, AND RESALE OF TELECOMMUNICATION SERVICES PROVIDED BY QWEST CORPORATION

Multi State SGAT "lite"

Final Emerging Services non-redlined Language for the Multi State

Filed March 20, 2001

9.3 Subloop Unbundling

9.3.1 Description

9.3.1.1 A Subloop is defined as any portion of the loop that it is technically feasible to access at terminals in Qwest's outside plant, including inside wire. An accessible terminal is any point on the loop where technicians can access the wire or fiber within the cable without removing a splice case to reach the wire or fiber within. Such points may include, but are not limited to, the pole, pedestal, network interface device, minimum point of entry, single point of Interconnection, main distribution frame, remote terminal, Feeder Distribution Interface (FDI), or Serving Area Interface (SAI).

9.3.1.1.1 Building terminals within or physically attached to a privately owned building in a Multi-Tenant Environment (MTE) are one form of accessible terminal. Throughout Section 9.3 the Parties obligations around such "MTE terminals" are segregated because Subloop terms and conditions differ between MTE environments and non-MTE environments.

9.3.1.1.1.1 MTE Terminals: Accessible terminals within a building in a MTE environment or accessible terminals physically attached to a building in a MTE environment. Qwest Premises located on real property that constitutes a campus environment, yet are not within or physically attached to a non-Qwest owned building, are not considered MTE Terminals.

9.3.1.1.1.2 Detached Terminals: All accessible terminals other than MTE Terminals.

9.3.1.2 Standard Subloops available.

(a) Two-Wire/Four Wire Unbundled Distribution Loop

(b) DS1 Capable Unbundled Feeder Loop

(c) Two-Wire/Four Wire Non-loaded Distribution Loop

(d) Intrabuilding Cable Loop

9.3.1.3 Standard Subloop Access

9.3.1.3.1 Accessing Subloops in Detached Terminals: Subloop Unbundling is available after a CLEC requested Field Connection Point (FCP) has been installed within or adjacent to the Qwest accessible terminal. The FCP is a demarcation point connected to a terminal block from which cross-connections are run to Qwest Subloop elements.

9.3.1.3.2 Accessing Subloops in MTE Terminals: Subloop

Unbundling is available after CLEC has notified Qwest of its intention to Subloop unbundle in the MTE, an inventory of CLEC's terminations has been created, and CLEC has constructed a cross-connect field at the building terminal.

9.3.1.3.2.1 Reserved for Future Use

9.3.1.3.2.2 Reserved for Future Use

9.3.1.4 Field Connection Point

9.3.1.4.1 Field Connection Point (FCP) is a demarcation point that allows CLEC to interconnect with Qwest outside of the Central Office location where it is technically feasible. The FCP interconnects CLEC facilities to a terminal block within the accessible terminal. The terminal block allows a technician to access and combine Unbundled Subloop elements. When a FCP is required, it must be in place before Subloop orders are processed.

9.3.1.4.2 Placement of a FCP within a Qwest Premises for the sole purpose of creating a cross-connect field to support Subloop unbundling constitutes a "Cross-Connect Collocation."

9.3.1.4.2.1 The terms, conditions, intervals and rates for Cross-Connect Collocation are found within section 9.3.

9.3.1.4.2.2 To the extent that CLEC places equipment in a Qwest Premises that requires power and or heat dissipation, such Collocation is governed by the Terms of Section 8 and does not constitute a Cross-Connect Collocation.

9.3.1.4.3 A FCP arrangement can be established either within a Qwest accessible terminal, or, if space within the accessible terminal is legitimately exhausted and when technically feasible, CLEC may place the FCP in an adjacent terminal. CLEC will have access to the equipment placed within the Collocation for maintenance purposes. However, CLEC will not have access to the FCP Interconnection point.

9.3.1.5 MTE Point of Interconnection (MTE-POI)

9.3.1.5.1 A MTE-POI is necessary when CLEC is obtaining access to the Distribution Loop or Intrabuilding Cable Loop from an MTE Terminal. CLEC must create the cross-connect field at the building terminal that will allow CLEC to connect its facilities to Qwest's Subloops. The demarcation point between CLEC and Qwest's facilities is the MTE-POI.

9.3.1.6 Once a state has determined that it is technically feasible to unbundle Subloops at a designated accessible terminal, Qwest shall either agree to unbundle at such access point or shall have the burden to demonstrate, pursuant to the dispute resolution provisions of this Agreement, that it is not

technically feasible, or that sufficient space is not available to unbundle Subloop elements at such accessible terminal.

9.3.1.7. Qwest shall provide access to additional Subloop elements to CLEC where facilities are available pursuant to the Special Request Process in Exhibit F.

9.3.2 Standard Subloops Available

9.3.2.1 Distribution Loops

9.3.2.1.1 Two-Wire/Four-Wire Unbundled Distribution Loop: a Qwest provided facility from the Qwest accessible terminal to the demarcation point or Network Interface Device (NID) at the end-user location. The Two-Wire/Four-Wire Unbundled Distribution Loop is suitable for local exchange-type services. CLEC can obtain access to this unbundled element at any technically feasible accessible terminal.

9.3.2.1.2 Two-Wire/Four-Wire Non-Loaded Distribution Loop: a Qwest provided facility without load coils and excess bridge taps from the Qwest accessible terminal to the demarcation point or Network Interface Device (NID) at the end-user location. When CLEC requests a Non-Loaded Unbundled Distribution Loop and there are none available, Qwest will contact CLEC to determine if CLEC wishes to have Qwest unload a Loop. If the response is affirmative, Qwest will dispatch a technician to "condition" the Distribution Loop by removing load coils and excess bridge taps (*i.e.,* "unload" the Loop). CLEC may be charged the cable unloading and bridge tap removal non-recurring charge in addition to the Unbundled Loop installation non-recurring charge. If a Qwest technician is dispatched and no load coils or bridge taps are removed, the non-recurring conditioning charge will not apply. CLEC can obtain access to this unbundled element at any technically feasible accessible terminal.

9.3.2.1.3 Intrabuilding Cable Loop: a Qwest provided facility from the building terminal inside a MTE to the demarcation point at the end user customer premises inside the same building. This Subloop element only applies when Qwest owns the intrabuilding cable.

9.3.2.1.4 To the extent CLEC accesses Subloop in a campus environment from an accessible terminal that serves multiple buildings, CLEC can access these Subloops by ordering a Distribution Loop pursuant to either Section 9.3.2.1.1 or 9.3.2.1.2. A campus environment is one piece of property, owned by one person or entity, on which there are multiple buildings.

9.3.2.2 Feeder Loops

9.3.2.2.1 DS1 Capable Unbundled Feeder Loop is a digital transmission path that is provisioned from a Qwest Central Office Network Interface, which consists of a DSX-1 panel or equivalent, to the

accessible terminal. The DS1 Capable Unbundled Feeder Loop transports bi-directional DS1 signals with a nominal transmission rate of 1.544 Mbit/s.

9.3.3 MTE Terminal Subloop Access: Terms and Conditions

9.3.3.1 Access to Distribution Loops or Intrabuilding Cable Loops at an MTE Terminal within a non-Qwest owned MTE is done through an MTE-POI. Remote Collocation is not necessary because CLEC can access the Subloop without placing facilities in a Qwest Premises.

9.3.3.2 To obtain such access, CLEC shall complete the "MTE-Access Ordering Process" set forth in Section 9.3.5.4.

9.3.3.3 The optimum point and method to access Subloop elements will be determined during the MTE Access Ordering Process. The Parties recognize a mutual obligation to interconnect in a manner that maintains network integrity, reliability, and security. CLEC may access the MTE Terminal as a test access point.

9.3.3.4 CLEC will work with the MTE building owner to determine where to terminate its facilities within the MTE. CLEC will be responsible for all work associated with bringing its facilities into and terminating the facilities in the MTE. CLEC shall seek to work with the building owner to create space for such terminations without requiring Qwest to rearrange its facilities.

9.3.3.5 If there is space in the building for CLEC to enter the building and terminate its facilities without Qwest having to rearrange its facilities, CLEC must seek to use such space. In such circumstances, an inventory of CLEC's terminations within the MTE shall be input into Qwest's systems to support Subloop orders before Subloop orders are provisioned. Qwest shall have five (5) calendar days from receipt of a written request from CLEC, in addition to the interval set forth in Section 9.3.5.4.1, to complete an inventory of CLEC's terminations and submit the data into its systems. Qwest may seek an extended interval if the work cannot reasonably be completed within the stated interval. In such cases, Qwest shall provide written notification to CLEC of the extended interval Qwest believes is necessary to complete the work. CLEC may dispute the need for, and the duration of, an extended interval, in which case Qwest must request a waiver from the Commission to obtain the extended interval.

9.3.3.6 If CLEC connects Qwest's Subloop element to CLEC's facilities using any temporary wiring or cut-over devices, CLEC shall remove them and install permanent wiring within thirty (30) calendar days. All wiring arrangements, temporary and permanent, must adhere to the National Electric Code.

9.3.3.7 If there is no space for CLEC to place its building terminal or no accessible terminal from which CLEC can access such Subloop elements, and Qwest and CLEC are unable to negotiate a reconfigured Single Point of Interconnection (SPOI) to serve the MDU, Qwest will either rearrange facilities to make room for CLEC or construct a single point of access that is fully accessible

to and suitable for CLEC. In such instances, CLEC shall pay Qwest a non-recurring charge, which shall be ICB, based on the scope of the work required.

9.3.3.7.1 If Qwest must rearrange its MTE Terminal to make space for CLEC, Qwest shall have forty-five (45) calendar days from receipt of a written request from CLEC to complete the rearrangement. Qwest may seek an extended interval if the work cannot reasonably be completed within forty-five (45) calendar days. In such cases, Qwest shall provide written notification to CLEC of the extended interval Qwest believes is necessary to complete the work. CLEC may dispute the need for, and the duration of, an extended interval, in which case Qwest must request a waiver from the Commission to obtain an extended interval.

9.3.3.7.2 If Qwest must construct a new Detached Terminal that is fully accessible to and suitable for CLEC, the interval for completion shall be negotiated between the Parties on an individual case basis.

9.3.3.7.3 CLEC may cancel such MTE Access request prior to Qwest completing the work by submitting a written notification via certified mail to its Qwest account manager. CLEC shall be responsible for payment of all costs previously incurred by Qwest as well as any costs necessary to restore the property to its original condition.

9.3.3.8 At no time shall either Party rearrange the other Party's facilities within the MTE or otherwise tamper with or damage the other Party's facilities within the MTE. If such damage accidentally occurs, the Party responsible for the damage shall immediately notify the other and shall be financially responsible for restoring the facilities and/or service to its original condition. Any intentional damage may be reported to the proper authorities and may be prosecuted to the full extent of the law.

9.3.4 Detached Terminal Subloop Access: Terms and Conditions

9.3.4.1 Except as to access at an MTE Terminal, access to unbundled Subloop elements at an accessible terminal must be made through a Field Connection Point (FCP) in conjunction with either a Cross-Connect Collocation or, if power and/or heat dissipation is required, a Remote Collocation.

9.3.4.2 To the extent that the accessible terminal does not have adequate capacity to house the network interface associated with the FCP, CLEC may opt to use Adjacent Collocation to the extent it is technically feasible. Such adjacent access shall comport with NEBS Level 1 safety standards

9.3.4.2.1 Reserved for Future Use

9.3.4.3 Field Connection Point

9.3.4.3.1 Qwest is not required to build additional space for CLEC to access Subloop elements. When technically feasible, Qwest shall allow CLEC to construct its own structure adjacent to Qwest's accessible terminal. CLEC shall obtain any necessary authorizations or rights of way

required (which may include obtaining access to Qwest rights of way, pursuant to section 10.8 of this Agreement) and shall coordinate its facility placement with Qwest, when placing their facilities adjacent to Qwest facilities. Obstacles that CLEC may encounter from cities, counties, electric power companies, property owners and similar third parties, when it seeks to interconnect its equipment at Subloop access points, will be the responsibility of CLEC to resolve with the municipality, utility, property owner or other third party.

9.3.4.3.2 The optimum point and method to access Subloop elements will be determined during the Field Connection Point process. The Parties recognize a mutual obligation to interconnect in a manner that maintains network integrity, reliability, and security.

9.3.4.3.3 CLEC must identify the size and type of cable that will be terminated in the Qwest FCP location. Qwest will terminate the cable in the Qwest accessible terminal if termination capacity is available. If termination capacity is not available, Qwest will expand the FDI at the request of CLEC if technically feasible, all reconfiguration costs to be borne by CLEC. In this situation only, Qwest shall seek to obtain any necessary authorizations or rights of way required to expand the terminal. It will be the responsibility of Qwest to seek to resolve obstacles that Qwest may encounter from cities, counties, electric power companies, property owners and similar third parties. The time it takes for Qwest to obtain such authorizations or rights of way shall be excluded from the time Qwest is expected to provision the Collocation. CLEC will be responsible for placing the cable from the Qwest FCP to its equipment. Qwest will perform all of the initial splicing at the FCP.

9.3.4.3.4 CLEC may cancel a Collocation associated with a FCP request prior to Qwest completing the work by submitting a written notification via certified mail to its Qwest account manager. CLEC shall be responsible for payment of all costs previously incurred by Qwest.

9.3.4.3.5 If the Parties are unable to reach an agreement on the design of the FCP through the Field Connection Point Process, the Parties may utilize the Dispute Resolution process pursuant to the Terms and Conditions Dispute Resolution Section. Alternatively, CLEC may seek arbitration under Section 252 of the Act with the Commission, wherein Qwest shall have the burden to demonstrate that there is insufficient space in the accessible terminal to accommodate the FCP, or that the requested Interconnection is not technically feasible.

9.3.4.4 At no time shall either Party rearrange the other Party's facilities within the accessible terminal or otherwise tamper with or damage the other Party's facilities. If such damage accidentally occurs, the Party responsible for the damage shall immediately notify the other and shall be financially responsible for restoring the facilities and/or service to its original condition. Any intentional damage may be reported to the proper authorities and may be prosecuted to the full extent of the law.

9.3.5. Ordering/Provisioning

9.3.5.1 All Subloop Types

9.3.5.1.1 CLEC can order Subloop elements through the Operational Support Systems described Section 12.

9.3.5.1.2 CLEC shall identify Subloop elements by NC/NCI codes.

9.3.5.2 Additional Terms for Detached Terminal Subloop Access

9.3.5.2.1 CLEC may only submit orders for Subloop elements after the FCP is in place. The FCP shall be ordered pursuant to Section 9.3.5.5. CLEC will populate the LSR with the termination information provided at the completion of the FCP process.

9.3.5.2.2 Qwest shall dispatch a technician to run a jumper between its Subloop elements and CLEC's Subloop elements. CLEC shall not at any time disconnect Qwest facilities or attempt to run a jumper between its Subloop elements and Qwest's Subloop elements without specific written authorization from Qwest.

9.3.5.2.3 Once the FCP is in place, the Subloop provisioning intervals contained in Exhibit C shall apply.

9.3.5.3 Reserved for Future Use

9.3.5.3.1 Reserved for Future Use

9.3.5.3.2 Reserved for Future Use

9.3.5.3.3 Reserved for Future Use

9.3.5.3.4 Reserved for Future Use

9.3.5.3.5 Reserved for Future Use

9.3.5.3.6 Reserved for Future Use

9.3.5.4 Additional Terms for MTE Terminal Subloop Access - MTE-Access Ordering Process

9.3.5.4.1 CLEC shall notify its account manager at Qwest in writing of its intention to provide access to customers that reside within a MTE. Upon receipt of such request, Qwest shall have up to ten (10) calendar days to notify CLEC and the MTE owner whether Qwest believes it or the MTE owner owns the intrabuilding cable.

9.3.5.4.2 If the MTE owner owns the facilities on the customer side of the terminal, CLEC may obtain access to all facilities in the building in accordance with Section 9.5 concerning access to unbundled NIDs.

9.3.5.4.3 If Qwest owns the facilities on the customer side of the terminal, CLEC shall notify Qwest in writing of whether the building owner has provided space for CLEC to enter the building and terminate its facilities or whether Qwest must rearrange facilities or construct new facilities to accommodate such access. Upon receipt of such notification, the intervals set forth in Section 9.3.3 shall begin.

9.3.5.4.4 CLEC may only submit orders for Subloop elements after the inventory is complete and, if necessary, the facilities are rearranged and/or a new facility constructed. CLEC will populate the LSR with the termination information provided at the completion of the inventory process.

9.3.5.4.5 If CLEC ordered Intrabuilding Cable Loop, CLEC shall dispatch a technician to run a jumper between its Subloop elements and Qwest's Subloop elements to make a connection at the MTE-POI. If CLEC ordered a Subloop type other than Intrabuilding Cable Loop, Qwest will dispatch a technician to run a jumper between CLECs Subloop elements and Qwest's Subloop elements to make a connection at the MTE-POI. In addition, CLEC shall not at any time disconnect Qwest facilities or attempt to run a jumper between its Subloop elements and Qwest's Subloop elements without specific written authorization from Qwest.

9.3.5.4.5.1 When CLEC accesses a MTE Terminal, it shall employ generally accepted best engineering practices in accordance with industry standards. CLEC shall clearly label the cross-connect wires it uses. CLEC wiring will be neatly dressed. When CLEC accesses Subloops in MTE Terminals, it shall adhere to Qwest's Standard MTE Terminal Access Protocol unless the Parties have negotiated a separate document for such Subloop access. If CLEC requests a MTE Terminal access protocol that is different from Qwest's Standard MTE Terminal Access Protocol, Qwest shall negotiate with CLEC promptly and in good faith toward that end.

9.3.5.4.5.2 Access to Intrabuilding Cable Loop at MTE Terminals without a cross-connect field:

9.3.5.4.5.2.1 To the extent CLEC seeks access to a MTE Terminal that does not contain a cross-connect field, CLEC shall not rearrange Qwest's facilities.

9.3.5.4.5.2.2 To the extent CLEC seeks access to a MTE Terminal that does not contain a cross-connect field, but that is connected to an adjacent MTE Terminal with a cross-connect field, CLEC shall access each Subloop via the adjacent MTE Terminal with a cross-connect field.

9.3.5.4.5.2.3 To the extent CLEC seeks access to a MTE Terminal that does not contain a cross-connect field and is

not connected to an adjacent MTE Terminal with a cross-connect field, CLEC shall access each Subloop in such a MTE Terminal using a bridging clip that overlays Qwest's termination pin for the particular end user customer on the connecting terminal block, and CLEC shall replace the Qwest line protector dedicated to that end user customer with a service denial protector or equivalent DC continuity interruptor. The details of this practice shall be contained within the MTE Terminal access protocol referenced in section 9.3.5.4.5.1.

9.3.5.4.5.2.4 CLEC shall be wholly and completely responsible for any service outage, equipment failure, property damage or any and all other damages to person or property that is caused by the failure to adhere to sections 9.3.5.4.5.1 or 9.3.5.4.5.2 or the MTE Terminal access protocol referenced in section 9.3.5.4.5.1.

9.3.5.4.6 Once inventory is complete and, if necessary, the facilities are rearranged and or a new facility constructed, the Subloop provisioning intervals contained in Exhibit C shall apply.

9.3.5.5 FCP Ordering Process

9.3.5.5.1 CLEC shall submit a Field Connection Point Request Form to Qwest along with its Collocation Application. The FCP Request Form shall be completed in its entirety.

9.3.5.5.2 After construction of the FCP and Collocation are complete, CLEC will be notified of its termination location, which will be used for ordering Subloops.

9.3.5.5.2.1 The following constitute the intervals for provisioning Collocation associated with a FCP, which intervals shall begin upon completion of the FCP Request Form and its associated Collocation Application in their entirety:

9.3.5.5.2.1.1 Any Remote Collocation associated with a FCP in which CLEC will install equipment requiring power and/or heat dissipation shall be in accordance with the intervals set forth in Section 8.4.

9.3.5.5.2.1.2 A Cross-Connect Collocation in a Detached Terminal shall be provisioned within ninety (90) calendar days from receipt of a written request by CLEC.

9.3.5.5.2.1.3 Reserved for Future Use

9.3.5.5.2.1.4 Reserved for Future Use

9.3.5.5.2.1.5 Qwest may seek extended intervals

if the work cannot reasonably be completed within the set interval. In such cases, Qwest shall provide written notification to CLEC of the extended interval Qwest believes is necessary to complete the work. CLEC may dispute the need for and the duration of, an extended interval, in which case Qwest must request a waiver from the Commission to obtain an extended interval.

9.3.6 Rate Elements

9.3.6.1 All Subloop Types

9.3.6.1.1 Subloop Recurring Charge - CLEC will be charged a monthly recurring charge pursuant to Exhibit A for each Subloop ordered by CLEC.

9.3.6.1.2 Subloop Trouble Isolation Charge - CLEC will be charged a Trouble Isolation Charge pursuant to the Support Functions – Maintenance and Repair Section when trouble is reported but not found on the Qwest facility.

9.3.6.2 Reserved for Future Use

9.3.6.2.1 Reserved for Future Use

9.3.6.3 Additional rates for Detached Terminal Subloop Access:

9.3.6.3.1 Cross-Connect Collocation Charge: CLEC shall pay the full non-recurring charge for creation of the Cross-Connect Collocation set forth in Exhibit A upon submission of the Collocation Application. The FCP Request Form shall not be considered completed in its entirety until complete payment is submitted to Qwest.

9.3.6.3.2 Any Remote Collocation associated with a FCP in which CLEC will install equipment requiring power and/or heat dissipation shall be in accordance with the rate elements set forth in Section 8.3.

9.3.6.3.3. Subloop Non-Recurring Jumper Charge: CLEC will be charged a non-recurring basic installation charge for Qwest running jumpers within the accessible terminal pursuant to Exhibit A for each Subloop ordered by CLEC.

9.3.6.4 Additional Rates for MTE Terminal Subloop Access

9.3.6.4.1 Subloop Non-recurring Charge - CLEC will be charged a non-recurring charge for the time and materials required for Qwest to complete the inventory of CLEC's facilities within the MTE such that Subloop orders can be submitted and processed.

9.3.6.4.2. Subloop Non-Recurring Jumper Charge – If CLEC ordered a Subloop type other than Intrabuilding Cable Loop, CLEC will be

charged a non-recurring basic installation charge for Qwest running jumpers within the accessible terminal pursuant to Exhibit A for each Subloop ordered by CLEC.

9.3.7. Repair and Maintenance

9.3.7.1 Detached Terminal Subloop Access: Qwest will maintain all of its facilities and equipment in the accessible terminal and CLEC will maintain all of its facilities and equipment in the accessible terminal.

9.3.7.2 MTE Terminal Subloop Access: Qwest will maintain all of its facilities and equipment in the MTE and CLEC will maintain all of its facilities and equipment in the MTE.

9.4 Line Sharing

9.4.1 Description

Line Sharing provides CLEC with the opportunity to offer advanced data services simultaneously with an existing end user's analog voice-grade (POTS) service on a single copper loop referred to herein as the "Shared Loop" or "Line Sharing", by using the frequency range above the voice band on the copper loop. This frequency range will be referred to herein as the High Frequency Spectrum Network Element ("HUNE"). A POTS splitter separates the voice and data traffic and allows the copper loop to be used for simultaneous data transmission and POTS service. The POTS service must be provided to the end user by Qwest. This section does not prohibit Line Splitting, which is addressed in Section 9.21.

9.4.1.1. Line Sharing occurs on the copper portion of the loop (i.e., copper loop or shared copper distribution). Qwest provides CLECs with the network elements to transport data from Qwest remote terminals including unbundled dark fiber, DS1 capable loop, and OCN. Qwest also provides CLECs with the ability to comingle its data with Qwest's pursuant to Section 9.20 with Unbundled Packet Switching. To the extent additional Line Sharing technologies and transport mechanisms are identified, and Qwest has deployed such technology for its own use, and Qwest is obligated by law to provide access to such technology. Qwest will allow CLECs to line share in that same manner, provided, however, that the rates, terms and conditions for Line Sharing may need to be amended in order to provide such access.

9.4.2 Terms and Conditions

9.4.2.1 General

9.4.2.1.1 To order the HUNE, CLEC must have a POTS splitter installed in the Qwest Wire Center that serves the end user as provided for in this Section, and the end user must have dial tone originating from a Qwest switch in that Wire Center. CLEC must provide the end user with, and is responsible for, the installation of a splitter, filter(s) and/or other equipment necessary for the end user to receive separate voice and data service across a single copper loop.

9.4.2.1.2 Reserved for Future Use

9.4.2.1.3 CLEC may use the HUNE to provide any xDSL services that will not interfere with analog voiceband transmissions in accordance with FCC rules. Such services currently are limited to ADSL, RADSL Multiple Virtual Lines (MVL) and G.lite. In the future, additional services may be used by CLEC to the extent those services are deemed acceptable for Line Sharing Deployment under applicable FCC rules.

9.4.2.1.4 CLEC may not order the HUNE on a given copper loop if Qwest, or another Telecommunications Carrier, is already using the high frequency spectrum, unless the end user disconnects the original Telecommunications Carrier's high-frequency service.

9.4.2.1.5 CLEC may request, and Qwest will provide, conditioning of Shared Loops to remove load coils, excess bridged taps, or electronics subject to the charges for loop conditioning in Exhibit A. Qwest will perform requested conditioning, including de-loading and removal of excess bridged taps, unless Qwest demonstrates in advance that conditioning a Shared Loop will significantly degrade the end user's analog voice-grade POTS service. Based on the pre-order make-up of a given copper loop, CLEC can make a preliminary determination if the loop can meet the technical parameters applicable to the data service it intends to provide over the loop.

9.4.2.1.6 Qwest will provide CLEC with access to the HUNE through POTS splitters installed in Qwest Wire Centers. POTS splitters may be installed in Qwest Wire Centers in either of the following ways at the discretion of CLEC: (a) via the standard Collocation arrangements set forth in the Collocation Section; or (b) via Common Area Splitter Collocation as set forth in this Section. Under either option, POTS splitters will be appropriately hard-wired or pre-wired so that Qwest is not required to inventory more than two (2) points of termination.

9.4.2.1.7 Reserved for Future Use

9.4.2.2 CLEC Collocation Area Splitter

9.4.2.2.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via the standard Collocation arrangements set forth in the Collocation Section, CLEC will either purchase the POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to taxes, shipping and handling. The POTS splitters must meet the requirements for Central Office equipment Collocation set by the FCC. CLEC will be responsible for installing and maintaining the POTS splitters in its Collocation areas within Qwest Wire Centers.

9.4.2.2.2 CLEC may designate some or all of its existing TIE Cables

for use in connection with Line Sharing. Qwest will perform any necessary TIE Cable reclassifications, frame re-stenciling, and related work for which it is responsible and that is required to provision Line Sharing. Charges will apply pursuant to Exhibit A of the Agreement.

9.4.2.2.3 Two (2) ITPs and two (2) TIE Cables will be needed to connect POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC™/MDF loop termination, to an appropriate ICDF. From this frame, one (1) TIE Cable will carry both voice and data traffic to the POTS splitter located in CLEC's Collocation area. The voice and data traffic will be separated at the POTS splitter. The data traffic will be routed to CLEC's network within its Collocation area. The voice traffic will be routed to the COSMIC™/MDF switch termination, via the ICDF, using a second TIE Cable and a second ITP.

9.4.2.2.4 Interconnection Tie Pairs and TIE Cables. There are two (2) types of ITP arrangements for connecting the Qwest network to the CLEC provided splitter, depending on whether CLEC elects to use an ICDF or direct connections.

9.4.2.2.4.1 CLEC may elect to use an ICDF. In this instance, one ITP carries the combined voice/data signal from the COSMIC™/MDF loop termination to the ICDF and a second ITP carries the voice only signal from the ICDF to the COSMIC™/MDF switch termination. For each Shared Loop, two pairs of the TIE cable must be used: one pair of the TIE Cable will carry the voice/data from the ICDF to the CLEC provided splitter, and the second pair will carry the voice-only signal from the CLEC provided splitter to the ICDF.

9.4.2.2.4.2 CLEC may elect to use direct connections between the CLEC-provided splitter and the COSMIC™/MDF. In this instance, Qwest will provide one TIE Cable between each module of the COSMIC™/MDF and the CLEC-provided splitter. One pair in the TIE Cable will carry the combined voice/data signal from the COSMIC™/MDF loop termination to the CLEC-provided splitter in CLEC's Collocation space. A second pair in the TIE Cable will carry the voice-only signal from the CLEC-provided splitter to the switch termination on the COSMIC™/MDF. These TIE Cables will be dedicated to CLEC's use, and, as a result, the full cost of the necessary Mechanized Engineering and Layout for Distributing Frame (MELD™) run, cable placement, and cable termination, and associated COSMIC™/MDF hardware to terminate a TIE Cable on each outside plant and switch equipment module of the COSMIC™/MDF will be assessed to CLEC in accordance with Section 8 (Collocation). To minimize CLECs cost, to the extent feasible, Qwest shall consolidate CLECs requirements with the requirements of Qwest and other CLECs into a single MELD™ run whenever feasible. Costs of such consolidated MELD™ runs shall be prorated among the Parties, including Qwest. Qwest will provide, for each Shared Loop, the TIE Cable pair assignments.

9.4.2.2.5 The demarcation points between Qwest's network and CLEC's network will be the place where the combined voice and data loop is connected to the ICDF, or where CLEC chooses a direct connection to the COSMIC™/MDF, where the combined voice and data loop originates from CLECs Collocation

9.4.2.3 Common Area Splitter Collocation

9.4.2.3.1 If CLEC elects to have POTS splitters installed in Qwest Wire Centers via Common Area Splitter Collocation, the POTS splitters will be installed in those Wire centers in one of the following locations: (a) in a relay rack as close to CLEC's DS0 termination points as possible; (b) on an ICDF to the extent such a frame is available; or (c) where options (a) and (b) are not available, or, in Wire Centers with network access line counts of less than 10,000, on the Cosmic™/MDF or in some other appropriate location such as an existing Qwest relay rack or bay. CLEC either may purchase POTS splitters or have Qwest purchase the POTS splitters subject to full reimbursement of the cost of the POTS splitters plus any pass through actual vendor invoice costs, including but not limited to, taxes, shipping and handling, and any similar charges assessed on Qwest by vendors in connection with the purchase of POTS splitters. The POTS splitters must meet the requirements for Central Office equipment Collocation set by the FCC. Qwest will be responsible for installing and maintaining the POTS splitters, but CLEC will lease the POTS splitters to Qwest at no cost. Qwest may co-mingle the POTS splitters shelves of different CLECs in a single relay rack or bay. Qwest will not be responsible for shortages of POTS splitters or Qwest's inability to obtain POTS splitters from vendors, if acting as purchasing agent on behalf of CLEC.

9.4.2.3.2 Two (2) ITPs and four (4) TIE Cables will be needed to connect the POTS splitters to the Qwest network. One ITP will carry both voice and data traffic from the COSMIC™/MDF loop termination, to an appropriate ICDF. From this frame, one (1) TIE Cable will carry both voice and data traffic to the POTS splitter. The voice and data traffic will be separated at the POTS splitter, and the separated voice and data traffic will be routed to the ICDF via separate TIE Cables (i.e., the second and third TIE Cables). At the ICDF, the data traffic will be routed to CLEC's Collocation area via a fourth TIE Cable, and the voice traffic will be routed to the COSMIC™/MDF switch termination, via a second ITP. CLEC can also elect a direct connect option pursuant to Section 8.3.1.11.2.

9.4.2.3.3 Qwest will provide the cabling used for TIE Cables between the POTS splitter and the ICDF. The POTS Splitter Tie Cable Connection Charge will apply.

9.4.2.3.4 The demarcation point between Qwest's network and CLEC's network will be at the place where the data loop leaves the POTS splitter on its way to CLEC's Collocated equipment.

9.4.3 Line Sharing Deployment

9.4.3.1 New applications for installation of POTS splitters will be processed in the manner outlined in the Collocation Section for Cageless or Common Collocation.

9.4.3.2 CLEC may submit applications for additional DSO TIE Cable terminations and/or reclassifications to support Line Sharing. Qwest will process any such applications for augmentation and/or reclassification of DSO TIE Cable terminations under intervals as outlined below in this Section.

9.4.3.3 Augmentation intervals will be thirty (30) days, subject to the following terms and conditions identified below:

9.4.3.3.1 Intentionally Left Blank

9.4.3.3.2 Intentionally Left Blank

9.4.3.3.3 The interval for reclassification will be fifteen (15) days, subject to the following terms and conditions. If requested reclassification engineering results in additional requirements for DSO TIE Cable termination or TIE Cable support, the interval will default to thirty (30) days.

9.4.3.3.4 Intentionally Left Blank

9.4.3.3.5 In the event CLEC, or Qwest acting as purchasing agent for CLEC, is unable to procure any equipment needed to complete all work required by applications submitted to Qwest by CLEC, including but not limited to, POTS splitters or cabling, Qwest will install the subject equipment when it becomes available. If Qwest is acting as purchasing agent for CLEC and is unable to procure equipment to complete all work in a timely manner, CLEC may provide Qwest with the subject equipment. CLEC will be notified by Qwest of the required material on-site date for the affected Wire Center(s) and CLEC will have two (2) business days to determine if it will be able to provide the subject equipment in advance of the material on-site date. If CLEC does not notify Qwest in writing of its intent to provide the subject equipment within this two (2) business days period, or if the subject equipment is not provided in a timely manner, Qwest will install the subject equipment when available.

9.4.4 Rate Elements

9.4.4.1 Recurring Rates for Shared Loop

9.4.4.1.1 Shared Loop Charge - A monthly recurring charge for the use of the Shared Loop will apply.

9.4.4.1.2 OSS Charge - A monthly recurring charge to recover upgrades to Qwest Operational Support Systems required to

accommodate Line Sharing will apply.

9.4.4.2 Non-Recurring Rates for the Shared Loop

9.4.4.2.1 Basic Installation Charge for Shared Loop – A non-recurring charge for each Shared Loop installed will apply.

9.4.4.2.2 If CLEC requests conditioning of a Shared Loop, a non-recurring conditioning charge specified in Exhibit A will apply for removal of load coils and excess bridged taps. If the conditioning significantly degrades the voice services on the loop to the point it is unacceptable to the end user, CLEC shall pay the conditioning charge in Exhibit A to recondition the loop.

9.4.4.3 Non-Recurring Rates for Tie Cable Reclassification

9.4.4.3.1 Reclassification Charge – A non-recurring charge will apply, based on time and materials for reclassification of existing TIE cable capacity, by among other things, reclassification of existing TIE cables for Line Sharing, frame restenciling, and any other work performed between CLEC's Collocation and the intermediate distribution frame required to provision Line Sharing.

9.4.4.4 Non-Recurring Rates for Maintenance and Repair

9.4.4.4.1 Trouble Isolation Charge – A non-recurring charge for Trouble isolation will be applied in accordance with the Support Functions – Maintenance and Repair Section.

9.4.4.4.2 Additional Testing – CLEC may request Qwest to perform additional testing, and Qwest may decide to perform the requested testing on a case-by-case basis. A non-recurring charge will apply in accordance with Exhibit A.

9.4.4.5 Rates for Common Area Splitter Collocation

9.4.4.5.1 Splitter Shelf Charge – This charge recovers installation and ongoing maintenance associated with splitter installation, bay installation, lighting costs, aerial support structures and grounding charge for splitters either in a bay, on the IDF, or on the MDF/COSMIC™. These are both recurring and non-recurring charges.

9.4.4.5.2 POTS Splitter Charge – A non-recurring charge will apply for the cost of each POTS splitter purchased by Qwest on behalf of CLEC. This charge will cover the cost of the POTS splitter, plus any associated costs incurred by Qwest to order the POTS splitter.

9.4.4.5.3 Engineering – A non-recurring charge will apply for the planning and engineering associated with placing POTS splitters in the Central Office, either in a bay, on the IDF, or on the MDF/COSMIC™.

9.4.4.6 POTS Splitter TIE Cable Connections Charge – A non-recurring charge will apply for the cost of each TIE Cable connected to the POTS splitters. This charge will cover both the TIE cables and associated blocks per one hundred (100) pair between the POTS splitter and the intermediate distribution frame or splitter bay.

9.4.4.7 The rates for each of the aforementioned Line Sharing rate elements are set forth in Exhibit A. All of these rates are interim and will be subject to true up based on either mutually agreed to permanent rates or permanent rates established in a Line Sharing cost proceeding conducted by the Commission. In the event interim rates are established by the Commission before permanent rates are set, the interim rates set forth in Exhibit A will be changed to reflect the interim rates set by the Commission; however, no true up will be performed until mutually agreed to permanent rates are established or permanent rates are set established by the Commission.

9.4.5 Ordering Process

9.4.5.1 Shared Loop

9.4.5.1.1 As a part of the pre-order process, CLEC can access loop characteristic information through the Loop Information Tool described in the Support Functions Section. CLEC will determine, in its sole discretion, whether to order the HUNE across any specific copper loop. Qwest and CLEC will work together to modify the Loop Information Tool to better support Line Sharing. CLEC shall accept the risk that the loop selected may not be suitable for providing the type of xDSL service CLEC seeks to provide.

9.4.5.1.2 The appropriate Splitter Meet Points dedicated to the POTS splitters will be provided on the Line Sharing Actual Point of Termination (APOT) form one (1) day prior to the Ready for Service date or at an interval ordered by the Commission or further agreed to by Qwest and CLEC in writing. CLEC will provide on the LSR, the appropriate frame terminations which are dedicated to POTS splitters. Qwest will administer all cross connects/jumpers on the COSMIC™/MDF and ICDF.

9.4.5.1.3 Basic Installation "lift and lay" procedure will be used for all Shared Loop orders. Under this approach, a Qwest technician "lifts" the Loop from its current termination in a Qwest Wire Center and "lays" it on a new termination connecting to CLEC's Collocated equipment in the same Wire Center.

9.4.5.1.4 Qwest will provision the Shared Loop within the standard unbundled loop provisioning interval as defined in Exhibit C.

9.4.5.1.5 CLEC shall not place initial orders for Shared Loops until all infrastructure work necessary to provision Line Sharing in a given Qwest Wire Center, including, but not limited to, POTS splitter installation and TIE Cable reclassification or augmentation has been completed.

Upon CLEC request at any time, including before placing an order, Qwest will arrange for a wire center walkthrough to verify the line sharing installation including APOT Information and associated databases, wiring and stenciling in the Qwest Wire Center.

9.4.5.1.6 Prior to placing an LSR for Shared Loop, CLEC must obtain a Proof of Authorization from the end user customer in accordance with the Proof of Authorization Section.

9.4.5.2 Common Area Splitter Collocation

9.4.5.2.1 This Section only applies to situations where CLEC orders placement of the splitter in a common area.

9.4.5.2.2 New POTS splitter shelves may be ordered via a single Collocation application form and quote preparation fee. Standard intervals as contained in Exhibit C will apply.

9.4.5.2.3 New POTS splitter shelves may be ordered with an existing Collocation. CLEC must submit a new Collocation application form and the applicable fee to Qwest. Standard Cageless and/or Common Collocation intervals as contained in Exhibit C will apply.

9.4.5.3 TIE Cable Reclassification

9.4.5.3.1 To the extent CLEC has existing DSO TIE Cable terminations extending from an intermediate distribution frame to its Collocation space, CLEC may request that these existing DSO TIE Cable terminations be reclassified for use with Line Sharing. CLEC shall request such reclassification through the same process used to order new terminations.

9.4.6 Repair and Maintenance

9.4.6.1 Qwest will allow CLEC to access Shared Loops at the point where the combined voice and data loop is cross-connected to the POTS splitter.

9.4.6.2 Qwest will be responsible for repairing voice services provided over Shared Loops and the physical line between network interface devices at end user premises and the point of demarcation in Qwest Wire Centers. Qwest will also be responsible for inside wiring at end user premises in accordance with the terms and conditions of inside wire maintenance agreements, if any, between Qwest and its end users. CLEC will be responsible for repairing data services provided on Shared Loops and is entitled to test the entire frequency range of the loop facility. Qwest and CLEC each will be responsible for maintaining its equipment. The entity that controls the POTS splitters will be responsible for their maintenance.

9.4.6.3 Qwest and CLEC will continue to develop repair and maintenance procedures for Line Sharing and agree to document final agreed to procedures in

a methods and procedures document that will be made available on Qwest's website: http://www.uswest.com/wholesale/productsServices/irrg/TABL1-0.html. In the interim, Qwest and CLEC agree that the following general principles will guide the repair and maintenance process for Line Sharing.

9.4.6.3.1 If an end user complains of a voice service problem that may be related to the use of a Shared Loop for data services, Qwest and CLEC will work together with the end user to solve the problem to the satisfaction of the end user. Qwest will not disconnect the data service provided to an end user over a Shared Loop without the written permission of CLEC unless the end user's voice service is so degraded that the end user cannot originate or receive voice grade calls and/or the end user authorizes Qwest to disconnect the data service. Qwest will notify CLEC whenever this occurs upon voice trouble ticket closure.

9.4.6.3.2 Qwest and CLEC are responsible for their respective end user base. Qwest and CLEC will have the responsibility for resolution of any service trouble report(s) initiated by their respective end users.

9.4.6.3.3 Qwest will test for electrical faults (e.g. opens, and/or foreign voltage) on Shared Loops in response to trouble tickets initiated by CLEC. When trouble tickets are initiated by CLEC, and such trouble is not an electrical fault (e.g. opens, shorts, and/or foreign voltage) in Qwest's network, Qwest will assess CLEC the TIC Charge.

9.4.6.3.4 When trouble reported by CLEC is not isolated or identified by tests for electrical faults (e.g. opens, shorts, and/or foreign voltage), Qwest may perform additional testing at the request of CLEC on a case-by-case basis. CLEC may request that Qwest perform additional testing and Qwest may decide not to perform requested testing where it believes, in good faith, that additional testing is unnecessary because the test requested has already been performed or otherwise duplicates the results of a previously performed test. In this case, Qwest will provide CLEC with the relevant test results on a case-by-case basis. If this additional testing uncovers electrical fault trouble (e.g. opens, shorts, and/or foreign voltage) in the portion of the network for which Qwest is responsible, CLEC will not be charged by Qwest for the testing. If this additional testing uncovers a problem in the portion of the network for which CLEC is responsible, Qwest will assess the appropriate miscellaneous charge.

9.4.6.4 When POTS splitters are installed in Qwest Wire Centers via Common Area Splitter Collocation, CLEC will order and install additional splitter cards as necessary to increase the capacity of the POTS splitters. CLEC will leave one unused, spare splitter card in every shelf to be used for repair and maintenance until such time as the card must be used to fill the shelf to capacity.

9.4.6.5 When POTS splitters are installed in Qwest Wire Centers via standard Collocation arrangements, CLEC may install test access equipment in its Collocation areas in those Wire Centers for the purpose of testing Shared Loops. This equipment must meet the requirements for Central Office equipment set by the FCC in its March 31, 1999 Order in CC Docket No. 98-147.

9.4.6.6 Qwest and CLEC will work together to address end user initiated repair requests and to prevent adverse impacts to the end user.

9.4.7 Other

9.4.7.1 Reserved for Future Use

9.7 Unbundled Dark Fiber

9.7.1 Description

9.7.1 Unbundled Dark Fiber (UDF) is a deployed, unlit pair of fiber optic cable or strands that connects two points within Qwest's network. UDF is a single transmission path between two Qwest Wire Centers, or between a Qwest Wire Center and a CLEC Wire Center, or between a Qwest Wire Center and either an appropriate outside plant structure or an end user customer premises in the same LATA and state. UDF exists in three (3) distinct forms: (a) UDF Interoffice Facility (UDF-IOF), which constitutes an deployed route between two Qwest Wire Centers; and (b) UDF-Loop, which constitutes a deployed loop or section of a deployed loop between a Qwest Wire Center and an end-user customer premises; and (c) Extended UDF (E-UDF) which constitutes a deployed route between a Qwest Wire Center and a CLEC Wire Center. Deployed Dark Fiber facilities shall include Dark Fiber Qwest has obtained with capitalized Indefeasible Right to Use (IRUs) or capitalized leases that do not prohibit Qwest's ability to provided access to another person or entity.

9.7.2 Terms and Conditions

9.7.2.1 Qwest will provide CLEC with non-discriminatory access to UDF in accordance with section 9.1.2. Qwest will provide UDF of substantially the same quality as the fiber facilities that Qwest uses to provide retail service to its own end user customers.

9.7.2.2 Reserved for Future Use

9.7.2.3 Qwest will provide CLEC with access to deployed Dark Fiber facilities. CLEC shall be responsible for obtaining and connecting electronic equipment, whether light generating or light terminating equipment, to the Dark Fiber. Qwest will not remove, and CLEC shall be permitted to use, regenerating equipment that already exists in mid-span.

9.7.2.4 Qwest will provide Unbundled Dark Fiber to CLEC in increments of two (2) strands (by the pair). In addition, after May 31, 2001, Qwest will provide UDF to CLEC in increments of one (1) strand. CLEC may obtain up to twenty five percent (25%) of available dark fibers or four (4) dark fiber strands, whichever is greater, in each fiber cable segment over a twelve (12) month period. Before CLEC may order additional UDF on such fiber cable segment, CLEC must demonstrate efficient use of existing fiber in each cable segment. Efficient use of interoffice cable segments is defined as providing a minimum of OC-12 termination on each fiber pair. Efficient use of loop fiber is defined as providing a minimum of OC-3 termination on each fiber pair. Efficient use of E -

UDF is defined as providing a minimum of OC -3 termination on each fiber pair. CLEC may designate five percent (5%) of its fibers along a fiber cable segment, or two (2) strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the termination requirements in this paragraph.

9.7.2.5 Qwest shall not have an obligation to unbundle Dark Fiber in the following circumstances:

(a) Qwest will not unbundle Dark Fiber that Qwest utilizes for maintenance or reserves for maintenance spare for Qwest's own use. Qwest shall not reserve more than five percent (5%) of the fibers in a sheath, or two (2) strands, whichever is greater, for maintenance or maintenance spare for Qwest's own use.

(b) Qwest will not be required to unbundle Dark Fiber if Qwest demonstrates to the Commission by a preponderance of the evidence that such unbundling would create a likely and foreseeable threat to its ability to meet its carrier of last resort obligations as established by any regulatory authority. Qwest shall initiate such proceeding within seven (7) calendar days of denying CLEC's request (by written notice) to unbundle dark fiber where such fiber is available. In this proceeding, Qwest shall not object to using the most expeditious procedure available under state law, rule or regulation. Qwest shall be relieved of its unbundling obligations, related to the specific Dark Fiber at issue, pending the proceeding before the Commission. If Qwest fails to initiate such pending proceeding within such seven (7) day period, CLEC's request to unbundle Dark Fiber shall be reinstated and the ordering and provisioning processes of Section 9.7.3 shall continue.

9.7.2.6 Qwest will provide CLEC with access to the deployed Dark Fiber in its network in either single-mode or multi-mode. During the inquiry process, Qwest will inform CLEC of the availability of single-mode and multi-mode fiber.

9.7.2.7 Specifications, interfaces and parameters for Dark Fiber are described in Qwest's Technical Publication 77383.

9.7.2.8 CLEC is responsible for trouble isolation before reporting trouble to Qwest.

9.7.2.9 CLEC shall not use UDF as a substitute for special or switched access services, except to the extent CLEC provides "a significant amount of local exchange traffic" to its end users over the UDF as set forth by the FCC (See 9.23.3.7.2).

9.7.2.10 Upon thirty (30) calendar days notification to CLEC, Qwest may initiate a proceeding to reclaim Dark Fiber strands from CLEC that were not serving end user customers at the time of Qwest's notice to CLEC. In such proceeding, Qwest shall have the burden to prove that Qwest needs such fiber strands in order to meet its carrier of last resort obligations as established by any regulatory authority. In such proceeding, CLEC shall not object to using the most expeditious procedure available under state law, rule or regulation. CLEC shall

be entitled to retain such strands of UDF for any purpose permitted under this Agreement pending the proceeding before the Commission; provided, however, that such use shall be at CLEC's sole risk of any reclamation approved by the Commission, including the risk of termination of service to end user customers. CLEC may designate five percent (5%) of its fibers along a fiber cable segment, or two (2) strands, whichever is greater, for maintenance spare, which fibers or strands are not subject to the reclamation requirements in this paragraph.

9.7.2.11 Reserved for Future Use.

9.7.2.12 CLEC must have established Collocation or other technically feasible means of network demarcation pursuant to section 9.1.4 of this Agreement at both terminating points of the UDF-IOF or at the Serving Wire Center of either the UDF-Loop or the E –UDF unless loop and transport combinations are ordered. Qwest will provide fiber cross connects at the serving Wire Center to connect UDF-Loop or E-UDF with the UDF-IOF if such elements are ordered in combination. No Collocation is required in intermediate Central Offices within a UDF or at Central Offices where CLEC's UDFs are cross connected. CLEC has no access to UDF at those intermediate Central Offices.

9.7.2.12.1. CLEC-to-CLEC connections with UDF for the mutual exchange of traffic is permissible pursuant to the provisions in Section 9.7.

9.7.2.13 For UDF-Loop, CLEC is responsible for all work activities at the end-user premises. All negotiations with the premises end-user and or premises owner are solely the responsibility of CLEC.

9.7.2.14 For a UDF-Loop terminating at an existing end-user premises FDP, Qwest will provide to CLEC an optical "jumper", not to exceed thirty (30) feet in length, connected to the Qwest UDF-Loop FDP.

9.7.2.15 The Remote Collocation provisions and §9.3.8.1 of this Agreement apply where CLEC needs to gain access to UDF at an outside plant structure.

9.7.2.16 CLEC will incur all costs associated with disconnecting the UDF from its side of the network demarcation point.

9.7.2.17 Qwest and CLEC will jointly participate in continuity testing within the provisioning interval established in Exhibit C. Qwest and CLEC must coordinate on the date and time for this continuity testing. As part of their respective duties regarding this continuity test, Qwest shall furnish a light detector at one termination point of the UDF, and CLEC shall furnish light generating equipment at the other termination point of the UDF as described below:

9.7.2.17.1 UDF-IOF: Qwest and CLEC shall mutually agree on the Wire Center at which Qwest must provide a light detector and the Wire Center at which CLEC must provide light generating equipment.

9.7.2.17.2 UDF-Loop: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the appropriate outside plant structure or end-user customer premises.

9.7.2.17.3 E-UDF: Qwest will provide the light detector at the serving Wire Center, and CLEC will provide the light generating equipment at the CLEC Wire Center.

9.7.2.18. If, within ten (10) days of the date Qwest provisioned an order for UDF, CLEC demonstrates that the UDF pair(s) provisioned over requested route do not meet the minimum parameters set forth in Technical Publication 77383, and if the trouble is in the Qwest UDF facility, not due to fault on the part of CLEC, then Qwest will at no additional cost, attempt to repair the UDF as it relates to Qwest cross-connects and jumpers. If Qwest cannot repair the UDF to the minimum parameters set forth in Technical Publication 77383, Qwest will replace the UDF if suitable UDF pair(s) are available, at no additional non-recurring charge. If Qwest cannot replace the UDF upon receipt of a CLEC disconnect order, Qwest will refund the non-recurring charges associated with the provisioning excluding IRI, FVQP and Field Verification and will discontinue all recurring charges.

9.7.2.19 Qwest shall allow CLEC's to access UDF loops, or sections of UDF loops, at accessible terminals including FDPS or equivalent in the Central Office, customer premises or at Qwest owned outside plant location (e.g CEV, RT or hut).

9.7.2.20 Qwest shall allow CLEC to access Dark Fiber that is a part of a meet point arrangement between Qwest and another Local Exchange Carrier if CLEC has an Interconnection agreement containing access to Dark Fiber with the connecting Local Exchange Carrier. Qwest rates, terms and conditions shall apply to the percentage of the route owned by Qwest.

9.7.3 Ordering Processes

Ordering processes and installation intervals are as follows:

9.7.3.1 The first step of the UDF ordering process is the inquiry process. The UDF inquiry is used to determine the availability of UDF between any two requested locations: between two (2) Qwest Wire Centers, between a Qwest Wire Center and an end user premises, or between a Qwest Wire Center and an appropriate outside plant structure, or a Qwest Wire Center and a CLEC Wire Center.

9.7.3.1.1 CLEC must submit a UDF inquiry through its account team. CLEC must specify the two (2) locations and the number of fibers requested.

9.7.3.1.2 Qwest will notify CLEC, within the interval set forth in Exhibit C of this Agreement, that: (i) UDF is available to satisfy CLEC's request, (ii) UDF is not available to satisfy CLEC's request; or (iii) Qwest, in writing, denies CLEC's request pursuant to Section 9.7.2.5 (b), Qwest

shall provide written notice of denials pursuant to (iii) above.

9.7.3.1.3 If there is UDF available, the UDF Inquiry Response will contain up to five (5) available UDF routes between the CLEC-specified end locations. If additional routes are available, Qwest will notify CLEC that such additional routes exist and negotiate how that additional information will be made available.

9.7.3.2 CLEC will establish network demarcation points to accommodate UDF optical terminations via Collocation or other technically feasible means or network demarcation pursuant to Section 9.1.4 of this Agreement. If Collocation and or other network demarcation arrangements have not been completed, CLEC must have obtained preliminary APOT address information (CFA – Carrier Facility Assignment) for its network demarcation points in each Qwest Wire Center where the UDF terminates prior to placing an order for UDF. When preliminary APOT has been established and delivered to CLEC, Qwest can begin processing the UDF provisioning order upon receipt of the UDF provisioning request. If the preliminary APOT address is changed by CLEC, a new provisioning time line for UDF must be established.

9.7.3.3 Based on the CLEC request (UDF-Loop, UDF-IOF or E -UDF), there are two (2) possible termination scenarios.

9.7.3.3.1 **Termination at an Outside Plant Structure**: If CLEC requests UDF-Loop going to an outside plant structure such as a Controlled Environmental Vault (CEV), or Remote Terminal (RT), the Remote Collocation provisions of this Agreement will apply. Qwest will prepare and submit to CLEC a quote along with the original Field Verification Quote Preparation form (FVQP) within the interval set forth in Exhibit C. Quotes are on an Individual Case Basis (ICB) and will include costs and an interval in accordance with Exhibit C.

9.7.3.3.2 Reserved for Future Use

9.7.3.3.3 **Termination at Qwest Wire Center, End-user Premises or CLEC Wire Center:** If spare fiber is available, and CLEC chooses to proceed, and the request is for UDF-IOF, UDF-Loop going to an end-user premises, or E-UDF going to a CLEC Wire Center, Qwest will begin the provisioning process upon notification from CLEC to proceed and the receipt of fifty percent (50%) of the non-recurring charges. The notification to proceed is accomplished by completing, signing and returning the original inquiry request to the account manager. Provisioning intervals for this type of request are set forth in Exhibit C. CLEC will be notified that provisioning is complete and the remaining non-recurring charges and associated recurring charges will be billed.

9.7.3.4 An order may be canceled any time up to and including the service date. Cancellation charges will apply.

9.7.3.5 CLEC may reserve dark fiber for CLEC during Collocation builds. Prior to reserving space, CLEC must place an inquiry pursuant to section 9.7.3.1

of this Agreement and receive a UDF Inquiry Response that reflects that the route to be reserved is available. CLEC is also strongly encouraged to request a Field Verification that the route to be reserved is available. If CLEC does not obtain Field Verification, CLEC assumes the risk that records upon which the UDF Inquiry Response is based may be in error. CLEC may reserve UDF for thirty (30), sixty (60), or ninety (90) days. CLEC may extend or renew reservations if there is delay in completion of the Collocation build. All applicable UDF recurring charges specified in sections 9.7.5.2 will be assessed at the commencement of the reservation. Non-recurring charges for provisioning and cross connects will be assessed at the time of installation.

9.7.4 Maintenance and Repair

9.7.4.1 The Parties will perform cooperative testing and trouble isolation to identify where trouble points exist. CLEC cross connections will be repaired by CLEC and Qwest cross connections will be repaired by Qwest. Maintenance and Repair processes are contained in the Support Functions Section of this Agreement

9.7.4.2. If it is determined that the UDF does not meet the minimum parameters of Technical Publication 77383 without fault of CLEC, and if the trouble is in the Qwest UDF facility, then Qwest will attempt to repair the UDF as it relates to Qwest cross-connects and jumper at no additional cost. If Qwest cannot repair the UDF to the minimum parameters set forth in Technical Publication 77383, then Qwest will replace the UDF at no additional cost if suitable UDF pair(s) are available. If Qwest cannot replace the UDF with available pairs, then it, upon receipt of a CLEC disconnect order, will discontinue the recurring charges effective as of the date of the commencement of the trouble.

9.7.5 Rate Elements

9.7.5.1 Dark Fiber rates are contained in Exhibit A of this Agreement and include the following elements:

(a) Initial Records Inquiry (IRI). This rate element is a pre-order work effort that investigates the availability of UDF. This is a one-time charge for each route check requested by CLEC. A simple IRI determines if UDF is available between two Qwest Wire Centers or between a Qwest Wire Center and Qwest customer premises. A complex IRI determines if UDF is available between a Qwest Wire Center and an outside structure (CEV, Hut, etc.) along the Loop fiber route. Qwest will bill CLEC the IRI immediately upon receipt of the inquiry. The IRI is a record search and does not guarantee the availability of UDF.

(b) Field Verification and Quote Preparation (FVQP). This rate element is a pre-order work effort to estimate the cost of providing UDF access to CLEC at locations other than Qwest Wire Centers or an end-user premises. Qwest will prepare a quote which will explain what work activities, timeframes, and costs are associated with providing access to this FDP location. This quote will be good for thirty (30) calendar days.

The FVQP is not necessary when the request is between Qwest Wire Centers or between a Qwest Wire Center and customer premises (i.e., IRI). If FVQP is applicable pursuant to this section and CLEC orders UDF that has been reserved after a Field Verification has been performed, then the charge for FVQP will be reduced by the amount of the Field Verification charge assessed in the context of the reservation.

(c) Field Verification. This rate element is a work effort performed at CLEC's option before placing a request to reserve UDF to verify the availability of UDF that CLEC desires to reserve.

9.7.5.2 The following rate elements are used once the availability of UDF has been established and CLEC chooses to access UDF.

9.7.5.2.1 Unbundled Dark Fiber - IOF Rate Elements

(a) UDF-IOF Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center. Two UDF-IOF terminations apply per pair. Termination charges apply for each intermediate office terminating at an FDP or like cross-connect point.

(b) UDF-IOF Fiber Transport, (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component and applies per pair. This rate element provides a transmission path between Qwest Wire Centers. The recurring component of this rate element is mileage sensitive based on the route miles of the UDF rounded up to the next mile.

(c) UDF-IOF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component and is used to extend the optical connection from the IOF FDP to CLEC's optical demarcation point (ICDF). A minimum of two (2) UDF-IOF fiber cross-connects apply per pair. Cross-connect charges apply for each intermediate office terminating at an FDP or like cross-connect point. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-IOF.

9.7.5.2.2 Unbundled Dark Fiber - Loop Rate Elements

(a) UDF-Loop Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at either the customer premises or an appropriate outside plant structure. Two UDF-Loop terminations apply per pair.

(b) UDF-Loop Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path

between the Qwest Serving Wire Center and either the customer premises or an appropriate outside plant structure.

(c) UDF-Loop Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for UDF-Loop.

9.7.5.2.3 Extended Unbundled Dark Fiber Rate Elements

(a) E-UDF Termination (Fixed) Rate Element. This rate element is a recurring rate element and provides a termination at the interoffice FDP within the Qwest Wire Center and at the CLEC Wire Center. Two E-UDF terminations apply per pair.

(b) E-UDF Fiber (Per Pair) Rate Element. This rate element has both a recurring and a non-recurring component, and it applies per pair. This rate element provides a transmission path between the Qwest Serving Wire Center and the CLEC Wire Center.

(c) E-UDF Fiber Cross-Connect Rate Element. This rate element has both a recurring and non-recurring component, is applied per pair, and is used to extend the optical connection from FDP to FDP. The non-recurring rate will not be charged for cross-connects already in place prior to CLEC's order for E-UDF.

9.20 Unbundled Packet Switching

Qwest shall provide CLEC with Unbundled Packet Switching in a non-discriminatory manner according to the following terms and conditions.

9.20.1 Description

9.20.1.1 Unbundled Packet Switching provides the functionality of delivering and routing packet data units via a virtual channel to a CLEC demarcation point. Unbundled Packet Switching includes use of a distribution loop and virtual transport facilities as well as the DSLAM functionality with the routing and addressing functions of the packet switch necessary to generate the virtual channel.

9.20.2 Terms and Conditions

9.20.2.1 CLEC may obtain Unbundled Packet Switching only when all four (4) of the following conditions are satisfied in a specific geographic area:

9.20.2.1.1 Qwest has deployed digital loop carrier systems, including but not limited to, integrated digital loop carrier or universal digital loop carrier systems or has deployed any other system in which fiber optic facilities replace copper facilities in the distribution section.

9.20.2.1.2 There are no spare copper loops available capable of supporting the xDSL services the requesting carrier seeks to offer.

9.20.2.1.3 Qwest has placed a DSLAM for its own use in a Remote Qwest Premises but has not permitted CLEC to collocate its own DSLAM at the same Remote Qwest Premises or collocating a CLEC's DSLAM at the same Qwest Premises will not be capable of supporting xDSL services at parity with the services that can be offered through Qwest's Unbundled Packet Switching.

9.20.2.1.4 Qwest has deployed Packet Switching capability for its own use.

9.20.2.2 A demarcation point must be established to the Qwest packet switch serving the DSLAM of the end user customer to which the CLEC is providing data services.

9.20.2.3 Qwest will provide CLEC with virtual channels at a physical network demarcation point such as a DSX-1 or DSX-3 in the Central Office in which the packet switch is located.

9.20.2.4 The ATM virtual channels provided to CLEC shall conform with ATM User-to-Network Interface (UNI) specifications as described in ITU-T 1.371/ATM Forum.

9.20.2.5 CLEC must specify the number of virtual channels, the bit rate for each virtual channel, and the quality of service for each virtual channel. Qwest will commit to satisfy the request to the extent feasible. Qwest will provide CLEC with Unspecified Bit-Rate (UBR) for each channel, and a minimum bit rate.

9.20.2.6 Qwest will provision CLEC specified options as available for each virtual channel in its OSS.

9.20.2.7 Qwest shall provide CLEC with Packet Network Management capacity through its service order activities. CLEC shall have access to Qwest's Packet Network Management Systems if, and only if, such Packet Network Management System capacity can be partitioned and made available to CLEC.

9.20.2.8 CLEC shall provide the customer premises modem. Customer premises equipment including modem and filters must be compatible with specific DSLAM equipment deployed by Qwest.

9.20.3 Rate Elements

9.20.3.1 Unbundled Packet Switch Customer Channel – This rate element consists of two (2) rate sub elements: DSLAM functionality and virtual transport.

9.20.3.1.1 DSLAM - –Both a non-recurring rate and a recurring rate shall apply. Rates will vary depending on the following factors: (a) Uncommitted Bit Rate or, (b) Committed Bit Rate at 256 Kbps, 512 Kbps, 768 Kbps, 1 Mbps, or 7 Mbps.

9.20.3.1.2 Virtual Transport – This includes virtual loop transport from the DSLAM to the Qwest Wire Center and virtual interoffice transport from the Wire Center serving the end-user customer to the Wire Center containing the packet switch. Both a non-recurring rate and a recurring rate shall apply. If CLEC provisions its own transport, then this rate element shall not apply.

9.20.3.2 Unbundled Packet Switch Loop Capability – This element includes loop facilities between the remote DSLAM and the end user customer premises and will vary depending on the type of loop elements, which may be either a dedicated loop or Shared Loop. If CLEC provisions its own transport from the end user customer to the DSLAM, this rate element shall not apply.

9.20.3.3 Unbundled Packet Switch Interface Port - CLEC obtains the Unbundled Packet Switch Interface Port currently contained within Qwest's network. This port may be a DS1 or DS3 port on a packet switch allowing virtual channels to be connected and transmitted to CLEC network.

9.20.4 Ordering Process

9.20.4.1 Prior to placing an order for Unbundled Packet Switching, CLEC must have provided Qwest a Collocation application, Collocation space availability report pursuant to Section 8.2.1.9, or a Collocation forecast to place a DSLAM in a Qwest Remote Premises containing a Qwest DSLAM and been denied such access.

9.20.4.1.1. Upon CLEC request, Qwest will disclose the location of all DSLAM's Qwest has deployed in Remote Premises throughout the state.

9.20.4.2 Prior to placing an order for Unbundled Packet Switch Customer Channel, CLEC must have established or be in the process of establishing continuity between CLEC network and an Unbundled Packet Switch Interface Port.

9.20.4.3 To order Unbundled Packet Switching, CLEC will place two (2) orders via an LSR, which orders will be provisioned according to the intervals set forth in Exhibit C once the continuity as set forth in the preceding section is established.

9.20.4.3.1 Network Interface Order to establish connectivity between CLEC network and Qwest Unbundled Packet Switch Interface Port: CLEC must specify bandwidth requirement of DS1 or DS3. Qwest will combine transport UNE to Unbundled Packet Switch Interface Port.

9.20.4.3.2 Customer channel order to establish linkage between end-user customer equipment and Qwest's packet network: CLEC must specify remote DSLAM address, end-user customer address, quality of service requested, and bit-rate requested.

9.20.5 Maintenance and Repair

Maintenance and Repair of Unbundled Packet Switching are the sole responsibility of Qwest. Maintenance and Repair processes are contained in Section 12.

PHX/JHERRON/1204173.1/67817.150

EXHIBIT C
SERVICE INTERVAL TABLES

1.0 Unbundled Loops, Line Sharing and Line Splitting Service Interval Table:

(a) Established Service Intervals 2/4 Wire Analog (Voice Grade):

a)	1-8 lines	5 business days
b)	9-16 lines	6 business days
c)	17-24 lines	7 business days
d)	25 or more	ICB

(b) Established Service Intervals for 2/4 Wire Non-Loaded Loops, Basic Rate ISDN Capable Loops, and ADSL Compatible Loops that do not require conditioning:

a)	1-8 lines	5 business days
b)	9-16 lines	6 business days
c)	17-24 lines	7 business days
d)	25 or more	ICB

(c) Established Service Intervals for xDSL-I Capable Loops that do not require conditioning:

a)	1-8 lines	10 business days
b)	9-16 lines	ICB
c)	17-24 lines	ICB

(d) Established Service Intervals for existing DS-1 Capable Loops, DS1 Capable Feeder Loop, 2-Wire Analog Distribution Loop:

a)	1 – 24 lines	9 business days
b)	25 or More	ICB

(e) Established Service Intervals for existing DS3 Capable Loops:

a)	1-3 lines	7 business days
b)	4 or more	ICB

(f) Established Service Intervals for Line Sharing and Line Splitting that do not require conditioning:

a)	1-8 lines	5 business days
b)	9-16 lines	6 business days
c)	17-24 lines	7 business days
d)	25 or More	ICB

(g) Conditioned Loops for 2/4 Wire Non-Loaded Loops, ADSL Compatible, Basic Rate ISDN Capable, xDSL-I Capable Loops, Line Sharing and Line Splitting:

a)	1-8 lines	15 business days
b)	9 or more	ICB

EXHIBIT C
SERVICE INTERVAL TABLES

(h) Established Repair Intervals for Basic 2-wire Analog Loops, Line Sharing and Line Splitting:

24 Hours OSS
48 Hours AS

(i) Established Repair Intervals for 4-wire Analog Loops, 2/4 Wire Non-Loaded Loops, Basic Rate ISDN Capable Loops, and ADSL Compatible Loops:

4 Hours

EXHIBIT C
SERVICE INTERVAL TABLES

2.0 Unbundled Dedicated Interoffice Transport (UDIT) Service Interval Table:

Product	Services Ordered	Installation Commitments	Repair Commitments
UDIT, UCCRE			
DS0	1 to 8	High Density: Five (5) Business Days Low Density: Six (6) Business Days	4 hrs. High Density 4 hrs. Low Density
	9 to 16	High Density: Six (6) Business Days Low Density: Seven (7) Business Days	4 hrs. High Density 4 hrs. Low Density
	17 to 24	High Density: Seven (7) Business Days Low Density: Eight (8) Business Days	4 hrs. High Density 4 hrs. Low Density
	25 or more	ICB	ICB
DS1	1 to 8	High Density: Five (5) Business Days Low Density: Eight (8) Business Days	4 hrs High Density 4 hrs Low Density
	9 to 16	High Density: Six (6) Business Days Low Density: Nine (9) Business Days	4 hrs High Density 4 hrs Low Density
	17 to 24	High Density: Seven (7) Business Days Low Density: Ten (10) Business Days	4 hrs High Density 4 hrs Low Density
	25 or more	ICB	4 hrs
DS3	1 to 3 Circuits	High Density: Seven (7) Business Days Low Density: Nine (9) Business Days	4 hrs High Density 4 hrs Low Density
	4 or more Circuits	ICB	4 hrs
OC3 and Higher	1 or more Circuits	ICB	4 hrs

EXHIBIT C
SERVICE INTERVAL TABLES

3.0 Unbundled Local Switching Service Interval Table:

Product	Services Ordered	Installation Commitments	Repair Commitments
Unbundled Switching			
Unbundled Switching – Line Side Analog With Line Class Code (LCC) already supported in requested switch.	1 to 8	High Density: Five (5) Business Days Low Density: Six (6) Business Days	24 hrs. High Density 24 hrs. Low Density
	9 to 16	High Density: Six (6) Business Days Low Density: Seven (7) Business Days	24 hrs. High Density 24 hrs. Low Density
	17 to 24	High Density: Seven (7) Business Days Low Density: Eight (8) Business Days	24 hrs. High Density 24 hrs. Low Density
	25 or more	ICB	24 hrs.
Unbundled Switching – Line Side Analog – Existing – Vertical Feature(s) (Features change without inward line activity and not impacting the design of the circuit.)	1 to 19	Two (2) Business Days	24 hrs. OOS 48 hrs. AS
	20 to 39	Four (4) Business Days	24 hrs. OOS 48 hrs. AS
	40 or more	ICB	24 hrs. OOS 48 hrs. AS
Unbundled Switching – Line Side Analog New Line Class Code (LCC) ordered through customized routing		ICB	24 hrs.
Unbundled Switching – BRI-ISDN Line-side Port. With a U S WEST standard configuration and Line Class Code (LCC) already supported in the requested switch	1 to 3 Lines	High Density: Seven (7) Business Days Low Density: ICB	24 hrs. High Density 24 hrs. Low Density
	4 or more	ICB	24 hrs.
Unbundled Switching – BRI-ISDN Line-side Port. With non-standard configuration and Line Class Code (LCC) already supported in the requested switch	1 to 3 Lines	High Density: Seventeen (17) Business Days (includes 10 days for complex translations.) Low Density: ICB	24 hrs. High Density 24 hrs. Low Density
	4 or more	ICB	24 hrs.

Unbundled Switching – BRI-ISDN Line-side Port. Non supported Line Class Code (LCC) ordered through Customized Routing		ICB	24 hrs.
Unbundled Switching – DS1 Trunk Port	1 to 8 Ports	High Density: Five (5) Business Days Low Density: Six (6) Business Days	24 hrs. High Density 24 hrs. Low Density
	9 to 16 Ports	High Density: Six (6) Business Days Low Density: Seven (7) Business Days	24 hrs. High Density 24 hrs. Low Density
	17 to 24 Ports	High Density: Seven (7) Business Days Low Density: Eight (8) Business Days	24 hrs. High Density 24 hrs. Low Density
	25 or more Ports	ICB	24 hrs.
Unbundled Switching – Message Trunk Groups • Translation questionnaire required • Routing to trunks is ordered separately as Customized Routing • DS1 trunk port & UDIT in place.	**High Density** 1 to 24	Seven (7) Business Days	24 hrs.
	25 to 48	Eight (8) Business Days	24 hrs.
	49 to 72	Ten (10) Business Days	24 hrs.
	73 to 96	Twelve (12) Business Days	24 hrs.
	97 to 120	Fourteen (14) Business Days	24 hrs.
	121 to 144	Fifteen (15) Business Days	24 hrs.
	145 to 168	Sixteen (16) Business Days	24 hrs.
	169 to 240	Eighteen (18) Business Days	24 hrs.
	241 or more	ICB	24 hrs.
	Low Density 1 to 24	Eighteen (18) Business Days	24 hrs.
	25 to 72	Nineteen (19) Business Days	24 hrs.
	73 to 120	Twenty (20) Business Days	24 hrs.
	121 or more	ICB	24 hrs.
Unbundled Switching – Two Way	1 to 8 Trunks	High Density: Five (5)	24 hrs. High

and DID Equivalent Group (add/change/increase) DS1 trunk port in place		Business Days Low Density: Six (6) Business Days	Density 24 hrs. Low Density
	9 to 16 Trunks	High Density: Six (6) Business Days Low Density: Seven (7) Business Days	24 hrs. High Density 24 hrs. Low Density
	17 to 24 Trunks	High Density: Seven (7) Business Days Low Density: Eight (8) Business Days	24 hrs. High Density 24 hrs. Low Density
	25 or more Trunks	ICB	24 hrs.
Unbundled Switching – PRI-ISDN Capable Trunk-Side DS1 Trunk port in place	1 to 8	High Density: Five (5) Business Days Low Density: Six (6) Business Days	4 hrs. High Density 4 hrs. Low Density
	9 to 16	High Density: Six (6) Business Days Low Density: Seven (7) Business Days	4 hrs. High Density 4 hrs. Low Density
	17 to 24	High Density: Seven (7) Business Days Low Density: Eight (8) Business Days	4 hrs. High Density 4 hrs. Low Density
	25 or more	ICB	4 hrs.
Unbundled Packet Switching	• Design changes – 8 business days • Non-design changes – 5 business days • Service changes – 5 business days	New service request – 10 business days	4 hrs

EXHIBIT C
SERVICE INTERVAL TABLES

4.0 Unbundled Dark Fiber Interval Table:

Product	Activity/ Features	Services Ordered	FOC Guidelines	Installation Guidelines	Repair Guidelines
Dark Fiber					
Initial Records Inquiry (IRI) (simple & complex)			N/A	Ten (10) Business Days	N/A
Field Verification And Quote Preparation (FVOP)			N/A	Twenty (20) Business Days	N/A
Provisioning (non-FVOP requests)			N/A	Twenty (20) Business Days	

EXHIBIT C
SERVICE INTERVAL TABLES

5.0 Unbundled Network Elements Platform (UNE-P) Service Interval Table:

Product	Services Ordered	Installation Commitments	Repair Commitments
UNE-P POTS 'New'- Soft Dial Tone (SDT) [Where available] **Facility Check indicates "AVAILABLE (SDT)" and DISPATCH "NO"**		Two (2) Business Days (regardless of the time of day the request is received)	24 hrs OOS 48 hrs AS
UNE-P POTS 'New'- Flow Through, Fully Electronic (N, T Orders) **Facility Check indicates "AVAILABLE" and DISPATCH "NO"**	1 to 19 Lines		24 hrs OOS 48 hrs AS
	20 to 39 Lines	Four (4) Business Days or next available due date thereafter as indicated by Appointment Scheduler.	24 hrs OOS 48 hrs AS
	40 or more Lines	ICB	24 hrs OOS 48 hrs AS
UNE-P POTS 'New'- Simple CO Features, or Number Changes without inward line activity, or Hunting changes without inward line activity	1 to 19 Lines	Three (3) Business Days	24 hrs OOS 48 hrs AS
	20 to 39 Lines	Four (4) Business Days	24 hrs OOS 48 hrs AS
	40 or more Lines	ICB	24 hrs OOS 48 hrs AS
UNE-P POTS 'New'- Suspend/Restore	Customers with service placed on "vacation"	Next Business Day	24 hrs OOS 48 hrs AS
	Treatment for Non-payment issues	Same Business Day as payment receipt validated	24 hrs OOS 48 hrs AS
UNE-P POTS 'New'- New Installs, Address Changes, Changes with inward line activity **Facility Check indicates "AVAILABLE DISP. REQ" and DISPATCH "YES"**	1 to 19 Lines	Next available due date as indicated by Appointment Scheduler **Note:** Appointment Scheduler minimum default interval is 3 (Three) Business Days.	24 hrs OOS 48 hrs AS
	20 to 39 Lines	Four (4) Business Days or next available due date thereafter as indicated by Appointment Scheduler.	24 hrs OOS 48 hrs AS
Product	**Services Ordered**	**Installation Commitments**	**Repair Commitments**
	40 or more Lines	ICB	24 hrs OOS 48 hrs AS

EXHIBIT C
SERVICE INTERVAL TABLES

UNE-P POTS 'New'- Directory Listings Changes (R Orders)	1-10 LISTINGS	Two (2) Business Days	
	11 to 20 Listings	Five (5) Business Days	
	21-50 Listings	Ten (10) Business Days	
	51-100 Listings	Thirty (30) Business Days	
	Over 100 Listings	Sixty (60) Business Days	
Conversions to UNE-P POTS- POTS Residence to UNE-P - Conversion as Specified - Simple CO Features	1 to 39 Lines	Three (3) Business days	24 hrs OOS 48 hrs AS
	40 or more lines	ICB	24 hrs OOS 48 hrs AS
Conversions to UNE-P POTS- UNE-P to UNE-P POTS Residence - Conversion as Is	1 to 39 Lines	Same Business Day if received before 12:00 p.m., or, Next Business Day if received later than 12:00 p.m.	24 hrs OOS 48 hrs AS
	40 or more Lines	ICB	24 hrs OOS 48 hrs AS
Conversions to UNE-P POTS- POTS Business to UNE-P - Conversion As Specified - Simple CO Features	1 to 19 Lines	Three (3) Business days	24 hrs OOS 48 hrs AS
	20 to 39 Lines	Four (4) Business Days	24 hrs OOS 48 hrs AS
	40 or more Line	ICB	24 hrs OOS 48 hrs AS
Conversions to UNE-P POTS- UNE-P to UNE-P POTS Business - Conversion As Is	1 to 39 Lines	Same Business Day if received before 12:00 p.m., or, Next Business Day if received later than 12:00 p.m.	24 hrs OOS 48 hrs AS
	40 or more Lines	ICB	24 hrs OOS 48 hrs AS
UNE-P Line Splitting – UNE-P POTS to UNE-P POTS with Line Splitting - Conversion As Specified	1 to 8 Lines	High Density: Five (5) Business Days Low Density: Six (6) business Days	24 hrs OOS 48 hrs AS
	9 to 16 Lines	High Density: Six (6) Business days Low Density: (9) Business Days	24 hrs OOS 48 hrs AS
	17 to 24 Lines	High Density: (7) Business Days	24 hrs OOS 48 hrs AS
Product	**Services Ordered**	**Installation Commitments**	**Repair Commitments**
	25-39 Lines	ICB	24 hrs OOS 48 hrs AS

	40 or more Lines or if Conditioning is required	ICB High Density: Five (5) Business Days	24 hrs OOS 48 hrs AS
UNE-P Line Splitting – POTS Residence or POTS Business with Line Sharing to UNE-P POTS with Line Splitting - Conversion as Specified	1 to 8 Lines	High Density: Six (5) Business days Low Density: Six (6) Business Days	24 hrs OOS 48 hrs AS
	9 to 16 Lines	High Density: Six (6) Business days Low Density: Nine (9) Business Days	24 hrs OOS 48 hrs AS
	17 to 24 Lines	High Density: Seven (7) Business Days Low Density: Ten (10) Business Days	24 hrs OOS 48 hrs AS
	25-39 Lines	ICB	24 hrs OOS 48 hrs AS
	40 or more Lines	ICB	24 hrs OOS 48 hrs AS
UNE-P PBX 'New'-	1 to 8 Trunks	Five (5) Business Days	4 hrs
	9 to 16 Trunks	Six (6) Business Days	4 hrs
	17 to 24 Trunks	Seven (7) Business Days	4 hrs
	25 or more Trunks	ICB	4 hrs
Conversions to UNE-P PBX – Conversion As Specified or Conversion As Is	1 to 8 Trunks	Five (5) Business Days	4 hrs
	9 to 16 Trunks	Six (6) Business Days	4 hrs
	17 to 24 Trunks	Seven (7) Business Days	4 hrs
	25 or more Trunks	ICB	4 hrs
UNE-P DSS 'New'- T1 Facility	1 to 3	Nine (9) Business Days	4 hrs
	4 or more	ICB	4 hrs
UNE-P DSS 'New'- Trunks	1 to 3 Lines	Twelve (12) Business Days	4 hrs
	4 to 6 Lines	Sixteen (16) Business Days	4 hrs
	7 to 9 Lines	Twenty (20) Business Days	4 hrs
	10 to 12 Lines	Twenty four (24) Business Days	4 hrs
Product	**Services Ordered**	**Installation Commitments**	**Repair Commitments**
	13 or more Lines	ICB	4 hrs

EXHIBIT C
SERVICE INTERVAL TABLES

Conversions to UNE-P DSS- T1 Facility	1 to 3	Nine (9) Business Days	4 hrs
	4 or more	ICB	4 hrs
Conversions to UNE-P DSS- Trunks	4 to 6 Lines	Sixteen (16) Business Days	4 hrs
	7 to 9 Lines	Twenty (20) Business Days	4 hrs
	10 to 12 Lines	Twenty four (24) Business Days	4 hrs
	13 or more Lines	ICB	4 hrs
UNE-P ISDN BRI 'New'- New Installs, Address Changes, Change to add Loop (N2Q)	1 to 10 Lines	Thirteen (13) Business Days	24 hrs
	11 or more Lines	ICB	24 hrs
UNE-P ISDN BRI 'New'- Add or Change Feature(s), Add Primary Directory Number (PDN) to established Loop (N2Q), Add Call Appearance	1 to 10 Lines	Three (3) Business Days	24 hrs
	11 or more Lines	ICB	24 hrs
Conversion to UNE-P ISDN BRI- Conversion As Is	1 to 10 Lines	Three (3) Business Days	24 hrs
	11 or more Lines	ICB	24 hrs
Conversion to UNE-P ISDN BRI- Conversion As Specified	1 to 10 Lines	Three (3) Business Days if a Loop is not involved (or) Thirteen (13) Business Days if a Loop is added or changed	24 hrs
	11 or more Lines	ICB	24 hrs
UNE-P ISDN PRI 'New'- T1 Facility	1 to 3	Nine (9) Business Days	4 hrs
	4 or more	ICB	4 hrs
UNE-P ISDN PRI 'New'- Trunks	1 to 3 Lines	Twelve (12) Business Days	4 hrs
	4 to 6 Lines	Sixteen (16) Business Days	4 hrs
	7 to 9 Lines	Twenty (20) Business Days	4 hrs
	10 to 12 Lines	Twenty four (24) Business Days	4 hrs
	13 or more Lines	ICB	4 hrs
Conversion to UNE-P ISDN PRI- T1 Facility	1 to 3	Nine (9) Business Days	4 hrs
Product	**Services Ordered**	**Installation Commitments**	**Repair Commitments**
	4 or more	ICB	4 hrs
Conversion to UNE-P ISDN	1 to 3 Lines	Twelve (12) Business Days	4 hrs

PRI- Trunks			
	4 to 6 Lines	Sixteen (16) Business Days	4 hrs
	7 to 9 Lines	Twenty (20) Business Days	4 hrs
	10 to 12 Lines	Twenty four (24) Business Days	4 hrs
	13 or more Lines	ICB	4 hrs
UNE-P Centrex 21 - Non Designed- Conversions as Specified	1 to 10 Lines	Five (5) Business Days	24 hrs OOS 48 hrs AS
	11 or more Lines	ICB	24 hrs OOS 48 hrs AS
UNE-P Centrex 21 - Non Designed- New Installations	1 to 10 Lines [Facility check indicates "Available Dispatch Required" and Dispatch "Yes".]	Five (5) Business Days or Next available due date thereafter as indicated by Appointment Scheduler.	24 hrs OOS 48 hrs AS
	11 or more Lines	ICB	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **Common Block Configuration Required** - Establish Common Block	1 to 10 Lines - No Optional Features	Twenty (20) Business Days	24 hrs OOS 48 hrs AS
	1 to 10 Lines - w/ Optional Features (i.e., ARS, DFIs, SMDR, UCD, etc.)	ICB	24 hrs OOS 48 hrs AS
	11-21 Lines – No Optional Features	Twenty (20) Business Days	24 hrs OOS 48 hrs AS
	11 to 21 Lines – w/Optional Features (i.e., ARS, DFIs, SMDR, UCD, etc.)	ICB	24 hrs OOS 48 hrs AS
	22 or more Lines with or without Optional Features	ICB	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **Common Block Configuration Required** - Feature Additions requiring Common Block activity per Common Block	1 to 10 Lines	Twenty (20) Business Days	24 hrs OOS 48 hrs AS
Product	**Services Ordered**	**Installation Commitments**	**Repair Commitments**

	11 or more Lines	ICB	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **Common Block Configuration Required** - Line Class Codes (LCCs)/ CAT/NCOS/DPAT additions/changes requiring Common Block work.	Per Common Block (must be existing Line Class Codes(LCCs)/ CAT/NCOS/DPAT)	Five (5) Business Days	24 hrs OOS 48 hrs AS
	If new LCC/CAT/NCOS or DPAT	Twenty (20) Business Days	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **Common Block Configuration Required** - Centrex Management System (CMS)	New Common Blocks & Cust ID's (lines installed at the same time the Common Block is installed)	Twenty (20) Business Days (after the initial Common Block & associated lines are installed)	N/A
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **Common Block Configuration Required** - Designed Services subsequent to initial Common Block installation	Tie Lines/DFI/FX	Thirteen (13) Business Days (may be longer due to facility due date requirements)	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **No Common Block Configuration Required** - Centrex Management System (CMS) Network Access Registers (NARs)	Additional/New Station Lines to be added to CMS	Five (5) Business Days after line is installed	N/A
	Additions	Five (5) Business Days	N/A
	Change from Non Blocked to Blocked Service	ICB	N/A

EXHIBIT C
SERVICE INTERVAL TABLES

Product	Services Ordered	Installation Commitments	Repair Commitments
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **No Common Block Configuration Required** - Station Lines (subsequent to the establishment of the Common Block) Includes: Conversions New Lines Moves **NOTE**: On conversions, numbers are "chipped" into the Common Block at the time of installation.	1 to 10 Lines per location	Five (5) Business Days or Next available due date thereafter as indicated by Appointment Scheduler.	24 hrs OOS 48 hrs AS
	11 to 20 Lines per location	Ten (10) Business Days or Next available due date thereafter as indicated by Appointment Scheduler.	24 hrs OOS 48 hrs AS
	21 or more Lines per location	ICB	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **No Common Block Configuration Required** Line Feature changes/additions/ Removals	1 to 19 Lines	Three (3) Business Days	24 hrs OOS 48 hrs AS
	20 or more Lines	ICB	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **No Common Block Configuration Required** Designed Services subsequent to initial Common Block installation	Tie Lines/DFI/FX	Thirteen (13) Business Days (may be longer due to facility due date requirements)	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **No Common Block Configuration Required** Automatic Route Selection (ARS)	Subsequent to Common Block Installation	Twenty (20) Business Days (may be longer if the activation of ARS is tied to a Private Line facility installation)	24 hrs OOS 48 hrs AS

EXHIBIT C
SERVICE INTERVAL TABLES

Product	Services Ordered	Installation Commitments	Repair Commitments
	Changes to Patterns: 1 to 25 changes 26 to 50 changes 51 or more changes	Business Days: Five (5) days Ten (10) days Twenty (20) days	24 hrs OOS 48 hrs AS
	Adding new Patterns	Twenty (20) Business Days	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **No Common Block Configuration Required** Uniform Call Distribution (UCD)	Per Request	Thirteen (13) Business Days	24 hrs OOS 48 hrs AS
Une-P Centrex Plus / UNE-P Centron [Centron is MN only] **No Common Block Configuration Required** Additional Numbers subsequent to initial Common Block installation **NOTE:** Additional numbers are "chipped" into the Common Block at the time of request.	Blocks (No limit on amount of numbers.)	Five (5) Business Days	N/A

EXHIBIT C
SERVICE INTERVAL TABLES

6.0 Enhanced Extended Loop Service Interval Table (EEL):

Product	Services Ordered	Installation Commitments	Repair Commitments
Enhanced Extended Loop (EEL)- DS0 or Voice Grade Equivalent	1 to 8	High Density: Five (5) Business Days Low Density: Six (6) Business Days	4 hrs High Density 4 hrs Low Density
	9 to 16	High Density: Six (6) Business Days Low Density: Seven (7) Business Days	4 hrs High Density 4 hrs Low Density
	17 to 24	High Density: Seven (7) Business Days Low Density: Eight (8) Business Days	4 hrs High Density 4 hrs Low Density
	25 or more	ICB	4 hrs
Enhanced Extended Loop (EEL) – DS1	1 to 8	High Density: Five (5) Business Days Low Density: Eight (8) Business Days	4 hrs High Density 4 hrs Low Density
	9 to 16	High Density: Six (6) Business Days Low Density: Nine (9) Business Days	4 hrs High Density 4 hrs Low Density
	17 to 24	High Density: Seven (7) Business Days Low Density: Ten (10) Business Days	4 hrs High Density 4 hrs Low Density
	25 or more	ICB	4 hrs
Enhanced Extended Loop (EEL) – DS3	1 to 3 Circuits	High Density: Seven (7) Business Days Low Density: Nine (9) Business Days	4 hrs High Density 4 hrs Low Density
	4 or more Circuits	ICB	4 hrs
Enhanced Extended Loop		ICB	24 hrs OOS

Conversions (EEL-C) – Private Line (PLTS) - Conversion as is			48 hrs AS

PHX/JHERRON/1204151.1/67817.150

EXHIBIT E

VERTICAL SWITCH FEATURES FOR UNE-SWITCHING

USOC FOR FEATURE	Feature Description
3BL	3-Way Call Block
3CW	Call Transfer – Trunk Side
53W	Open Switch Interval Protection
69B1X	Call Forwarding - Busy Line
69D	Call Pick-up Directed
69H	Call Forwarding - Don't Answer
69J	Call Forwarding - Busy Line
6APPK	Call Hold
6MD	Barge-In
6SY	Call Waiting Terminating
6SZ	Call Waiting Originating
9FK	Secretarial Listing
A6PPK	Additional Primary Directory Number, Per PDN
A6QPN	Additional Secondary Directory Number*
ACS	Additional Call Appearances, Per Appearance
AR5	ARS Patterns Per Facility Terminating In Patterns
ARS-B	Automatic Route Selection, Common Equip
AS9	Additional Shared Call Appearance, Per Appearance
AYK	Class Anonymous Call Rejection
B2DPK	Automatic Dial
BOV	Executive Busy Override
C4Z	Call Park
CLT	Additional Directory Listing
CMD	Customer Dialed Account Recording
CTP	Call Transfer - All Calls
CV9	Call Forwarding – Variable
CXT	Remote Access Service
D06	Secondary DN
D08	Multiple Shared Call Appearances Of A DN
DAL	Foreign Listing
DHA	Distinctive Alert
DMA	Directed Call Pick-up - Per Line, Barge-In
DO6	Secondary Directory Number
DO8	Shared Directory Number
DPB	Directed Call Pick-up - Per System
E1N	Intracall
E3D	Speed Call
E3F	Speed Calling – 30 Per Line Accessing List
E3P	Call Pick-up

EXHIBIT E

VERTICAL SWITCH FEATURES FOR UNE-SWITCHING

E3PPK	Call Pick-up
E62	Call Waiting Dial Originating
E6D	Directed Call Pick-up - Per Line, Non Barge-In
E6G	Call Forwarding – Busy Restricted
E6GUR	Call Forwarding – Busy Unrestricted
E6N	Call Waiting – Intragroup, Per Line Equipped
E8C	Speed Calling 8#
E9G	Call Forwarding - Don't Answer Restricted
E9GUR	Call Forwarding - Don't Answer Unrestricted
EAB	Call Hold
EAT	Call Forwarding - Variable
EBR	Attendant Camp-On And Indication Of Camp-On
EGR	Group Use Service
EH6	Multiline Hunt Group - Circular Hunt
EH8	Multiline Hunt Group - Preferential List Hunt - First Line – Equipped
EH9	Multiline Hunt Group - Preferential List Hunt Additional Line – Equipped
EO3	Call Transfer
ERB	Call Forward Busy - Cust Activate
ERD	Call Forward Don't Answer - Cust Activate
ESC	3-Way
ESH	Convenience Dialing - Shared User
ESHT3	Speed Calling - 30 Per List
ESHT6	Speed Calling - 6 Per List
ESM	Call Forward Variable
EST	Speed Calling - 6 Per Line Accessing List
ESX	Call Waiting
ESZ	Call Waiting – Originating
ETD	Call Diversion
ETG	Call Restriction
ETQPB/BLF	Direct Station Selection/Busy Lamp Field
ETQPB/GIC	Group Intercom All Calls
ETQPB/MWI	Message Center Bus Set
EVB	Call Forward Busy – Programmed
EVBHG	Call Forward Busy - Per Hunt Group
EVD	Call Forward Don't Answer – Programmed
EVDHG	Call Forward Don't Answer - Per Hunt Group
EVF	Call Forward Busy Line Don't Answer, Forward To Outside Number
EVFHG	Call Forward Busy Line Don't Answer, Forward To Outside Number, Per Hunt Group

EXHIBIT E

VERTICAL SWITCH FEATURES FOR UNE-SWITCHING

EVK	Call Forward Busy Line Don't Answer, Overflow
EVKHG	Call Forward Busy Line Don't Answer, Overflow, Per Hunt Group
EVO	Call Forward Busy Line, Overflow
EVOHG	Call Forward Busy Line, Overflow - Per Hunt Group
EY3PS	Network Speed Call
FAL	Additional Listing In Another Directory
FBJ	Call Forward, Busy Line – Expanded
FBJHG	Call Forward, Busy Line – Expanded - Per Hunt Group
FCU/FCY	Call Forwarding-Programmable
FDJ	Call Forward, Don't Answer – Expanded
FDJHG	Call Forward, Don't Answer – Expanded - Per Hunt Group
FGDPN	Secondary Directory Number, Per SDN
FID LNR after line USOC	Last Number Redial
FID MSB after line USOC	Make Set Busy
FID NDT after line USOC	*Data Call Protection*
FID PRK after line USOC	Call Park
FKAPN	Continuous Redial, Per PDN
FKDPN	Last Call Return, Per PDN
FKEPN	Selective Call Forwarding, Per PDN
FKQPN	Call Rejection, Per PDN
FNA	Alternate Call Listing
FOQ	Call Forwarding Without Call Completion
FVJ	Call Forwarding Busy Line/Don't Answer Interoffice
FVJHG	Call Forwarding Busy Line/Don't Answer Interoffice - Per Hunt Group
G5BPN	X.25 Reverse Charge Acceptance, Per Number
GFDPN	Packet Switched Data Including One X.25 Logical Channel
GSVPK	X.25 Throughput Class Negotiation
GVJ	Speed Calling - 1 & 2 Digit List
GVT	6-Way
GVV	Speed Calling - 1 & 2 Digit List
GVZ	Speed Calling - 1 & 2 Digit List
GXEPN	X.25 Fast Select Acceptance, Per Number
GXGPK	X.25 Flow Control Parameter Negotiation
H6U	Hunting – UCD - Data
H6UPG	Hunting – UCD - Data - Per Group
HBS	Last Call Return Block
HCKPG	Circular Hunting - Per Group
HDT	Hunting - Circular – Data
HDTPG	Hunting - Circular - Data - Per Group
HLA	Hot Line

EXHIBIT E

VERTICAL SWITCH FEATURES FOR UNE-SWITCHING

HSHHP	Preferential Hunting
HSO	Series Completion Per Each TN Hunted To
HTG	Hunting Feature
HX2	Call Waiting Terminating
JUL	Joint User Listing
KX9	Toll Restriction
LBN	Caller Id LIDB Listing
M1W	Message Waiting Indicator Audible/Visible
MAZ	Analog Call Appearance
MGN	Audible Message Waiting Service
MJJPK	Conference Calling Meet Me
MO9PK	Conference Calling Preset
MUMHT	Centrex Billing; Network Access Register Sharing Capability
MV5	Visual Message Waiting Service
N13	Call Transfer/Three Way
N2D	Hunting - Sequential - Data
N2DPG	Hunting - Sequential - Data - Per Group
N3CPB	Non-Standard Configuration Group, Per Button
NAE	Shared Call Appearance, Per Appearance
NBWPN	Message Waiting Indication, Per PDN
NC8PN	Priority Call, Per PDN
NCE	Class Selective Call Forwarding
NDD	Caller ID Blocking-All Calls, Per PDN
NDK	Automatic Identified Outward Dialing
NF4VC	Calling Number Id Feature Package
NF4VF	Flexible Calling Feature Package
NGQ	Did Sequential Number Block
NGS	20 Sequential DID Numbers
NHGPG	Key Short Hunt, Per Group
NHGPN	Key Short Hunt, Per Number
NHN	Each DID Number
NHNRN	Each DID Reserved
NJEPN	Call Forwarding Variable-All Calls-Voice, Per DN
NJGPN	Call Forwarding Busy Line-All Calls-Voice, Per DN
NJKPN	Call Forwarding Don't Answer-All Calls-Voice, Per DN
NKM	Class Calling Number Delivery Blocking
NKM	Caller-ID Block Per Line
NLT	Non-Listed Service
NM1PP	Isdn Calling Name Delivery
NMCPN	Call Name Id, Per Number
NN8PK	Speed Calling (8), Per Terminal

EXHIBIT E

VERTICAL SWITCH FEATURES FOR UNE-SWITCHING

NNK	CLASS Name /#
NPU	Non-Published Service
NQ1PN	Call Exclusion, Per DN
NQ2PN	Call Forwarding Busy Line For Circuit-Switched Data
NQMPN	Call Forwarding Don't Answer For Circuit-Switched Data
NRCJ1	Call Forwarding - Outside
NRCJ6	Call Waiting – Intragroup, Per System
NSD	Caller Identification Number
NSH	Alternate Listing
NSK	Class Priority Call
NSQ	Class Last Call Return
NSS	Class Continuous Redial
NSW	No Solicitation Calls Directory Listing
NSY	Class Selective Call Rejection
NTU	Night Service (Trunk Answer Any Station)
NU4PN	Call Forwarding Variable-All Calls For Circuit Switched Data
NW9AL	Additional X.25 Logical Channel, Per Logical Channel
NWT	Flexible Calling Feature Package
NXJPK	Speed Calling (30), Per Terminal
NZ6PK	Six Way Conference, Per Terminal
NZHPN	Call Pick-up, Per Number
NZQ	Hunting – Sequential
NZQPG	Hunting – Sequential - Per Group
NZS	Hunting – Circular
NZSPG	Hunting – Circular - Per Group
NZT	Hunting – UCD
NZTPG	Hunting – UCD - Per Group
NZVPG	Intercom, Per Group
OBK5X	Optional Calling Plans*
OTQ	Outgoing Trunk Queuing
PLC	Code Calling
PLS	Advanced Private Line Termination
RBVXC	International Toll Block
RD7PN	Redirecting Number Delivery, Per Number
REAGF	Block Compromise Charge-Removal Of A TN From A Sequential Number Block
REAGG	Block Compromise Charge-Temporary Removal Of A TN From A Sequential Number Block
REAGM	Changing Number Of Digits Outpulsed, Per Change
REAGN	Changing Signaling, Per Change
RGE	Automatic Callback
RGG1A	Custom Ringing

EXHIBIT E

VERTICAL SWITCH FEATURES FOR UNE-SWITCHING

RGG1B	Custom Ringing
RGG1C	Custom Ringing
RGG2A	Custom Ringing
RGG2B	Custom Ringing
RGG2C	Custom Ringing
RGG3A	Custom Ringing
RGG3B	Custom Ringing
RGG3C	Custom Ringing
RN4PP	Isdn Redirecting Name Delivery
RNCEP	Easy Number
RNN	Distinctive Call Waiting Tone
RTV1Q	Toll Restriction – Billed Number Screening
RTV1X	Toll Restriction – Billed Number Screening
RTV2Q	Toll Restriction – Billed Number Screening
RTV3Q	Toll Restriction – Billed Number Screening
RTV4Q	Toll Restriction – Billed Number Screening
RTVXN	Restriction Of 976 Calls
RTVXQ	Toll Restriction – Billed Number Screening
RTVXY	10xxx Direct Dialed Blocking
RTY	Toll Restriction Service Individual & Key Lines
SE3PG	Hunting - Series Completion - Per Group
SE3PG	Series Completion Hunt, Per Group
SE3PN	Hunting - Series Completion - Per #
SEA	Selective Class Of Call Screening Per Access Line
SRG	Selective Class Of Call Screening Per Line Or Trunk
TW1	Talking Call Waiting
U1E	Loop Extension Technology
XLL	Directory Line Of Information
XRW,XRS	2B+D (Circuit Switched Data)*
ZNBHX	Zone 2 - With Hunting; In Central (EAS)
ZPTMX	Isdn Call Transfer Per T-1 Facility

EXHIBIT E

VERTICAL SWITCH FEATURES FOR UNE-SWITCHING

PACKAGES

UVKBX	Call Waiting/Cancel, Speed Call 30, 3-Way Automatic Call Back, and Call Forward Variable
UVKEX	Basic Vertical Feature Package & Class Features, Call Waiting ID, Call Name & Number Delivery, Continuous Redial, Selective Call Forwarding, Selective Call Rejection, and Anonymous Call Rejection

PHX/JHERRON/1204178.1/67817.150

EXHIBIT F - SPECIAL REQUEST PROCESS

1. The Special Request Process shall be used for the following requests:

   a. Requesting specific product feature(s) be made available by Qwest that are currently available in a switch, but which are not activated.

   b. Requesting specific product feature(s) be made available by Qwest that are not currently available in a switch, but which are available from the switch vendor.

   c. Requesting a combination of Unbundled Network Elements that is a combination not currently offered by Qwest as a standard product and:

      i. that is made up of UNEs that are defined by Qwest as products, and
      ii. that is made up of UNEs that are ordinarily combined in the Qwest network.

   d. Requesting an Unbundled Network Element that has been defined by the FCC or the State Commission as a network element to which Qwest is obligated to provide unbundled access, but for which Qwest has not created a standard product, including UDIT and EEL between OC-3 and OC-192.

2. Any request that requires an analysis of technical feasibility shall be treated as a Bona Fide Request (BFR), and will follow the BFR Process set forth in this Agreement. The BFR process shall be used for, among other things, the following:

   a. Requests for Interconnection not already available as described in this Agreement,
   b. Requests for access to an unbundled network element that has not been defined by the FCC or the State Commission as a network element to which Qwest is obligated to provide unbundled access,
   c. Requests for UDIT and EEL above the OC-192 level,
   d. Requests for combinations of Unbundled Network Elements that include UNEs that are not defined by Qwest as products, and
   e. Requests for combinations of Unbundled Network Elements that are not currently combined in the Qwest network.

3. A Special Request shall be submitted in writing and on the appropriate Qwest form, which is located on Qwest's website. The form must be completely filled out.

4. Qwest shall acknowledge receipt of the Special Request within 5 business days of receipt.

5. Qwest shall respond with a preliminary analysis, including costs and timeframes, within 15 business days of receipt of the Special Request. In the case of UNE

combinations, the preliminary analysis shall include whether the requested combination is a combination of elements that are ordinarily combined in the Qwest network. If the request is for a combination of elements that are not ordinarily combined in the Qwest network, the preliminary analysis shall indicate to CLEC that it should use the BFR process if CLEC elects to pursue its request.

6. All timeframes will be met unless extraordinary circumstances arise. In such a situation, CLEC and Qwest will negotiate a reasonable response timeframe.

PHX/JHERRON/1204179.1/67817.150

ADSL	Asymmetric Digital Subscriber Loop
BFR	Bona Fide Request (Process)
CFA	Carrier Facility Assignment
DLC	Digital Loop Carrier
(x)DSL	(type of) Digital Subscriber Loop
DSL	Digital Subscriber Loop
DSLAM	Digital Subscriber Loop Access Mulitplexer
EEL	Enhanced Extended Links
EUDIT	Extended Unbundled Dedicated Interoffice Transport
FCP	Field Connection Point
FDI	Feeder/Distribution Interface
IDLC	Integrated Digital Loop Carrier
IRRG	Interconnect and Resale Resource Guide
LSR	Local Service Request
MELD	Mechanized Engineering and Layout for Distributing Frame
MDU	Multiple Dwelling Unit
MPOE	Minimum Point of Entry
MTE	Multi Tenant Environment
QCI	Qwest Communications International, Inc.
SAI	Serving Area Interface
xDSL	x Digital Subscriber Loop
UDIT	Unbundled Dedicated Interoffice Transport
VDSL	Very High Rate Digital Subscriber Loop