

Qwest

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Carla M. Butler Sr. Paralegal

February 25, 2005

Frances Nichols Anglin Oregon Public Utility Commission 550 Capitol St., NE Suite 215 Salem, OR 97301

Re: ARB 584

Dear Ms. Nichols Anglin:

Enclosed for filing please find and the original and five (5) copies of Qwest Corporation's Direct Testimony of William Easton, Karen Stewart and Michael Norman, along with a certificate of service.

If you have any question, please do not hesitate to give me a call.

Sincerely,

Carla M. Butler

CMB:

Enclosure

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BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON ARB 584

IN THE MATTER OF THE PETITION OF DEICA COMMUNICATIONS, INC. dba COVAD COMMUNICATIONS COMPANY FOR ARBITRATION OF AN INTERCONNECTION AGREEMENT WITH QWEST CORPORATION

DIRECT TESTIMONY OF
WILLIAM R. EASTON
ON BEHALF OF
QWEST CORPORATION

PAYMENT ISSUES

(Disputed Issue Nos. 8-1, 8-2, and 8-3)

FEBRUARY 25, 2005

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1 I. **IDENTIFICATION OF WITNESS** 2 0. PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS. 3 My name is William R. Easton. My business address is 1600 7th Avenue, Seattle, A. 4 Washington. I am employed as Director – Wholesale Advocacy. I am testifying on 5 behalf of Owest Corporation ("Owest"). 6 Q. PLEASE GIVE A BRIEF BACKGROUND OF YOUR EDUCATIONAL 7 BACKGROUND AND TELEPHONE COMPANY EXPERIENCE. 8 I graduated from Stanford University in 1975, earning a Bachelor of Arts degree. In A. 9 1980, I received a Masters of Business Administration from the University of 10 Washington. In addition, I am a Certified Management Accountant and member of the 11 Institute of Management Accountants. 12 I began working for Pacific Northwest Bell in 1980, and have held a series of jobs in 13 financial management with U S WEST, and now with Qwest, including staff positions in 14 the Treasury and Network organizations. From 1996 through 1998, I was Director – 15 Capital Recovery. In this role I negotiated depreciation rates with state commissions and 16 the FCC and testified in various regulatory proceedings. From 1998 until 2001 I was a 17 Director of Wholesale Finance, responsible for the management of Wholesale revenue 18 streams from a financial perspective. In this capacity I worked closely with the Product 19 Management organization on their product offerings and projections of revenue. In

October of 2001 I moved from Wholesale Finance to the Wholesale Advocacy group,

where I am currently responsible for advocacy related to Wholesale products and

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- services. In this role I work extensively with the Product Management, Network and
- 2 Costing organizations.

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3 Q. HAVE YOU TESTIFIED PREVIOUSLY IN OREGON?

- 4 A. Yes. I have testified previously in Docket Nos. UM 767, UT 125, ARB 10, ARB 365,
- 5 ARB 445, IC 1 and UA55 (Reopened).

II. PURPOSE OF TESTIMONY

7 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

- A. The purpose of my testimony is to explain Qwest's positions, and the policies underlying those positions on Disputed Issue No. 8 Payment Issues. There are three distinct subparts to this issue in this arbitration proceeding: Issue 8-1 (Due Dates for Amounts Payable); Issue 8-2 (Timing for Discontinuing Orders); and Issue 8-3 (Timing for Disconnecting Services). At the time that Covad filed its Petition for Arbitration there was a fourth payment issue involving the definition of "repeatedly delinquent," which the parties have since resolved.
 - My testimony will show that Qwest's position on these payment issues strikes a commercially reasonable and appropriate balance between meeting the billing and payment needs and concerns of both Covad and Qwest. My testimony will also show

¹ Covad does not break this disputed issue into separate subparts. I do so here so that the precise language and the dispute related to each subpart is identified and addressed.

1		that Covad has failed to demonstrate why there should be any deviation from those
2		payment standards which are generally applicable industry-wide.
3	Q.	IN ITS PETITION FOR ARBITRATION, COVAD CHARACTERIZES ISSUE
4		NO. 8 AS BEING ABOUT "PROVISIONS RELATED TO BILLING AND
5		BILLING DISPUTE RESOLUTION." IS THIS AN ACCURATE DESCRIPTION
6		OF THE ISSUE?
7	A.	No. The language in dispute involves separate subsections of Section 5.4 of the
8		interconnection agreement entitled "Payment," which is the section in which the parties
9		address issues concerning payment obligations. While Covad has characterized Issue 8 as
10		focusing on "billing" issues, Issue 8 (and Section 5.4 of the agreement) is more appropriately
11		described as "payment" issues: Section 5.4 relates to the obligation of the billed party to
12		make payments, and to the billing party's recourse in the event of non-payment.
13	Q.	BY WAY OF BACKGROUND, DOES THE PAYMENT LANGUAGE IN THE
14		AGREEMENT APPLY TO BOTH PARTIES?
15	A.	Yes. The language at issue in this interconnection agreement applies to both parties since
16		the agreement anticipates that either party may provide services to the other and, thus be
17		entitled to payment for the services provided. One of the unique aspects of Qwest's
18		relationship with Covad, however, is that Covad does not provide any services to Qwest.
19		Consequently, Covad is likely not concerned about the terms governing payment for
20		services rendered to Qwest. This situation perhaps explains why Covad is so
21		aggressively seeking to delay the time for paying its bills as well as the time for Qwest to

1		take action to protect itself from further business risk by discontinuing the processing of
2		new orders and disconnecting service. Covad's proposed extended times are at odds with
3		standard and commercially-reasonable practices, and such extended times would
4		improperly require Qwest to continue to provide services (without compensation) to
5		Covad for extended periods, even where Covad does not dispute the amounts due.
6	Q.	HAS COVAD ACCEPTED QWEST'S PROPOSED LANGUAGE IN ANY OTHER
7		STATE?
8	A.	Yes. Covad has accepted Qwest's proposed language on this issue in Iowa, Nebraska,
9		North Dakota, South Dakota, Wyoming, Montana and Idaho.
10		III. DISPUTED ISSUE NO. 8-1: DUE DATES FOR AMOUNTS PAYABLE
11	Q.	PLEASE EXPLAIN DISPUTED ISSUE 8-1.
12	A.	Issue 8-1 relates to Section 5.4.1 of the interconnection agreement, which specifies the
13		number of days Covad has to pay its bills.
14	Q.	WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 5.4.1?
15	A.	Qwest proposes the following language:
16 17 18 19		5.4.1 Amounts payable under this Agreement are due and payable within thirty (30) calendar Days after the date of invoice, or within twenty (20) calendar Days after receipt of the invoice, whichever is later (payment due date). If the payment due date is not a business day, the payment shall be due the next business day.
20	Q.	WHAT LANGUAGE IS COVAD PROPOSING?
21	A.	Covad originally proposed that amounts payable be due and payable within 45 days, but it
22		has since revised its position on this issue. Covad now proposes the following language:

5.4.1 Amounts payable for any invoice containing (1) line splitting or loop splitting products, (2) a missing circuit ID,) a missing USOC, or (4) new rate elements, new services, or new features not previously ordered by CLEC (collectively "New Products") (items (1)-(4) hereinafter collectively referred to as "Exceptions") are due and payable within forty-five (45) calendar Days after the date of invoice, or within twenty (20) calendar Days after receipt of the invoice, whichever is later (payment due date). With respect to the New Products Exception, the forty-five (45) Day time period shall apply for twelve (12) months. After twelve (12) months' experience, such New Products shall be subject to the thirty (30) Day time frame hereinafter discussed. Any invoices that do not contain any of the above Exceptions are due and payable within thirty (30) calendar Days after the date of the invoice, or within twenty (20) calendar Days after the receipt of the invoice, whichever is later. If the payment due date is not a business day, the payment shall be due the next business day.

15 Q. WHY DOES QWEST BELIEVE THAT 30 DAYS IS THE APPROPRIATE TIME

PERIOD?

A. The 30-day time period balances Covad's need for sufficient time to analyze its monthly bills and issue its payment with Qwest's right to timely compensation for the services Qwest has rendered. This is the same 30-day time period that is in the parties' current interconnection agreement under which they have been operating since early 1999. This is also the same 30-day time period in Qwest's Statement of Generally Available Terms and Conditions (SGAT), in numerous interconnection agreements with other CLECs, as well as in Qwest's FCC access tariff (FCC No. 1) and the Qwest Oregon Access Service Tariff.

Q. WHAT WOULD HAPPEN IF THERE IS A DISPUTE OVER A CHARGE ON A BILL? WOULD THE BILLED AMOUNT STILL BE DUE WITHIN 30 DAYS?

A. No. The agreed-to language in Section 5.4.4 of the agreement discusses in detail how disputed amounts are to be handled, and it states that the undisputed portions of the bill shall be paid. If a portion of the bill is disputed and the dispute is resolved in favor of the

billed party, the disputed amount and associated interest will be credited or paid to the
billed party. Conversely, if the dispute is resolved in favor of the billing party, the
disputed portion of the bill becomes due and late payment charges are applied. The
language in Sections 5.4.4 and 5.18.5 also allows the billed party to dispute a charge at a
later date if it should discover an error after the bill has been paid.

Q. HOW DOES QWEST'S LANGUAGE FOR THE PAYMENT PERIOD COMPARE WITH THE LANGUAGE THAT IS IN QWEST'S OREGON SGAT?

8 A, Qwest's proposed language for Section 5.4.1 of the agreement is identical to the language 9 that is contained in Qwest's Oregon SGAT.

10 Q. WAS THIS ISSUE ADDRESSED DURING THE 271 WORKSHOPS?

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A.

Yes. During the section 271 workshops throughout Qwest's region, in which state commissions, including this Commission, analyzed Qwest's applications for entry into the interLATA toll market, and in which Covad actively participated, the issue of allowing adequate time to analyze monthly bills was discussed at length. Many of the concerns that Covad raises in this case were thoroughly discussed during these workshops. Ultimately, all issues pertaining to the appropriate time frames for payment, including the timing of discontinuance of orders and disconnection of service which are discussed in more detail below, were resolved and the resulting consensus language is the same as that which Qwest proposes herein. Furthermore, in its recently negotiated Commercial Line Sharing Agreement with Qwest, Covad agreed to payment,

1 discontinuance and disconnection terms which are identical to those that Qwest proposes 2 in this proceeding. 3 Q. IN PROCEEDINGS IN OTHER STATES, COVAD HAS ARGUED THAT THE 4 PAYMENT LANGUAGE AGREED TO IN THE 271 WORKSHOPS IS 5 **IRRELEVANT HERE. HOW DO YOU RESPOND?** 6 A. I disagree. The 271 proceedings throughout Qwest's region, including this 7 Commission's proceeding in docket UM 823, were structured to facilitate an in-depth 8 discussion of the "general terms and conditions" of Qwest's SGATs in those states. The 9 issue of allowing sufficient time to analyze bills and the issue of the appropriate payment 10 due dates were discussed at length by Covad and the other CLECs during the various 11 commissions' General Terms and Conditions workshops. The outcome of these 12 discussions was consensus billing and payment language, which is the same language 13 that Qwest is proposing for the parties' interconnection agreement here. While it has been a few years since the 271 workshops that resulted in this consensus 14 15 language, there have been no intervening facts or circumstances that would support any 16 change in the payment language. To the contrary, Qwest and Covad have been operating 17 under the same 30-day time period for the payment of bills since early 1999. Just as 18 Covad did not object to the 30-day payment due date consensus language during the 271 19 proceedings, it has not identified any problems with this time period during the course of 20 the parties' business operations under their existing interconnection agreement.

1	Q.	IN ITS REQUEST FOR ARBITRATION, COVAD ARGUES THAT QWEST IS
2		LIKELY TO BE MORE CONCERNED NOW THAN IT WAS DURING THE 271
3		PROCEEDINGS OVER PAYMENT ISSUES GIVEN THE STATE OF THE
4		INDUSTRY AND SEVERAL HIGH PROFILE CASES IN WHICH CLECS HAVE
5		FAILED TO PAY QWEST FOR SERVICES. HOW DO YOU RESPOND?
6	A.	The proper focus of this arbitration dispute is whether the Commission should adopt
7		Covad's request to deviate from current industry practice. The industry standard (30 days)
8		is commercially reasonable, and it balances the legitimate business interests and concerns
9		of both parties. The fact that a number of CLECs have failed to pay Qwest for services
10		that Qwest has provided to them, leaving Qwest with millions of dollars in uncollectible
11		receivables, actually underscores the legitimacy of the language that Qwest proposes here
12		and actually undermines Covad's argument for extending the amount of time within which
13		Covad (and CLECs opting in to this agreement) would be able to withhold payment for
14		services they have received from Qwest and which they do not dispute they owe to Qwest.
15		Covad's proposal would delay Qwest's ability to take commercially-reasonable protective
16		action and would exacerbate Qwest's risks of non-recovery.
17	Q.	HAVE OTHER CLECS AGREED TO THE SAME LANGUAGE QWEST
18		PROPOSES HERE?
19	A.	Yes. For example, AT&T/TCG recently completed interconnection negotiations with
20		both parties agreeing to the payment language that Covad challenges here. (Although
21		AT&T/TCG and Qwest were parties to an interconnection arbitration proceeding (docket
22		ARB 527) last year these payment issues were not in dispute.) Not surprisingly, since this

1		language was agreed upon with the CLEC community, numerous CLECs are operating
2		under this payment language here and across Qwest's service territory.
3	Q.	WHAT DO YOU SAY ABOUT COVAD'S ARGUMENTS THAT IT NEEDS
4		MORE TIME TO ANALYZE AND PROCESS QWEST'S BILLS?
5	A.	Covad's arguments about the alleged need for more time are belied by the fact that it has
6		had years of experience with Qwest's bills, has had ample opportunity to raise any
7		specific concerns about its ability to efficiently analyze and process these bills within the
8		time frame allotted for payment and yet it has not previously raised these concerns.
9		Moreover, through years of experience with Qwest's bills, Covad has undoubtedly
10		acquired sufficient familiarity and expertise with the bills to analyze them promptly and
11		efficiently, or to seek appropriate business solutions to any general or specific billing
12		problems it might have identified.
13	Q.	IN ITS PETITION FOR ARBITRATION, COVAD NOTES THAT "WHILE
14		SOME BILLS ARE SENT IN ELECTRONIC FORMAT, OTHERS ARE SENT IN
15		PAPER FORMAT ONLY." PLEASE COMMENT.
16	A.	Although the statement is technically correct, Covad omits the fact that the vast majority
17		of Qwest's billing is done electronically. In the case of UNE/Resale, a paper bill is still
18		the official bill of record. However, in addition to the paper bills, Covad also receives
19		electronic files for the UNE/Resale bills which provide it with the information that it
20		needs to analyze and review the bills. The only other paper bill that Covad is currently
21		receiving is out of the Billing and Receivables Tracking (BART) system for one-

1		time/non-recurring charges related to collocation. On a region wide basis, this one-
2		time/non-recurring charge for collocation represents only about [$\pmb{\text{Confidential}}\ [\pmb{\text{X\%}}]]$ of
3		Covad's total monthly billed amounts
4	Q.	APPROXIMATELY HOW MANY PAGES OF BART BILLING DOES COVAD
5	Q.	RECEIVE EACH MONTH FROM QWEST?
6	A.	In total, for <i>all</i> the Qwest states in which it operates, Covad receives approximately
7		[Confidential [XX]] pages of BART billing per month.
8	Q.	DOES QWEST HAVE PERSONNEL WHO ARE AVAILABLE TO EXPLAIN ITS
9		BILLS TO COVAD, AND TO ASSIST WITH ANY BILLING INQUIRIES FROM
10		COVAD?
11	A.	Yes. Qwest has a staff of Service Delivery Coordinators whose responsibilities include
12		explaining CLEC bills and answering any questions a CLEC might have about their bills
13		Qwest has three Service Delivery Coordinators who have been designated to work with
14		Covad.
15	0	DOES OWEST HAVE INCENTIVES TO ENSUDE THAT ITS DILLS ADE
15	Q.	DOES QWEST HAVE INCENTIVES TO ENSURE THAT ITS BILLS ARE
16		ACCURATE?
17	A.	Yes, it does. There are performance measures related to billing completeness and
18		accuracy that are a part of Qwest's Performance Assurance Plan (QPAP). If billing is
19		inaccurate, Qwest is subject to penalty payments. It is therefore in the best interests of
20		both Qwest and Covad that Qwest's bills are complete and accurate.

1	Q.	HAS COVAD HAD DIFFICULTY MEETING THE 30-DAY DUE DATE IN THE
2		PAST?
3	A.	No. Qwest's experience has been that Covad generally pays its bills within the 30-day
4		payment due date.
5	Q.	IN ARBITRATION PROCEEDINGS HELD IN OTHER STATES, COVAD
6		ARGUED THAT SINCE COVAD HAD A GOOD BILLING RELATIONSHIP
7		WITH QWEST, QWEST SHOULD NOT BE CONCERNED ABOUT
8		EXTENDING PAYMENT TIME FRAMES. DO YOU AGREE?
9	A.	No. Given the rights of other CLECs to "opt into" this new Qwest-Covad
10		interconnection agreement, any CLEC could therefore choose to receive the extended
11		time frames that Covad advocates here. ² As a result, Covad's prior payment performance
12		is not a relevant factor in determining whether it is appropriate to require Qwest to
13		continue to provide services for extended periods even though the bill is undisputed.
14		Further, Covad's prior payment performance may not be predictive of Covad's future
15		payment performance. In any event, while Covad cites its prior payment performance as
16		a reason why it believes Qwest need not have any concerns about Covad, it
17		simultaneously argues for significant extensions of time frames for which Qwest would
18		not have a remedy in the event of Covad's nonpayment.
19	Q.	WHAT IS COVAD'S PAYMENT POLICY FOR ITS END-USER CUSTOMERS?

² Although the FCC recently eliminated the "pick and choose" option, under FCC rules any carrier may still opt into an interconnection agreement in its entirety, thereby taking advantage of the payment terms, including timing of discontinuing orders and disconnecting service, that Covad advocates in this proceeding.

A. When billing its customers, Covad uses the same 30-day period that Qwest is proposing to use. Attached as Exhibit Qwest/2, Easton/1 is a page from Covad's website:

http://www.covad.com/onlinesupportcenter/resources/explainer/invoice.shtml. This page contains a sample Covad bill which indicates that the payment due date is 30 days after the invoice date.

Q. WHY IS OWEST OPPOSED TO COVAD'S REVISED LANGUAGE?

A.

Covad is now proposing that some bills have a 45-day due date, and others a 30-day due date, depending on whether certain items appear on the bill. The language that Covad proposes is vague and subject to several interpretations. For example, one could read the proposed language for section 5.4.1 to mean that Covad would have 45 days to pay the entirety of any bill if one of the exceptions is applicable to that bill. If such an interpretation were to be accepted, Covad would have received a 45-day payment due date, under the guise of only asking for an extended date in certain instances. To implement the necessary system changes would not only be a major effort for Qwest but would require billing system logic different from that used for all other Qwest CLEC customers.

Even more problematic from a systems standpoint than treating different items on the same bill differently is Covad's request that new products be treated differently for twelve months, and then revert back to the 30-day payment period used for previously ordered products. This would mean that the billing systems would need to have the capability of determining when a CLEC orders a new product, the capability to treat bills with new services on them differently, and the capability to turn off the exception

treatment at the end of 12 months. The Covad language also begs the question of what constitutes a "new product." For example, if a CLEC had been ordering two-wire loaded loops and at some point in the future ordered a two-wire unloaded loop, would this new order be considered a "new product," even though there is no difference from a bill presentation and billing validation perspective?

Covad's revised position on this issue is particularly surprising in light of Covad's testimony before the Colorado Public Utilities Commission. The Administrative Law Judge in Colorado asked Covad's witness, Ms. Megan Doberneck, about limiting the 45-day payment period to specific products as opposed to all products.³ Ms. Doberneck's response was that exceptions for certain items would be difficult for Covad, stating, "It is extraordinarily difficult, as a business, to create exceptions to the rule, rather than having a standardized relationship across the board." The new Covad proposal would place that extraordinary difficulty on both Qwest's and Covad's shoulders.

Q. WHY IS COVAD ASKING TO HAVE 45 DAYS TO PAY BILLS WHICH CONTAIN LINE SPLITTING OR LOOP SPLITTING SERVICES?

A. Covad has stated in other proceedings that it plans to "partner" with other CLECs to provide line splitting and loop splitting services and, as a result, will need additional time to coordinate bill payment with its partner.

³ In the Matter of Petition of Qwest Corporation for Arbitration of an Interconnection Agreement With Covad Communications Company Pursuant to 47 U.S.C 252(b), Docket No. 04B-160T. Public Utilities Commission of the State of Colorado, Transcript Vol. 1 at pages 88:23 – 89:21 and 110:21 – 111:15. See Exhibit Qwest/3, attached.

⁴ *Id.* at 111:12-15.

1	Q.	DO YOU BELIEVE THIS PARTNERING PLAN IS SUFFICIENT JUSTIFICATION
2		TO ALLOW FOR A 45-DAY PAYMENT DATE FOR THESE SERVICES?
3	A.	No. The fact that Covad has chosen to change its business strategy and to partner with
4		other CLECs is not justification for requiring Qwest to assume additional risk and deferred
5		payment. The fact that Covad's plans to partner with other CLECs may require significant
6		billing coordination between Covad and its new business partners is an issue that Covad
7		and those new business partners would need to address. Covad and its new business
8		partners would have no incentive to adopt efficient billing arrangements or to sort out
9		billing issues between themselves if payment to Qwest for the services ordered from Qwest
10		could be deferred and the business costs and risk of nonpayment shifted to Qwest.
11	Q.	DO OTHER QWEST CUSTOMERS OPERATE UNDER PARTNERSHIP
12		ARRANGEMENTS SIMILAR TO WHAT COVAD MAY BE
13		CONTEMPLATING?
14	A.	Yes. Qwest currently has a number of customers purchasing Line Splitting, a product
15		which allows one company to provide voice service and another company to provide data
16		service over the same line. These customers are operating under the same 30-day
17		payment terms that Covad is disputing here.
18	Q.	WHY IS COVAD SEEKING A 45-DAY EXCEPTION FOR BILLS WITH
	v.	
19		MISSING CIRCUIT IDs?
20	A.	Covad has argued in previous proceedings that its bill analysis is complicated by the fact
21		that Qwest does not provide circuit ID information on bills for line sharing. The reason
22		that Qwest does not provide circuit ID information on bills is that the circuit ID is not the

relevant identifier for line sharing services. Qwest does provide the circuit identification field on bills when the circuit ID is the relevant identifier for a particular charge. For example, bills for Unbundled Loops, Private Lines and similar circuits do in fact contain the circuit ID. However, most telecommunication services do not use the circuit ID as an identifier. To identify line sharing services, Qwest assigns a unique identification number to the loop over which Covad is providing line sharing and Qwest provides this unique identification number to Covad as a part of the Firm Order Confirmation (FOC) that is issued in the service provisioning process, just as circuit IDs are provided via the FOC for those services for which circuit ID is the relevant identifier. This unique identification number provides Covad with a direct and efficient means of verifying that the service for which Covad has been billed is the service that Covad ordered. This identification number is also a part of the Customer Service Record (CSR) that Covad may readily access electronically. Owest billing personnel have explained this process for billing line sharing, its rationale, and the ready means by which line sharing bills may be validated to Covad numerous times.

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Q. HAS COVAD RAISED THIS CIRCUIT IDENTIFICATION ISSUE IN THE CHANGE MANAGEMENT PROCESS (CMP)⁵ PROCESS?

18 A. Yes. However, Covad did not raise this as a billing issue in CMP until October of 2004,
19 nearly two years after the parties began negotiating their interconnection agreement, and

⁵ The CMP is intended to facilitate a discussion between CLECs and Qwest about Product, Process or OSS Interface release changes, release life cycles, release notifications, communication intervals, and regularly scheduled Change Management Process (CMP) meetings. Team Members include CLEC and Qwest representatives who gather to review CLEC and Qwest Change Requests (CRs) and to discuss Qwest Notifications.

five months after filing its direct testimony in Colorado, the first state to conduct an arbitration proceeding.

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Q. WHY IS COVAD SEEKING A 45-DAY EXTENSION FOR MISSING USOCS?

4 A. Covad has argued in other states that its bill validation efforts are hampered by the lack of
5 Universal Service Order Codes (USOCs) on some bills. Although Qwest routinely and
6 regularly provides USOCs on bills for all recurring charges, Qwest acknowledges that it
7 previously had a problem providing USOCs for some non-recurring charges in its
8 Western Region. This was the result of a needed system change in the Western Region
9 Customer Records and Information System (CRIS) billing system which was corrected
10 this past January, making this a moot issue.

O. DOES COVAD NEED A 45-DAY BILLING EXCEPTION FOR NEW SERVICES?

12 A. No. Interestingly, Covad did not raise payment for new services as a concern in the 13 Colorado or Washington proceedings, nor was it mentioned in Covad's petition here. 14 This issue first arose in Minnesota at the suggestion of the Department of Commerce. I disagree with Covad's proposal for a number of reasons, however. First, as I noted at the 15 beginning of my testimony, treating new services in the manner that Covad proposes 16 17 would create an administrative and systems nightmare and would require a reworking of 18 standardized billing and collections practices to allow for exceptions based on whether 19 services have been ordered previously, as well as a corresponding rewriting of systems 20 logic to accommodate the changes.

⁶ A USOC is a five-character code identifying a specific telecommunications product or service.

CLEC" is an overly broad definition that exaggerates the degree to which accommodations must be made when "new products" are ordered. The example I cited earlier perhaps best illustrates the nature of this concern. The exception treatment that this language would afford would make the system far too susceptible to gaming. A CLEC would need only to order an element that it had not purchased previously to increase the time it would have to pay its bills by 50% for the next 12 months. Finally, Covad overstates the degree to which accommodations are required on its part when new services are ordered. These new services will be billed by the same billing systems that Covad has been working with since it began doing business with Owest in 1998, and in most cases the new services will require little, if any, accommodation from a billing validation perspective. Qwest provides documentation of its billing processes and Owest service delivery coordinators are available to help answer any questions that CLECs may have. Covad is essentially asking to be treated differently from the other CLECs who order new services, validate bills and make payment within the standard 30day time period.

Second, "new rate elements, new services, or new features not previously ordered by

IV. DISPUTED ISSUE NO. 8-2: TIMING FOR DISCONTINUING ORDERS

18 Q. PLEASE EXPLAIN DISPUTED ISSUE 8-2.

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19 A. Issue 8-2, which relates to Section 5.4.2 of the interconnection agreement, has to do with 20 the period of time that the billing party must wait before discontinuing processing orders 21 in cases of non-payment.

1 Q, WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 5.4.2?

2 A. Qwest is proposing the following language:

3 5.4.2 One Party may discontinue processing orders for the failure of the other 4 Party to make full payment for the relevant services, less any disputed amount as 5 provided for in Section 5.4.4 of this Agreement, for the relevant services provided 6 under this Agreement within thirty (30) calendar Days following the payment due 7 date. The Billing Party will notify the other Party in writing at least ten (10) 8 business days prior to discontinuing the processing of orders for the relevant 9 services. If the Billing Party does not refuse to accept additional orders for the 10 relevant services on the date specified in the ten (10) business days notice, and the other Party's non-compliance continues, nothing contained herein shall preclude 11 12 the Billing Party's right to refuse to accept additional orders for the relevant 13 services from the non-complying Party without further notice. For order 14 processing to resume, the billed Party will be required to make full payment of all 15 charges for the relevant services not disputed in good faith under this Agreement. 16 Additionally, the Billing Party may require a deposit (or additional deposit) from 17 the billed Party, pursuant to this section. In addition to other remedies that may 18 be available at law or equity, the billed Party reserves the right to seek equitable 19 relief including injunctive relief and specific performance.

20 Q. HOW DOES QWEST'S LANGUAGE DIFFER FROM COVAD'S PROPOSED

21 **LANGUAGE?**

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22 A. Under the Covad proposal, the billing party (Qwest) would have to wait 60 days, and not 30, following the payment due date before it could discontinue processing orders.

Q. WHY DOES QWEST OPPOSE COVAD'S PROPOSED 60 DAY PERIOD?

A. Qwest is entitled to timely payment for services rendered and to take remedial action if risk of non-payment is apparent. Under Qwest's proposal, an invoice is not due and payable until 30 days after the invoice date, and Qwest cannot take action until another 30 days after that. Since Qwest renders some of its services in the month *before* the invoice date, under the Qwest proposal, Qwest will have to wait nearly three months after

it has provided the service before it could take action. Under the Covad proposal, however, Qwest would be required to wait 90 days after the invoice date (30 days to payment due date plus an additional 60 days), and even longer in cases of Covad's proposed 45-day billing exceptions, before Qwest could take action in the case of non-payment. Taking into account the fact that the service may have been rendered in the month prior to the invoice date, Covad proposes that Qwest wait nearly four months after the service may have been provided before it could discontinue processing new orders. Qwest should not have to wait nearly four months to take action in cases of failure to make payment *for undisputed charges*. Every day of delay could result in additional bad debt, and would impose additional cash flow costs upon Qwest. Because the discontinuance would apply only to *undisputed charges*, there would be no basis for requiring Qwest to continue to provision services to Covad long after Covad would have ceased paying Qwest for services that Qwest has already provided and that Covad does not dispute have been properly billed.

O. WAS THIS ISSUE ADDRESSED IN THE 271 PROCEEDINGS?

- 16 A. Yes. This issue was discussed at length during the 271 proceedings in which Covad
 17 actively participated. Ultimately the Commission approved the consensus SGAT
 18 language providing for the 30-day time period that Owest advocates in this case.
- 19 Q. IS THERE ANY BASIS FOR DOUBLING THE AMOUNT OF TIME THAT
 20 QWEST MUST WAIT BEFORE IT COULD PROTECT ITSELF BY
 21 DISCONTINUING PROCESSING ORDERS FOR NONPAYMENT?

1	A.	No. Covad identifies no new facts or circumstances requiring Qwest to continue to
2		process new orders for this extended period of time during which it is undisputed that
3		Covad owes Qwest for services that Qwest provided to Covad months earlier. The CLEC
4		community agreed during the 271 process that the 30-day period strikes the proper
5		balance between CLECs' and Qwest's interests. Qwest's proposed language carries
6		forward that balance, whereas Covad's proposed language, without justification, shifts to
7		Qwest enormous additional risk of never being paid for the services it provides.
8	Q.	WHAT TIMING FOR DISCONTINUING ORDERS DID AT&T/TCG AND
9		QWEST AGREE UPON IN THEIR RECENT INTERCONNECTION
10		NEGOTIATIONS?
11	A.	AT&T/TCG and Qwest agreed to the same 30-day period that Qwest is proposing in this
12		proceeding. This 30-day period is also in Qwest's SGATs and in numerous
13		interconnection agreements.
14	V	7. DISPUTED ISSUE NO. 8-3: TIMING FOR DISCONNECTING SERVICES
15	Q.	PLEASE EXPLAIN DISPUTED ISSUE 8-3.
16	A.	Issue 8-3, which relates to Section 5.4.3 of the interconnection agreement, has to do with
17		the period of time the billing party must wait before disconnecting service in cases of
18		non-payment.
19	Q,	WHAT LANGUAGE IS QWEST PROPOSING FOR SECTION 5.4.3?
20	A.	Qwest proposes the following language:

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The Billing Party may disconnect any and all relevant services for failure 5.4.3 by the billed Party to make full payment, less any disputed amount as provided for in Section 5.4.4 of this Agreement, for the relevant services provided under this Agreement within sixty (60) calendar Days following the payment due date. The billed Party will pay the applicable reconnect charge set forth in Exhibit A required to reconnect each resold End User Customer line disconnected pursuant to this paragraph. The Billing Party will notify the billed Party at least ten (10) business days prior to disconnection of the unpaid service(s). In case of such disconnection, all applicable undisputed charges, including termination charges, shall become due. If the Billing Party does not disconnect the billed Party's service(s) on the date specified in the ten (10) business days notice, and the billed Party's noncompliance continues, nothing contained herein shall preclude the Billing Party's right to disconnect any or all relevant services of the noncomplying Party without further notice. For reconnection of the non-paid service to occur, the billed Party will be required to make full payment of all past and current undisputed charges under this Agreement for the relevant services. Additionally, the Billing Party will request a deposit (or recalculate the deposit) as specified in Section 5.4.5 and 5.4.7 from the billed Party, pursuant to this Section. Both Parties agree, however, that the application of this provision will be suspended for the initial three (3) Billing cycles of this Agreement and will not apply to amounts billed during those three (3) cycles. In addition to other remedies that may be available at law or equity, each Party reserves the right to seek equitable relief, including injunctive relief and specific performance.

24 Q. HOW DOES THIS DIFFER FROM COVAD'S PROPOSED LANGUAGE?

25 A. Under Covad's proposal, Qwest would have to wait 90 days, and not 60, after the due date before it could begin disconnecting service in cases of non-payment.

Q. WHY DOES QWEST OPPOSE THE 90-DAY PERIOD?

As I have discussed above, Qwest is entitled to timely payment for services it has
rendered and to take remedial action if the risk of non-payment is apparent. Under the
Qwest proposal, Qwest could not begin disconnection until 90 days after the invoice date
(30 days to payment due date plus 60 days before disconnection). The additional time
that Covad requests significantly increases Qwest's financial exposure. Under the Covad
proposal, it would be four months after the invoice date (30 days to payment due date

1		plus and an additional 90 days) before Qwest could disconnect services in cases of non-
2		payment. Taking into account the fact that the service itself may have been rendered in
3		the month prior to the invoice date, this is nearly five months after the service may have
4		been provided. This is an unreasonable amount of time. Again, the disconnection timing
5		at issue here applies only to undisputed amounts. Disputed amounts are handled pursuant
6		to the language in Section 5.4.4, as I described earlier.
7	Q.	IN ITS PETITION, COVAD ARGUES THAT EXTENDING THE TIME IS
8		CRITICAL GIVEN THE SEVERE CONSEQUENCES. HAS QWEST EVER
9		DISCONTINUED TAKING COVAD ORDERS OR DISCONNECTED SERVICE?
10	A.	No.
11	Q.	WAS THIS ISSUE ALSO ADDRESSED IN THE 271 WORKSHOPS?
11 12	Q. A.	WAS THIS ISSUE ALSO ADDRESSED IN THE 271 WORKSHOPS? Yes. This issue was also discussed at length during the 271 workshops. Ultimately, the
12		Yes. This issue was also discussed at length during the 271 workshops. Ultimately, the
12 13		Yes. This issue was also discussed at length during the 271 workshops. Ultimately, the issue was resolved with Covad and other CLECs agreeing upon the 60-day proposal that
12 13 14	A.	Yes. This issue was also discussed at length during the 271 workshops. Ultimately, the issue was resolved with Covad and other CLECs agreeing upon the 60-day proposal that Qwest is making in this case.
12 13 14	A.	Yes. This issue was also discussed at length during the 271 workshops. Ultimately, the issue was resolved with Covad and other CLECs agreeing upon the 60-day proposal that Qwest is making in this case. WHAT SERVICE DISCONTINUANCE LANGUAGE DID AT&T/TCG AND
12 13 14 15 16	A.	Yes. This issue was also discussed at length during the 271 workshops. Ultimately, the issue was resolved with Covad and other CLECs agreeing upon the 60-day proposal that Qwest is making in this case. WHAT SERVICE DISCONTINUANCE LANGUAGE DID AT&T/TCG AND QWEST AGREE TO IN THEIR RECENT INTERCONNECTION
12 13 14 15 16 17	A. Q.	Yes. This issue was also discussed at length during the 271 workshops. Ultimately, the issue was resolved with Covad and other CLECs agreeing upon the 60-day proposal that Qwest is making in this case. WHAT SERVICE DISCONTINUANCE LANGUAGE DID AT&T/TCG AND QWEST AGREE TO IN THEIR RECENT INTERCONNECTION NEGOTIATIONS?

Q. WHAT IS COVAD'S DISCONNECTION POLICY FOR ITS END USER

2 **CUSTOMERS?**

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- A. Attached as Exhibit Qwest/4 is a copy of the Covad Customer Service Policies, which are
 posted on Covad's website:
- 5 <u>http://www.covad.com/onlinesupportcenter/resources/legal/docs/Customer</u> 6 <u>Policies_Direct_030104.pdf</u>

Page 16 of Covad's policy states that: "If Customer fails to pay any bill when due, Covad shall have the right to terminate the services and charge any disconnection and/or early termination fee that would apply if Customer had elected to terminate the Services."

Unlike the language that Covad proposes here, this language does not require Covad to wait for any period past the due date before it disconnects services.

VI. SUMMARY/CONCLUSION

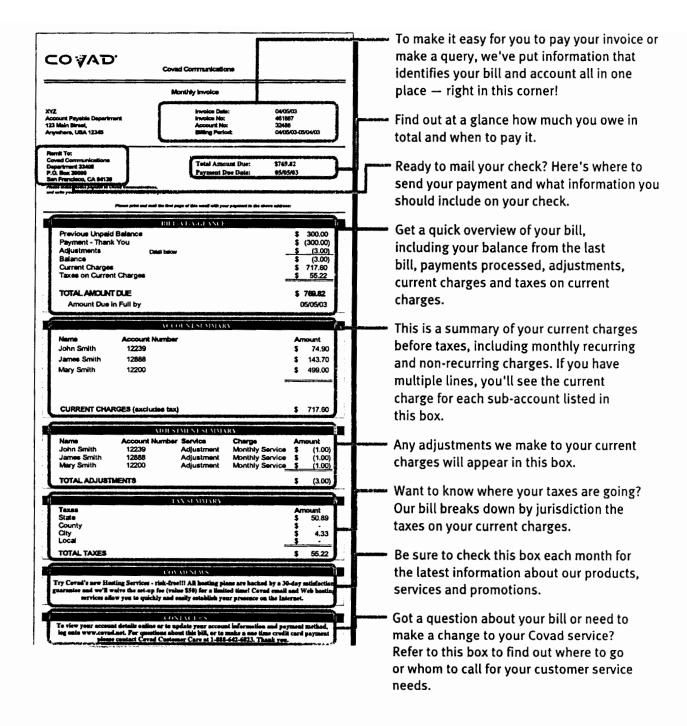
O. PLEASE SUMMARIZE YOUR TESTIMONY.

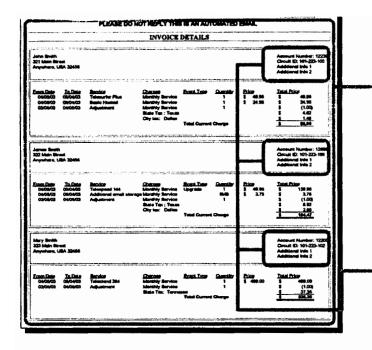
14 The payment issues that Covad now disputes were addressed at length by Covad and A. 15 other CLECs during the 271 process. The payment deadline and the timing for taking 16 protective action that Qwest proposes for the parties' interconnection agreement are 17 identical to the times that were agreed to in the 271 process and that are in Qwest's Oregon SGAT. No new facts or circumstances support the deviations that Covad 18 19 proposes. Covad's proposals would, if accepted, place Owest at additional risk of not 20 being paid for the services it has rendered. Because Owest's payment language is 21 commercially reasonable, is the result of consensus reached during the 271 process and

- balances the needs of both the billed and billing parties, Qwest respectfully submits that
- the Commission should adopt Qwest's payment language in this arbitration proceeding.

3 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

4 A. Yes, it does.





Details, details. Here's where to find a quick, easy-to-read explanation of the current charges on your bill. This section itemizes the services we're billing for, and includes monthly recurring charges, non-recurring charges, taxes and any adjustments made to your current bill. If you have multiple lines, you'll find details on each sub-account in a separate box.

For information about your account — including your service address and circuit ID — just turn your attention to this section of your invoice.

1	BEFORE THE PUBLIC	UTILITIES COMMISSION
2	OF THE STA	TE OF COLORADO
3	Docket No. 04E	3-160T - Volume 1
4	*	* *
5	IN THE MATTER OF THE PETITI	ON OF QWEST CORPORATION
6	FOR ARBITRATION OF AN INTER	RCONNECTION AGREEMENT WITH
7	COVAD COMMUNICATIONS COMPAN	NY PURSUANT TO 47 USC
8	SS 252(b).	
9		
10	Pursuant to notice to a	ll parties of interest,
11	the above-entitled matter	came on for hearing at
12	9:30 a.m., June 21, 2004,	at 1580 Logan Street,
13	Office Level 2, Denver, Co	lorado, before
14	Adminstrative Law Judge Ma	na Jennings-Fader.
15	APPEA	RANCES
16	For Qwest Corporation:	WINSLOW WAXTER, ESQ.
17		1005 17th Street Suite 200
18		Denver, Colorado 80209 JOHN DEVANEY, ESQ.
		1899 Wynkoop
19		Denver, Colorado 80202
20	For Covad Communciations:	ANDREW NEWELL, ESQ.
21		1515 Arapahoe Street Suite Tower 1, Suite 1000
22		Denver, Colorado 80202 KAREN FRAME, ESQ.
		7901 Lowry Boulevard
23		Denver, Colorado 80230
24		
25		

- 1 available to other, potentially, problematic carriers,
- 2 for purposes of opting in. Did I misunderstand?
- 3 A That is correct. That is a concern. And
- 4 the point there is that Covad's billing performance
- 5 isn't the only relevant measure we would look at when
- 6 deciding what we should be using for payment terms.
- 7 Q So, is it Qwest's -- is it your
- 8 testimony, then, that if, in looking at interconnection
- 9 agreements for the purposes of arbitrating provisions
- 10 of interconnection agreements, the Commission should
- 11 look at the impact of -- or potential impact of opting
- 12 in to those provisions, the impact that that might have
- 13 on Qwest?
- 14 A I believe that's correct. I can tell
- 15 you, when Qwest negotiates an interconnection
- 16 agreement, we are very aware of the potential for folks
- 17 opting in, and we want to make sure that's something
- 18 that we could live with.
- 19 Q And, so, in a similar vein, the
- 20 Commission should also look at that in determining the
- 21 arbitration or making the arbitration decisions?
- 22 A I believe so, yes.
- 23 Q Does Qwest's concern about the billing
- 24 issues, 1 through 4 -- I'm sorry. Would Qwest's
- 25 concerns about Billing Issues 1 through 4 be reduced,

- 1 in any way, if the provisions relating to bill payment,
- 2 timing of discontinuing ordering -- or processing of
- 3 orders, timing of disconnecting service, and repeatedly
- 4 delinquent were specific to, or added as conditions to
- 5 specific types of services, such as providing, just as
- 6 an example, providing line-sharing, even though I know
- 7 that's going by the wayside; but, in other words, if it
- 8 were no longer provisioned in the general provision
- 9 section, which is where it's found now, but rather were
- 10 put into and made condition-specific, with specific
- 11 conditions as to specific products or types of
- 12 products.
- 13 A I think that would be very problematic.
- 14 given the billing systems we have. And, as I mentioned
- 15 earlier, the CRIS system bills for several of the
- 16 products we're talking about here. And when you start
- 17 differentiating one product within the system from the
- 18 other, and say, on this one, you allow 45 days for them
- 19 to pay, but on the others, on this same bill, you only
- 20 allow 30 days, I believe, you know, you create kind of
- 21 a nightmare, from a processing problem point of view.
- 22 A.L.J. JENNINGS-FADER: Thank you,
- 23 Mr. Easton. I have no additional questions. Covad, do
- 24 you have any questions, based on what I asked
- 25 Mr. Easton?

- 1 Commission to understand the answer?
- 2 A Well, I would like to provide an example,
- 3 because I basically use generalities. Simply, I agree.
- 4 It is very important for Qwest to receive some payment.'
- 5 It is equally important that Covad be given the
- 6 protection it seeks, by the extended time frames,
- 7 because the remedies available to Qwest go far beyond,
- 8 in terms of harm, a failure of payment.
- 9 And I am not attempting to minimize a
- 10 failure of payment. Don't get me wrong, but Qwest has
- 11 the ability to destroy our business, in a particular
- 12 state, by refusing to process orders, by disconnecting
- 13 circuits. So that's, when I say, you know, and there
- 14 are provisions in the interconnection agreement to
- 15 address nonpayment. There is an, essentially, nothing
- 16 we can do, once the horse has left the barn, and we
- 17 can't process the orders, or get orders processed, and
- 18 service disconnected, there's nothing that gets us back
- 19 to that, given the prohibitions on recovery, of
- 20 remedies, and you just can't unring a bell.
- 21 Q And looking at that, and the
- 22 reasonableness of the provisions from Qwest's
- 23 perspective, and the Commission's undertaking that
- 24 review, the opt-in provisions appear to be problematic,
- 25 at least based on Qwest's testimony. To the extent

- 1 that Covad can receive or could -- might receive what
- 2 it wanted by limiting the various provisions to -- at
- 3 issue, to specific products, as opposed to in the
- 4 general provisions section, is that problematic to
- 5 Covad, in terms of practical difficulties, in the same
- 6 way that Mr. Easton explained practical difficulties,
- 7 addressing the reasonableness of such a proposal from
- 8 Qwest's perspective?
- 9 A Right. I would say, yes. I think what
- 10 Mr. Easton pointed out correctly, our business and
- 11 certainly Qwest's operate by process, and with specific
- 12 time frames to make sure we comply. It is
- 13 extraordinarily difficult, as a business, to create
- 14 exceptions to the rule, rather than having a
- 15 standardized relationship across the board.
- 16 A.L.J. JENNINGS-FADER: Staff, any
- 17 questions based on what I have asked Ms. Doberneck?
- 18 MR. NOCERA: No, Your Honor.
- 19 A.L.J. JENNINGS-FADER: Qwest?
- 20 MS. WAXTER: Yes, Your Honor.
- 21 CROSS EXAMINATION
- 22 BY MS. WAXTER:
- Q Good afternoon.
- 24 A It is that.
- 25 Q You had some discussions earlier with the

Covad Service Customer Policies

Version 030804

TELESPEED AND TELEXTEND INTERNET SERVICE DESCRIPTION	1
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Covad, Covad.net, TeleSurfer Link, TeleSurfer, TeleSoho, TeleSpeed and TeleDefend are registered trademarks of Covad Communications. TeleXtend is a service mark of Covad Communications.	
TELESPEED AND TELEXTEND INTERNET SERVICE DESCRIPTION	***************************************

TELESPEED INTERNET SERVICE

The TeleSpeed Internet Services are Covad's business-oriented Internet Services based on Symmetric Digital Subscriber Line ("SDSL") services provisioned on separate lines from the Customer's phone service. TeleSpeed Internet Services are designed for individuals and businesses who use the Internet for conducting their work and running their businesses. All TeleSpeed orders require a Covad Professional Installation. The availability of TeleSpeed Internet Services depends upon the distance of the Customer from the Central Office of the local telephone company and the condition of the wire from the Central Office to the Customer's premises, otherwise referred to as the Customer Circuit. The TeleSpeed family of Internet Services consists of various speeds, listed in the table below:

Service Name	Maximum Throughput Downstream	Maximum Throughput Upstream	Distance Limitations
TeleSpeed 144	144 kbps	144 kbps	39,600 feet (Verizon East – 18,000 feet)
TeleSpeed 192	192 kbps	192 kbps	15,000 feet
TeleSpeed 384	384 kbps	384 kbps	15,000 feet
TeleSpeed 768	768 kbps	768 kbps	13,000 feet
TeleSpeed 1.1	1,100 kbps	1,100 kbps	12,000 feet
TeleSpeed 1.5	1,500 kbps	1,500 kbps	7,000 feet

To determine the speed a Customer may be able to receive, Covad measures the speed the Customer could get from its equipment at its location to Covad's equipment in the local telephone company's central office. While the distance from the Customer's location to the phone company's central office is a good indication of the speed the Customer may be able to get, there are specific technical limitations that also are considered. Based on certain parameters, it may be necessary for certain orders to be downgraded to the next available speed. If Covad can determine during the provisioning of the order that a

Customer's location does not qualify for the ordered speed, the order will be automatically downgraded to the next available product. While TeleSpeed 1.1 and TeleSpeed 192 are not available for new orders, it is possible that Customers will be downgraded to these products during the provisioning process.

TELEXTEND INTERNET SERVICE

TeleXtend Internet Services are Covad's premium business Internet Services. Using standard T1 technology, TeleXtend Internet Service overcomes the distance limitations inherent in SDSL and Asymmetric Digital Subscriber Line ("ADSL") services, enabling most Customers, located within the serving area of a Covad collocation facility, to receive symmetric speeds of up to 1,500 kbps. All TeleXtend orders require a Covad Professional Installation. The TeleXtend family of Internet Services is offered at full T1 and fractional T1 bandwidth.

Service Name	Maximum Throughput Downstream	Maximum Throughput Upstream
TeleXtend 384	384 kbps	384 kbps
TeleXtend 768	768 kbps	768 kbps
TeleXtend 1.5	1,500 kbps	1,500 kbps

IP ADDRESS PROVISIONING FOR TELESPEED AND TELEXTEND INTERNET SERVICES

Covad provides either one (1) static and public IP address with Network Address Translation ("NAT") or five (5) usable static and public IP addresses without NAT as basic IP configuration options for TeleSpeed and TeleXtend Internet Services. The default IP address setting is 1 static IP with NAT. Additional static and public IP addresses without NAT, in configurations of 13, 29, 61, 125, or 253 usable IP addresses, are available at the time of ordering or after installation for additional setup and recurring charges and for use in accordance with the standards applied by the American Registry Internet Numbers ("ARIN") for the use of all IP space. Customers who wish to purchase 13 or more IP addresses are required to provide information to Covad, in accordance with ARIN guidelines, justifying the usage of the IP addresses before Covad will allocate the additional IP addresses. Covad will provide such Customer-provided information to ARIN upon request from ARIN.

ISP SERVICES FOR TELESPEED AND TELEXTEND INTERNET SERVICES

As part of the TeleSpeed and TeleXtend Internet Services, the Customer will receive the following ISP services:

- Fifteen (15) POP3 email accounts at Covad.net domain
- Fifteen (15) MB web hosting space at Covad.net domain
- Free dial-up services until TeleSpeed or TeleXtend Internet Service is installed
- Ten (10) free hours of local dial-up each month. Additional hours charged at \$1.50 per hour or fraction thereof.
- 24x7x365 customer support
- Access to online SMART Account Manager at www.covad.net

PROFESSIONAL INSTALLATION FOR TELESPEED AND TELEXTEND INTERNET SERVICES

TeleSpeed and TeleXtend Internet Services require Professional Installation services by a Covad Field Service Technician. Covad will schedule an installation time with the Customer to complete the installation process after Covad has confirmed that the Customer's Local Exchange Carrier ("LEC") has provisioned the appropriate loop to the Customer's premises. Professional Installation includes the following on-site services, where required (a limit of 2 hours of included on-site time for each Professional Installation):

- Basic inspection of inside wiring. Maximum of 30 minutes including tracing or toning across phone closets;
- Customer Premises Equipment ("CPE") hardware installation of Covad-qualified equipment.

The Professional Installation fee does not include the cost of the CPE. Professional Installation service does not include installation or repair of inside wiring. Customer is responsible for quality and repair of inside wiring.

SERVICE LEVEL AGREEMENT FOR TELESPEED AND TELEXTEND INTERNET SERVICES

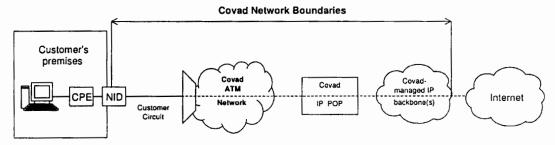
The Covad Service Level Agreement ("SLA") is applicable only to TeleSpeed and TeleXtend Internet Services, and applies only to the Covad Network and TeleSpeed or TeleXtend Customer Circuits. The SLA does not apply to any other services, including but not limited to, TeleSurfer and TeleSoho Internet Services and ISP services (including but not limited to DNS, email, and web hosting). The SLA is applicable only to TeleSpeed and TeleXtend Customers under contract with Covad.

All terms used in this section and not otherwise defined shall have the meaning attributed to such terms in the Customer Agreement (the "Agreement") between Customer and Covad.

DEFINITIONS

<u>Covad Network:</u> "Covad Network" means the infrastructure, facilities, and equipment owned, operated, or controlled by Covad used to provide TeleSpeed and TeleXtend Internet Services. The Covad Network excludes CPE, inside wiring at the Customer's premises, and any network infrastructure, facilities, or other components not owned, leased, operated, or controlled by Covad. See Figure 1.

Figure 1: Covad Network boundaries.



<u>Network Interface Device:</u> "Network Interface Device" ("NID") is defined as the LEC-installed device that connects a Customer's inside wiring to the telephone network.

<u>Customer Circuit:</u> "Customer Circuit" is defined as the physical wiring between Covad's network equipment and the Customer's NID.

<u>Covad IP PoP</u>: A "Covad IP Point of Presence" is defined as a location where Covad's network equipment connects to the public Internet and/or the LEC equipment.

<u>IP Region</u>: An "IP Region" is the set of Covad Service Areas that are served by a particular IP PoP. A listing of Covad IP Regions is available from Covad upon request. Covad may, at its sole discretion, change the number and configuration of IP Regions and the assignment of Service Areas to particular IP Regions. Covad may serve individual Customer Circuits from an IP PoP in a different IP Region.

Installation Interval: For completed Customer Circuits on which billing has commenced, "Installation Interval" is calculated as the number of whole calendar days between (a) the later of (i) the date Covad received the Customer Circuit order from Customer or (ii) the date that Covad has approved Customer's credit application (if applicable) and (b) the Billing Start Date for that Customer Circuit order. This calculation excludes: (a) any period that Covad waits for a response, availability, or action from Customer, (b) any period that Covad waits to install the Customer Circuit resulting from Customer failure to respond, unavailability, lack of access to Customer's facilities, change of requested installation date, or other action or inaction, or (c) any period resulting from a Force Majeure Event.

Service Available: "Service Available" is defined as the ability for a Customer to exchange Internet Protocol ("IP") packets between the Customer's NID and any IP address (of Covad's choice) on the public Internet via the Covad Network.

Service Outage: There is a "Service Outage" on a specific Customer Circuit when IP packets cannot be exchanged between the Customer's NID and any IP address (of Covad's choice) on the public Internet via the Covad Network.

A Service Outage excludes any failures to which any of the following have contributed in whole or in part:

- a) Scheduled maintenance or other planned outages on the Covad Network;
- b) Problems with, or maintenance on, Customer's applications or equipment (including, but not limited to, inside wiring, or changes to or reconfiguration of Customer's CPE not performed by Covad); or
- c) A Force Majeure Event, as defined in the Agreement.

<u>Time to Restore Service</u>: "Time to Restore Service ("TTR")" is defined as the duration of a Service Outage. Time to Restore Service is calculated commencing with the date and time (as set forth on the trouble ticket) on which Covad initially reports the Service Outage on a trouble ticket containing all information necessary for Covad to respond to the trouble ticket and ending upon confirmation by Covad to Customer that the service is restored. This calculation excludes any period that Covad waits for a response, availability, or action from Customer, and further excludes any period Covad spends monitoring the affected Customer Circuit after Covad has restored service to the affected Customer Circuit.

Monthly Service Availability: "Monthly Service Availability" is defined as the percentage of minutes in a calendar month a Customer Circuit did not experience a Service Outage in that month. Specifically, Monthly Service Availability is a percentage calculated as:

1- [(aggregate Time to Restore Service for all Service Outages experienced by Customer Circuit in a calendar month) / (total minutes in same month)]*100

<u>Severe Problem:</u> A Customer Circuit is experiencing a "Severe Problem" if the aggregate Time to Restore Service for all Service Outages for such Customer Circuit is in excess of twenty-four (24) hours in any calendar month.

<u>Chronic Problem:</u> A particular Customer Circuit is experiencing a "Chronic Problem" if a subsequent Severe Problem occurs (a) within one (1) calendar month following the calendar month in which a Customer experienced a Severe Problem, and (b) Covad did not recommend to disconnect the Customer Circuit at the time of the prior Severe Problem.

<u>Network Delay</u>: "Network Delay" is defined as the time in milliseconds ("ms") required for a round-trip ping test between the Customer's NID and a Covad IP PoP in a different IP Region, provided that the only traffic on the Customer Circuit during the ping test is the test traffic.

Average Network Delay: The "Average Network Delay" on a Customer Circuit is the hourly average of the Network Delay measurements conducted on that Customer Circuit. Average Network Delay is not measured when the Customer Circuit is experiencing a Service Outage.

<u>Delivery</u>: "Delivery" is defined as the percentage of IP packets successfully transmitted between the Customer's NID and a Covad IP PoP in a different IP Region in a period, provided that the only traffic on the Customer Circuit during the test is the test traffic.

Average Delivery: The "Average Delivery" on a Customer Circuit is an hourly average of the Delivery measurements conducted on that Customer Circuit. Average Delivery is not measured when the Customer Circuit is experiencing a Service Outage.

Time to Repair Service: "Time to Repair Service" is defined as the duration that the Average Network Delay or Average Delivery on a Customer Circuit exceeds the targets for Average Network Delay or Average Delivery set forth below. Measurement of Time to Repair Service commences with the date and time (as set forth on the trouble ticket) on which Covad reports the Network Delay or Delivery issue on a trouble ticket containing all information necessary for Covad to respond to the trouble ticket and ends upon confirmation by Covad to Customer that performance within the Average Network Delay or Average Delivery targets is restored. This calculation excludes any period that Covad waits for a response, availability, or action from Customer, and further excludes any period Covad spends monitoring the affected Customer Circuit after Covad has restored performance to within the targets for Average Network Delay or Average Delivery for the affected Customer Circuit.

SERVICE LEVELS AND REMEDIES

Installation Interval: Covad's target for Installation Interval for each Customer Circuit is:

Service	Installation Interval Target
TeleSpeed Customer Circuit	30 calendar days
TeleXtend Customer Circuit	30 calendar days

If Covad does not meet the Installation Interval Target for a Customer Circuit per the above definition and Customer requests a credit, Covad will provide Customer with a credit ("Installation Interval Credit") of fifty percent (50%) of the first whole month's monthly recurring charge for that Customer Circuit.

Monthly Service Availability: Covad's target for Monthly Service Availability for each TeleSpeed Customer Circuit and TeleXtend Customer Circuit is:

Service	Monthly Service Availability Target	
TeleSpeed Customer Circuit	99.9%	
TeleXtend Customer Circuit	99.99%	

If Covad does not meet the Monthly Service Availability Target for a Customer Circuit per the above definition and Customer requests a credit, Covad will provide Customer a credit of three percent (3%) per hour of the monthly recurring charge for such Customer Circuit for each hour (or fraction thereof, rounded to the nearest fifteen (15) minutes) of Service Outage experienced by the Customer Circuit in excess of the Service Availability Target ("Service Availability Credit"); provided that in no case will the aggregate of all Service Availability Credits and Time to Restore Credits (defined below) exceed the total monthly recurring charge billed for such Customer Circuit during such month.

Example: For the purposes of illustrating the Service Availability Credit only, if a TeleSpeed 384 Customer Circuit (i.e., monthly recurring charge of \$179.00) experiences a single Service Outage with Time to Restore Service of 14 hours, 22 minutes in January 2003, Covad will calculate the Service Availability Credit in the following manner:

- Subtract Monthly Service Availability Target (in minutes) from the Time to Restore Service for the Service Outage for the
 month to determine the Time to Restore Service in excess of the Monthly Service Availability Target. In this case, the
 calculation is 14 hours, 22 minutes Time to Restore Service 45 minutes allowable Service Outage time (1-99.9% of
 44,640 minutes in January) = 13 hours, 37 minutes outage in excess of target;
- 2) Round to the nearest 15 minutes = 13 hours, 30 minutes;
- 3) Multiply by 3% per hour = 41% of monthly recurring charge;
- 4) Multiply by monthly recurring charge (\$179.00) = \$73.39 Service Availability Credit.

<u>Time to Restore Service</u>: Covad's target for Time to Restore Service for each Service Outage experienced by a TeleSpeed Customer Circuit or TeleXtend Customer Circuit is:

Service	Time to Restore Service Target
TeleSpeed Customer Circuit	24 hours
TeleXtend Customer Circuit	4 hours

If Covad does not meet the Time to Restore Service Target for a Service Outage on a Customer Circuit per the above definition and Customer requests a credit, Covad will provide Customer a credit of ten percent (10%) of the monthly recurring charge for that Customer Circuit ("TTR Credit"), in addition to any other applicable credits for Service Availability, provided that in no case will the aggregate of all Service Availability Credits and TTR Credits for that Customer Circuit in a month exceed the total monthly recurring charge billed by Covad for such Customer Circuit for service during such month.

<u>Severe and Chronic Problems:</u> For any Customer Circuit that Covad verifies has experienced a Severe Problem, Covad may recommend to disconnect the affected Customer Circuit. If Covad recommends to disconnect the affected Customer Circuit, Covad will provide a credit to Customer for the amount of such disconnection fee (if any) assessed by Covad.

For any Customer Circuit that Covad verifies has experienced a Chronic Problem, Customer may give Covad approval to disconnect such Customer Circuit, and Covad will provide a credit to Customer for the amount of any disconnection fee (if any) assessed by Covad.

Average Network Delay: Covad's Average Network Delay target for all TeleSpeed & TeleXtend Customer Circuits is:

Service	Average Network Delay Target	
TeleSpeed Customer Circuit	110 milliseconds ("ms")	
TeleXtend Customer Circuit	110 ms	

If Covad does not meet the Average Network Delay Target for a Customer Circuit in a month per the above definition and Customer requests a credit, Covad will credit the Customer ("Network Delay Credit") according to the following table:

If Average Network Delay Time to Repair Service exceeds:	Network Delay Credit is:
One (1) hour in a calendar month	Five percent (5%) of the monthly recurring charge for that Customer Circuit
Two (2) hours in a calendar month	Ten percent (10%) of the monthly recurring charge for that Customer Circuit

Average Delivery: Covad's targets for Average Delivery for all TeleSpeed and TeleXtend Customer Circuits are:

Network	Average Delivery Target
TeleSpeed Customer Circuit	99.9%
TeleXtend Customer Circuit	99.9%

If Covad does not meet the Average Delivery Target for a Customer Circuit per the above definition and Customer requests a credit, Covad will credit the Customer ("Delivery Credit") according to the following table:

If Average Delivery Time to Repair Service exceeds:	Delivery Credit is:
One (1) hour in a calendar month	Five (5%) of the monthly recurring charge for that Customer Circuit
Two (2) or more hours in a calendar month	Ten (10%) of the monthly recurring charge for that Customer Circuit

CLAIMS AND CREDIT AVAILABILITY

It is the Customer's responsibility to identify, request and document all bona fide SLA claims and corresponding credits. The easiest way for Customers to notify Covad of an SLA claim is to submit the email form located in the Customer Support section of SMART Account Manager. To be eligible for service credits, Customer must first report service availability, delay, or delivery events to Covad Customer Care. Covad will notify Customer of its resolution of the reported event. Customer must claim any applicable service credits by the 15th day of the month following the month in which (a) the reported incident was resolved (in the case of credits for Service Availability, Time to Restore Service, Network Delay, or Delivery credits) or (b) the Billing Start Date of the affected Customer Circuit (in the case of Installation Interval credits). Covad will verify the Customer's claim within thirty (30) days of a complete and properly submitted credit request, and will apply any applicable credits, as determined at Covad's sole discretion, to the Customer's invoice issued on the next billing anniversary date following Covad's thirty (30) day review. NOTE: Total credits in a given month on a TeleSpeed or TeleXtend Customer Circuit may not exceed the monthly recurring fees charged by Covad for such Customer Circuit during such month. Any excess credits will not carry over into later invoices.

For the purposes of illustrating the timelines for Credit Availability only, if Covad resolves an incident in January 2003 – regardless of when Covad opened the trouble ticket for the incident – and Customer wishes to receive a credit for the incident, Customer must claim the applicable credits by February 15, 2003. If the claim is complete and is properly submitted, Covad will verify the claim by March 15, 2003, and will apply any applicable credit to Customer's next invoice. Customer may not, under any circumstances, submit credit requests after the date to submit service credit requests set forth above has passed; Covad will not accept late credit requests.

Requests for SLA credits must be submitted to Covad Customer Care in writing or by email to support@covad.net. A separate credit request must be submitted for each Customer Circuit for which a claim is made. In addition, a separate credit request must be submitted for each type of credit (e.g., Service Availability Credit, Installation Interval Credit, etc.) requested if multiple types of claims are made on a single Customer Circuit; provided, however, that requests for Service Availability Credits and Time to Restore Credits for a single Customer Circuit may be made via the same credit request.

Covad will reject any credit requests that do not provide sufficient supporting information to allow Covad to verify the claim. Such information must include:

- The contact name for the TeleSpeed or TeleXtend Internet Service on which the incident occurred;
- The Covad circuit number for the TeleSpeed or TeleXtend Customer Circuit on which the incident occurred;
- · The specific type of credit being requested;
- The date(s) of the resolution of the trouble ticket(s) (for credits for Service Availability, Time to Restore Service, Network Delay, or Delivery) or the Billing Start date (for credits for Installation Interval) for the incident; and
- Any other information that Covad may reasonably request to assist Covad in verifying Customer's credit request.

Covad does not guarantee that provision of the above information will be sufficient to allow Covad to verify the request. Covad will inform Customer of credit requests rejected for insufficient information, and Customer will be allowed to resubmit such requests with additional supporting information within five (5) business days of Covad's notification of its rejection of the credit request. After Customer resubmits the credit request with the additional supporting information, the standard verification and crediting timelines (outlined above) will apply. Covad will notify of results within 5 business days of receipt of such requested additional information.

Covad reserves the right to modify the format for submission of, and information required for, SLA credit requests.

Covad may, at its reasonable discretion and without notice, limit or eliminate Customer's eligibility and ability to submit SLA credit requests if (a) Customer has an undisputed past-due amount owed to Covad or (b) in Covad's sole determination, Covad determines that Customer has:

- Failed on one or more occasions to comply with the credit request policies and requirements described herein;
- · Submitted an excessive number of rejected SLA credit requests; or
- Used, or attempted to use, the SLA credit process in a frivolous, abusive, or fraudulent manner.

Covad will restore Customer's ability to submit SLA credit requests once Customer (i) has paid all amounts owed Covad (in case of failure to pay outstanding invoices), or (ii) in all other cases, provides to Covad assurances sufficient for Covad to determine Customer has cured the conduct that initiated Customer's ineligibility to participate in the SLA.

TELESPEED EXTENDED COVERAGE AREAS SERVICES

Covad offers Customers service in Covad's extended coverage areas, which are beyond the areas covered by Covad's network (the "ECA Services"). However, the ECA Services differ from Covad's standard Services in various ways that are described below. If Customer purchases ECA Services, the following will apply:

Service Branding. The names of the SDSL ECA Services will be tied to the corresponding Covad Service Name set forth below. For all other purposes except as set forth herein, the ECA Service will be treated as the corresponding Covad Service. T1 and ADSL Services are not available as ECA Services.

Covad Service Name	ECA Service Name	
TeleSpeed 144	TeleSpeed 144 ECA	
TeleSpeed 192	TeleSpeed 192 ECA	
TeleSpeed 384	TeleSpeed 384 ECA	
TeleSpeed 768	TeleSpeed 768 ECA	
TeleSpeed 1.1	TeleSpeed 1.1 ECA	
TeleSpeed 1.5	TeleSpeed 1.5 ECA	

Professional Installation and Field Service. All ECA Services will be provisioned and all field service dispatches will be serviced by a Field Service Technician from one of Covad's partners rather than a Covad Field Service Technician. As a result, Covad waives all liability for installation or field service related issues, including but not limited to, personal injury, death or tangible or intangible property damage.

SLAs. All SLAs remain as set forth for standard Covad Services, with the exception that there will be no SLAs for Time to Restore Service (TTR), for Monthly Service Availability, or for Average Network Delay.

CPE. Customer-provided and Customer-managed CPE may not be used with ECA Services without prior written consent of Covad. The CPE available will be limited to: SDSL CPE: Efficient 5851 and IDSL CPE: Efficient 5871. Covad will provide a one-year limited warranty on this CPE as follows: If, during the warranty period, Covad deems the equipment to be faulty and believes that a replacement is needed, a replacement CPE will be shipped to the Customer within three (3) business days. If a technician visit is also required, Covad's standard fees for a technician dispatch will apply.

Move Orders and Changes. Disconnection and a new order will be required for moves and CPE may not be transferred to a new location. Moves within a Customer location also require a new installation and Customer will be billed for such new installation. Upgrade and downgrades during an order will not be permitted; however, Customers can upgrade or downgrade after the order has been installed by calling Covad (standard upgrade and downgrade terms and conditions apply).

SMART Account Manager. Certain SMART account manager functionality will not be available to manage the ECA Service accounts online and certain information may not be available for viewing in real-time.

Loop Conditioning. In the event that loop conditioning is required on a Customer Circuit, Covad may charge a fee of \$199.00 per Customer Circuit

TELESURFER AND TELESOHO INTERNET SERVICE DESCRIPTION

TeleSurfer and TeleSoho services are Internet Services based on Asymmetric Digital Subscriber Line ("ADSL") services provisioned on a shared-line basis (meaning that the Customer will receive ADSL services over the same line on which he or she currently receives his or her voice service). The availability and performance of TeleSurfer and TeleSoho Internet Services depends the distance of the Customer from the Central Office of the local telephone company and the condition of the wire from the Central Office to the Customer's premises. To subscribe to Covad ADSL services, Customers must have local telephone service through one of the following companies: SBC, Verizon, Qwest, or BellSouth. If Customer has local phone service with one of the listed companies at the time of the Covad order, and subsequently changes their voice service while subscribing to Covad ADSL service, Customer will lose their Covad service and will be charged any applicable early termination/disconnection fees if the termination occurs during the Minimum Term. This is the nature of line-sharing services, and cannot be altered for individual customers.

Service Name	Installation Service	Maximum Throughput Downstream	Maximum Throughput Upstream	Distance Limitations
TeleSurfer Link*	Self Installation or Professional Installation	Up to 384 kbps	Up to 128 kbps	18,000 feet
TeleSurfer*	Self Installation or Professional Installation	Up to 608 kbps	Up to 128 kbps	18,000 feet
TeleSurfer Plus	Self Installation or Professional Installation	Up to 1,500 kbps	Up to 128 kbps	18,000 feet
TeleSoho	Self Installation or Professional Installation	Up to 1,500 kbps	Up to 384 kbps	18,000 feet
TeleSoho 3.0/768	Self Installation or Professional Installation	Up to 3,000 kbps	Up to 768 kbps	10,000 feet

^{*} These services have been discontinued for new orders.

TeleSurfer and TeleSoho Internet Services are "commercially reasonable efforts" services. This means that Covad does not guarantee any upstream or downstream speeds. Service speeds are dependent on the distance of the Customer from the Central Office and the condition of the Customer Circuit, among other factors. TeleSurfer and TeleSoho Internet Services that pass at least 128 kbps of bandwidth downstream and 64 kbps of bandwidth upstream is considered to meet the service's performance standard ("Performance Standard"). The exception is TeleSoho 3.0/384 which has a performance standard of 1500 kbps downstream and 128 kbps upstream. Customers that order TeleSoho 3.0/768 service and cannot realize the Performance Standard, can disconnect their Service (within 30 days of the billing start date) or downgrade TeleSoho 1.5/384. TeleSurfer and TeleSoho Internet Services are rate adaptive ADSL services. This means that Customers may experience downstream speeds between 1,500 kbps and 3,000 kbps for TeleSoho 3.0/768, 128 kbps and 1,500 kbps for TeleSurfer Plus and TeleSoho 1.5/384, between 128 kbps and 608 kbps for TeleSurfer, and between 128 kbps and 384 kbps for TeleSurfer Link. For the purposes of determining this speed, Covad measures the speed the Customer can get from its equipment at its location to Covad's equipment in the local telephone company's central office.

IP ADDRESS PROVISIONING FOR TELESURFER AND TELESOHO INTERNET SERVICES

TeleSurfer Internet Services will be provisioned with one (1) dynamic IP address via PPPoE (Point to Point Protocol over Ethernet). Covad will provide the PPPoE software to the Customer in the Covad Self Installation Kit. Static IP addresses are not available with any TeleSurfer services.

TeleSoho Internet Services will be provisioned with one (1) fixed and public IP address with Network Address Translation. When NAT is chosen as the IP configuration, the static IP address is terminated on the Customer Premises Equipment and cannot be assigned to individual computers or devices. TeleSoho Customers may also choose five (5) static and public IP addresses without NAT for an additional fee.

ISP SERVICES FOR TELESURFER AND TELESOHO INTERNET SERVICES

As part of TeleSurfer and TeleSoho Internet Services (excluding TeleSurfer Link), the Customer will receive the following ISP services:

- Fifteen (15) email accounts at Covad.net domain
- Ten (10) MB web space at Covad.net domain
- Free dial-up services until TeleSurfer or TeleSoho Internet Service is installed
- Ten (10) free hours of local dial-up each month. Additional hours charged at \$1.50 per hour or fraction thereof.
- 24x7x365 customer support
- Access to online SMART Account Manager

ISP SERVICES FOR TELESURFER LINK INTERNET SERVICE

As part of the TeleSurfer Link Internet Service, the Customer will receive the following ISP services:

- One (1) email account at Covad.net domain
- Free dial-up service until TeleSurfer Link Internet Service is installed
- Dial service charged at \$1.50 per hour or fraction thereof
- 24x7x365 customer support
- · Access to online SMART Account Manager

SELF INSTALLATION FOR TELESURFER AND TELESOHO INTERNET SERVICES

For all Self Installation Services, the Customer is responsible for performing all installation activities at the Customer's premises. Covad will ship the DSL equipment in a Self Installation Kit directly to the Customer after verification that Customer's LEC will provide the DSL capable loop. Covad offers technical telephone assistance to assist the Customer with any installation issues. If the Customer is unable to complete the installation, the Customer can request a Professional Installation by calling Covad Customer Care at 1-888-64-COVAD. Please note that Covad charges a fee for Professional Installation services. Covad will close the order and begin billing after the Customer's LEC confirms that the DSL capable loop has been delivered, or when Covad detects traffic on the Customer Circuit, whichever occurs first. The Self Installation Kit for TeleSurfer and TeleSoho Internet Services includes the following components:

- Ethernet Bridge (TeleSurfer Internet Services) or ADSL router (TeleSoho Internet Services)
- Ethernet cable

- Phone cord/cable
- Five (5) analog DSL filters 4 in-line filters and one wall mount filter
- User Guide and Troubleshooting CD
- Tango DSL Connection Software (TeleSurfer Internet Services)

PROFESSIONAL INSTALLATION FOR TELESURFER AND TELESOHO INTERNET SERVICES

If the Customer has selected a Professional Installation at the time of order entry, Covad will schedule an installation time with the Customer to install the DSL Installation Kit. Prior to the Professional Installation, Covad will ship the DSL equipment, including the bridge or router, to the Customer. The Customer can complete the installation of the DSL equipment, and request that the Professional Installation be cancelled by calling Covad Customer Care at least one (1) business day prior to the scheduled installation date to avoid a cancellation charge. In addition, if Customer is unable to install the Self Installation Kit, Customer may request a Professional Installation by calling Covad Customer Care at 1-888-64-COVAD. Please note that Covad charges a fee for Professional Installation services.

Professional Installation includes the following on-site services, where required (limit of 2 hours of on-site time for each Professional Installation):

- NID Splitter or in-line filter installation including cost of filters or splitter;
- Basic inspection of inside wiring. Maximum of 30 minutes including tracing or toning across phone closets;
- · Hardware installation of Covad-provided DSL equipment;

Professional Installation fee does not include CPE fees. Professional Installation service does not include installation or repair of inside wiring, installation of software on the Customer's computer, or any work necessary on the Customer's Local Area Network (LAN). Customers are responsible for quality and repair of inside wiring, any software installation, and work necessary to connect their LAN to the Covad DSL service. Tango DSL Connection Software is compatible with the following operating systems: Windows 98/98SE, Windows NT 4.0 or higher, Windows ME, Windows 2000, Windows XP Home, Windows XP Pro, Mac OS 8.6, Mac OS 9.1 or higher, and Mac OS 10.1 or higher. TeleSurfer customers with an operating system other than one of these must provide their own PPPoE connection software. Covad Customer Care will not support any PPPoE connection software other than that provided in the Covad installation kit.

DIAL INTERNET SERVICE DESCRIPTION

As part of the Dial Internet Service, the Customer will receive the following:

- 150 hours of dial service each month; additional hours charged at \$1.50 per hour or fraction thereof.
- Five (5) email accounts at Covad.net domain
- Ten (10) MB web space at Covad.net domain
- 24x7x365 customer support
- Access to online SMART Account Manager tool

INTERNET SERVICES POLICIES

Only Covad technicians may complete delivery of a Customer Circuit (except in the case of Self Installation Services). Covad will not authorize the Customer or a Customer-designated vendor to complete Customer Circuit delivery. This applies to all TeleSpeed and TeleXtend Internet Services and TeleSurfer or TeleSoho Professional Installation Services, but does not apply to Self Installation Services until such time that any of the Services rendered under Professional Installation are needed or specifically requested by Customer (e.g., NID splitter installation is required).

If Covad cannot deliver the ordered service due to technical issues, and the Customer does not want a downgraded service speed, Covad will allow the Customer to cancel the order. The Customer will not be liable for any service setup and equipment

fees, other than fees for Missed Appointments (if applicable). For TeleSpeed orders, a service installation will be considered successful if a signal is successfully passed from Covad's IP PoP to the NID at the Customer's premises at the minimum requested bitrate in each direction.

Due to the rate adaptive nature of ADSL orders, the technician will not change a TeleSurfer or TeleSoho Internet Service order while completing the installation. The TeleSurfer or TeleSoho order is closed and billed at the rate of the service ordered. If not satisfied, the Customer has thirty (30) calendar days from completion of the TeleSurfer or TeleSoho order to submit a change order at no charge by calling Covad Customer Care at 1-888-64-COVAD to downgrade or cancel the order. On downgrades, Covad does not refund the difference in service pricing on previous service charges.

STANDARD INSIDE WIRING POLICIES FOR TELESPEED AND TELEXTEND INTERNET SERVICES

Standard Inside Wiring Services, as outlined below, for TeleSpeed and TeleXtend Internet Services are not billable. The technician will perform the following services as necessary (provided that such services can be completed within the two hour installation window):

- · Positive identification of a new Covad circuit delivered to the Customer's NID;
- Toning, tracing and completing all necessary cross connects on existing inside wiring between the Covad circuit at the NID and the Customer's designated jack location;
- Wiring of the existing jack to support the DSL or T1 router, provided that existing wiring is available;
- · Router configuration and line test; and
- Any inside wiring that the technician can complete within 15 minutes.

For any TeleSpeed and TeleXtend inside wiring beyond the Standard (non-billable) Inside Wiring Services listed above, Covad charges standard rates for billable inside wire services. Please see the Other Fees for Covad Services section of this document. Before performing any inside wiring beyond Standard Inside Wiring Services for TeleSpeed and TeleXtend Internet Service, the technician will require the Customer's signature on an Inside Wiring Authorization Form to acknowledge that additional charges may be associated with the work about to be performed.

ADDITIONAL INSIDE WIRING POLICIES

Depending on the extent of inside wiring required, Covad may not be able to complete the inside wiring. The Customer is responsible for completing the wiring or contracting a third-party for such services. Covad does not provide extensive inside wiring services as part of our order delivery process. If the technician determines that extensive inside wiring is required, the technician will confirm successful service activation at the NID. The technician will leave the configured CPE with the Customer, and Covad will close the order. If Covad agrees to do the inside wiring, Covad will schedule such extensive inside wiring as close as possible to the installation services date, and Covad will charge the Customer additional fees for such inside wiring work. Please see the Other Fees for Covad Services section of this document for further details. Covad reserves the right to refuse to do any extensive inside wiring work requested. If the order is cancelled due to extensive inside wiring, Covad will assess standard cancellation and disconnect charges as specified in the Other Fees for Covad Services section.

Extensive inside wiring includes, but is not limited to:

- Tracing and testing existing wire through multiple units, multiple stories, or multiple telephone closets in a high-rise building or business park;
- Other complex wiring situations where physical laying of cable or wiring is required;
- New wiring due to service location greater than 50 feet from the NID;
- · Wiring from the NID to a desired location; or
- Moving an existing jack to another location.

CONFIGURATION OF SERVERS

Covad also utilizes certain Internet tools and software to verify the configuration of servers connected to Covad's network. Customers may not operate servers in an "open relay" configuration (a configuration whereby a mail server processes email messages where neither the sender nor the recipient is a local user), as servers configured in this manner expose both Covad's network and that particular Customer to fraudulent and abusive use by third parties. If a Customer requires assistance in determining the configuration of a server and/or instructions to secure a server, please contact abuse-team@covad.com. Please refer to Covad's Acceptable Use Policy, posted at http://covad.net/legal/.

CUSTOMER PREMISES EQUIPMENT LIMITED WARRANTY

If Customer purchases Customer Premises Equipment directly from Covad, the equipment carries a one-year limited warranty, beginning on the Billing Start Date for the Covad Internet service. If, during the warranty period, Covad deems the equipment to be faulty and believes that a replacement is needed, Covad will:

- 1. For TeleSpeed and TeleXtend Internet Services, Covad will schedule a technician to go to the Customer's location. Customer will not be billed for a technician visit unless the technician determines the equipment failure was due to the Customer's negligence or abuse of the equipment, in which case Covad's standard fees for a technician dispatch will apply (in addition to Covad's then-standard fees for the replacement CPE).
- 2. For TeleSurfer and TeleSoho Internet Services, Covad will ship replacement equipment to the Customer and provide freight prepaid packaging for return of the faulty equipment. Instructions on the returns process are available by calling the Covad Customer Care. Covad requires that the Customer return the faulty equipment. In the event the Customer does not return the faulty equipment, Covad will charge Customer the current standard price for a replacement Self Installation Kit.

After expiration of the one-year limited warranty period, Covad will replace such out-of-warranty CPE; provided, however, that Customer will be responsible for the standard charge for the CPE and the technician visit (if applicable). In any instance where Customer pays for new CPE, the warranty period will be reset and will begin on the date the equipment is delivered to the Customer. The warranty period is not reset for warranty replacement equipment that Covad provides free of charge. Covad will only honor the original one-year warranty period that began with the purchase of the original equipment. Customers that migrate to Covad Broadband Solutions from another Covad wholesale partner are not eligible for a new warranty period. Warranty periods are only reset when the Customer pays for a new CPE.

HOSTING SERVICES DESCRIPTION

Covad Hosting Services includes Email and Web Hosting Services. These services allow Customers to outsource the storage, hardware and software requirements for their email system and Web site. In exchange for providing this online service, Covad charges a monthly fee, a set up fee for certain plans, and any other applicable fees set forth below. Covad Hosting Services are designed for individuals and businesses who want to establish an identifiable presence on the Internet. Using these services, Customers can:

- Register a new or transfer an existing domain;
- Include their domain in their email address(es);
- · Use Covad-provided or non-Covad provided software to build and manage a web site; and
- Host the Web site on Covad-provided servers, enabling end-users to access the Customer's site.

Covad Hosting Services are available to all broadband access Customers and are not restricted by physical location.

COVAD EMAIL AND WEB HOSTING PLANS

	Email Only	Basic	Enhanced	Premium
Number of Email boxes	10	20	30	50
Web Site Storage (MB)	NA	50	100	250
Web Site Transfer (MB)	NA	2,500	5,000	10,000
Covad Web Builder	NA	Yes	Yes	Yes
Web Reporting	NA	Yes	Yes	Yes
Webmail	Yes	Yes	Yes	Yes
Email Storage (MBs/ mailbox)	10	10	10	10
Web site storage (MBs)	N/A	50	100	250
Web site transfer speed (MBs/mo)	N/A	2,500	5,000	10,000

*The Email Only plan entitles the Customer to register a domain and use email associated with their domain but does not include any web design and webhosting features.

**Additional email boxes, email and web site storage, and website transfer are available for the additional fees described below.

Covad Hosting Services are shared, meaning that a Customer's web site co-exists with other Customers' sites on the same Covad web server. The benefits to Customers of shared services are that they are more efficient and less expensive.

CONTRACTS

All Customers must accept the Covad Hosting Services Agreement. The contract term is month-to-month and may be canceled by either party as described below. There is no cancellation fee associated with Covad Hosting Services, except that Covad will not refund fees paid to Covad prior to cancellation of the Agreement or any fees collected for domain name registrations. Customers are required to abide by the terms outlined in the Hosting Services Agreement, these Customer Policies and the Acceptable Use Policy. Covad reserves the right to cancel a Customer's service for violation of these terms.

CANCELING SERVICE

Cancellation can occur for one of two reasons:

1. Customer-initiated cancellation:

A Customer may cancel its hosting plan at any time. In the event that a Customer cancels its hosting plan but wishes for Covad to maintain its domain name, the account will remain active and Covad will bill the Customer for the periodic (annual) domain name registration fee. If a Customer cancels its Covad access service, the hosting plan can remain in service and Covad will bill the Customer for the monthly recurring fees for the hosting plan and the periodic (annual) domain name registration fee.

2. Covad-initiated cancellation

Covad retains the right to cancel service at any time by providing Customer with thirty (30) days notice. Covad also retains the right to cancel service at any time for reasons related to:

- Non-payment or other breach of the Hosted Service Agreement
- Violation of the terms in these Policies or the Acceptable Use Policy

All Customer-initiated cancels must be done by calling Covad Customer Care at 888.64.COVAD or by faxing a notice of cancellation Covad at 866.839.2887. In some cases where a Customer has ordered a broadband access service and a hosting plan at the same time, Covad discovers after the order is submitted that it cannot provide broadband access service to the Customer's location. In this instance, Covad will notify Customer via email that Covad was not able to provision the access service that Customer had requested, and Covad will ask Customer if Customer would like to continue with its hosting plan. The Customer has five (5) days to notify Covad of its intent to keep its hosting plan. If the Customer does not notify Covad within five days that Customer would like to keep its hosting plan, Covad will cancel the hosting plan on the sixth (6th) day after email notification.

COVAD EMAIL AND WEB HOSTING SERVICE CUSTOMER CARE POLICY

Covad provides 24x7x365 support for Customers using any hosting plan and covers issues related to:

- Ordering a hosting plan
- Registering or transferring a domain
- Setting up a web site using Covad-provided software
- Helping manage any hosting service features and settings
- Troubleshooting technical problems related to Covad hosting services

As a policy, Covad will not provide support for Hosting Services other than as listed above. In particular, Covad will not:

- Contact the other registrar/provider on behalf of the Customer to transfer a domain
- Resolve domain transfer problems that are caused by the other registrar/provider
- Call the Customer when the domain has been successfully transferred. This can be monitored in SMART.
- Build a web site for the Customer
- Answer in-depth questions about non-Covad-provided web design software (i.e., FrontPage)
- Debug HTML, ASP, or Perl code
- · Perform data mining analysis

ADDITIONAL EMAIL AND WEB HOSTING SERVICE FEES

Add-on Features	Monthly Price	
Additional Mailboxes	\$2 per email box	
Additional Email storage	\$3.75 per 5 MBs	
Additional Web site storage	\$3.75 per 5 MBs	
Additional Web site transfer	\$1 per 100 MBs	
Domain Name Registration	\$20 per year	

CONTENT MANAGED AND DISTRIBUTED USING COVAD EQUIPMENT AND FACILITIES

By definition, the Customer is using Covad equipment and facilities to store and distribute content via email and a web site. As such, Covad's reputation is at risk if a Customer abuses acceptable use policies set forth by Covad. Please see the Covad Acceptable Use Policy ("AUP") to become familiar with these issues.

TELEDEFEND SECURITY SERVICES DESCRIPTION

Service Name	Description
TeleDefend Firewall	Managed firewall service based on NetScreen device and using stateful packet inspection. Covad pre-configures and/or remotely configures the NetScreen device per Customer's order but Customer must self-install the NetScreen device. Once installed, Covad provides remote 24x7x365 customer support and 24x7x365 health monitoring.
TeleDefend VPN/Firewall	Site-to-site virtual private networking ("VPN") service based on NetScreen device and using IPSec Triple DES ("3DES") encrypted tunnels. Also includes a managed firewall, which uses stateful packet inspection. Covad pre-configures and/or remotely configures the NetScreen device per Customer's order but Customer must self-install the NetScreen device. Once installed, Covad provides remote 24x7x365 customer support and 24x7x365 health monitoring.

Covad may supply new or recertified equipment on new orders. Recertified equipment is equipment that (a) may have been removed from its original packaging by Covad or returned to Covad by an End User after a promotional offer, (b) is free from visible defects, and (c) is equivalent in function and appearance to new units. On new and recertified equipment purchased by Customer through Covad, Covad will provide a one (1) year replacement warranty from the Billing Start Date for manufacturer's defects. At Covad's discretion, any equipment Covad supplies as replacement equipment for existing equipment (e.g., for warranty purposes) may be new, recertified or refurbished. Refurbished equipment is previously owned equipment that has been remanufactured by the manufacturer or its agent, is free from visible defects, and is equivalent in functionality to new units. Any equipment supplied as replacement equipment will carry the remainder of the one (1) year warranty described above.

FIREWALL CONFIGURATIONS

Customers can specify up to 20 total incoming and outgoing policies for TeleDefend Firewall or TeleDefend VPN/Firewall Services. These policies can be customized to meet most Customer requirements. Customers can define an inbound policy to block all incoming connections for maximum security, or define an inbound policy that will allow access only to host servers for email, web pages, or almost any other IP based service. Outbound policy definitions can be created to limit the types of applications that can be accessed by users from within the network. For example, web surfing can be limited to only specific computers. Customers will work with a designated Covad Sales Engineer to define and implement TeleDefend Firewall and TeleDefend VPN/Firewall Services.

TELEDEFEND PROVISIONING

For each TeleDefend Service, Covad follows the following provisioning process:

- Covad configures the NetScreen device prior to shipping to Customer in the TeleDefend Self Installation Kit. The
 Self Installation Kit includes one (1) NetScreen device with a static and public IP address assigned, required cables,
 and installation instructions. For TeleDefend VPN/Firewall services, one (1) NetScreen device is needed for each site.
- Covad ships TeleDefend Self Installation Kit(s) to Customer's site(s). Covad notifies Customer of shipped
 TeleDefend Self Installation Kit(s) via an email, which includes shipping information. Upon receipt, Customer installs
 NetScreen device per installation instructions and calls Covad Customer Care to finalize configuration and activate
 service.
- Covad commences billing at the earlier of: (a) the time at which Customer has successfully completed the installation
 process and Covad has confirmed activation in an email and/or phone call, or (b) ten (10) business days after Covad
 has shipped the TeleDefend Self Installation Kit.

TELEDEFEND SERVICE LEVEL AGREEMENT

TeleDefend Customers receive TeleDefend-specific SLA. Additional SLAs might apply based upon the access service subscribed to by the customer. The TeleDefend SLA represents Covad's commitment to providing reliable security services for its Customer's only remedy for service-related issues.

Time to Respond: Covad will respond to each TeleDefend configuration change request or trouble ticket within 24 hours. If Covad does not respond within such a 24 hour period, Covad will credit Customer 10% of monthly TeleDefend Service charges at the affected site per incident, up to a maximum of 30% per month. The Customer must proactively report failure to meet this SLA to receive credit for the month of the request.

Emergency Hardware Swap: In the event of a TeleDefend hardware failure, Covad will replace the security hardware within two (2) business days of when the failure is reported to and confirmed by Covad Customer Care. If Covad does not replace the security hardware within the two (2) business days, Covad will credit Customer 10% of monthly TeleDefend Service charges at the affected site per incident, up to a maximum of 30% per month. The Customer must proactively report failure to meet this SLA to receive credit.

All credit requests must be made pursuant to Covad's credit procedures outlined in the Claims and Credit Availability section of this document. In addition, TeleDefend Claims and Credit Availability are subject to the following conditions:

- Customer must contact Covad Customer Care immediately upon TeleDefend Service failure to perform;
- Covad must be at fault for the failure to meet the SLA (as determined by Covad in its sole and reasonable commercial judgment); and
- Customer must provide Covad remote access to the security hardware and other Covad-provided CPE at all necessary times.

COVAD BILLING POLICIES

Billing for access initiates the day the Customer's order is closed (the "Billing Start Date"). A first invoice will be generated at such time. All subsequent invoices will be generated based on Customer's monthly anniversary date. Customer's monthly

anniversary date will be the date the Customer registered with Covad and created a Covad account. For example, if Customer created an account on July 6 and the order closed on July 20, a first invoice will be generated July 20 covering the installation, CPE and other non-recurring fees as well as monthly recurring fees pro-rated from July 20 until August 6. On August 6, an invoice will be generated to cover monthly recurring fees for the period from August 6 through September 6. Subsequent invoices will be generated on the 6th of each month, covering monthly recurring fees, which are due in advance and any prorated fees or non-recurring fees from the previous month.

The Billing Start Date for hosting services is dependent on whether the Customer ordered a hosting plan at the time access was ordered, if a hosting plan was purchased separately from access or if Customer does not have Covad access services. Monthly service charges, upgrades/downgrades and move orders are pro-rated for access and hosting plans. The billing policy for these scenarios is described below:

1. Customer orders access and hosting plan at the same time:

In the event that a Customer orders a hosting plan at the same time a Covad broadband service is purchased, billing initiates the day that the Customer's access order closes. If, as described earlier, Covad is not able to provision the access plan originally requested, then Covad will notify the Customer and offer alternative access plans. The Billing Start Date for the hosting plan is dependent on the alternative access choice and is outlined in the following table:

Customer Access Choice	Billing Start Date
Customer selects alternative broadband service	Billing begins on the day the alternative order is closed
Customer selects Covad Dial-Up plan	Billing begins on the day the alternative order is closed
Customer cancels Covad access service	Hosted billing continues without change

2. Customer orders a Covad hosting plan at a different time than access or does not order Covad access: If a Customer does not have Covad access services and does not order Covad access services, the Billing Start Date will be the date Customer registered with Covad and created an account and such date will be the monthly anniversary date. If a Customer purchases an access plan at a later date, fees for both access and hosting will be billed on the monthly anniversary date set when Customer created an account with Covad. If Customer has access and later adds a hosting plan, the anniversary date for access will match the anniversary date set when Customer created its account in connection with the access services. Fees for hosting are then pro-rated to match the billing anniversary date for access.

In both cases (1 & 2), Covad will send one integrated bill that reflects charges for all Covad services.

Customer may select one of three payment options: (1) check payment; (2) credit card payment or (3) automatic electronic funds transfer, when available to them. With the exception of government entities, all payment options may not be available for all billing (notify) methods. A Customer paying by check will receive paper invoices ("invoice billing"). A Customer paying by credit card or EFT will receive email statements. If Customer selects either credit card or electronic funds transfer, Covad will automatically debit such account each month. The Customer will receive an email of the monthly statement on their "invoice date", which is based on Customer's monthly anniversary date. If Customer selects invoice billing, Customer must remit payment to Covad each month. The Customer will receive a copy of the monthly invoice in the mail. As described above, a Customer is billed one month in advance for monthly recurring charges. For example, a customer billed on August 1st is charged from July 1st to July 31st for non-recurring charges as well as from August 1st to August 30th for monthly recurring charges. Customer shall be responsible for payment of any taxes or shipping charges. If Customer fails to pay any bill when due, Covad shall have the right to terminate the services and charge any disconnection and/or early termination fees that would apply if Customer had elected to terminate the Services. Payments are considered late if received after the due date. For all late payments, Customer may be assessed interest at the lesser of (a) 1.5% per month on the outstanding balance due Covad or (b) the maximum interest charges permitted under applicable law. Covad may charge a processing fee of \$25.00 for returned checks.

An account with a multi-line end-user hierarchy ("parent account") may select consolidated billing (one invoice for all end-user accounts; sent to the consolidated parent) or individual billing (separate invoices for each end user account; sent to the separate end-user payers). For purposes of definition, a consolidated parent account or a sub-account within an individual parent account hierarchy are treated as a "Customer" under the above billing and payment terms and conditions.

SERVICE DISCONNECTION AND SATISFACTION GUARANTEE

For TeleSurfer, TeleSoho, TeleSpeed, TeleXtend Internet Services and TeleDefend Security Services, Customers have thirty (30) calendar days after the Billing Start Date to request a disconnection without an early termination fee. If the disconnection request is received in the first thirty (30) calendar days of service, Covad will provide a refund credit equal to all fees billed, with the exception of any fees associated with a Missed Appointment charge and/or the Self-Installation Kit or Equipment. If Customer disconnects the service within this thirty (30) calendar day 'grace period' following the Billing Start Date, Customer may return the TeleSurfer or TeleSoho Installation Kit for a full refund only if all equipment is included, if it is in its original working condition and original packaging and if it is received by Covad within thirty (30) days after Customer's disconnection request. Customer must call Covad Customer Care to disconnect the Customer Circuit. TeleSurfer and TeleSoho Customers will need to use the return label that was included in their installation kit. Customer should give the tracking number on the label to the Customer Care Agent so that Covad can track the status of the shipment. Upon verfication that the shipment reached its destination intact, a credit will be issued to the Customer's account. TeleSpeed and TeleXtend customer will receive a shipping label in the mail from Customer Care upon notifying Covad that they will be taking advantage of the 30 Day Satisifaction Guarantee. Covad will track the status of the shipment and issue a credit to the Customer's account upon verification that the shipment arrived intact. Customer is responsible for any shipping charges for returned equipment.

Standard termination fees will apply after this thirty (30) calendar day period and Customers will no longer be able to return their Self Installation Kit or other Equipment for credit. Termination fees will apply for Customers that switch their service to another provider prior to fulfilling their term agreement.

For Email and Web Hosting Service, Customers who cancel within 30 days of ordering a plan will receive a full refund for the set-up fees and the monthly recurring cost, including additional features. However, if a Customer has registered a domain, this fee will not be refunded as the Customer now owns that domain and has the right to transfer it elsewhere.

Applicable termination fees shall be the lesser of (a) the fees for the remaining balance of the Customer Term or (b) the applicable Terminationion Fee set forth in the Other Fees for Covad Services section of this document.

To disconnect a service, the Customer can choose one of two methods: 1) Call Covad Customer Care at 888.64.COVAD or 2) Fax a notice of cancellation to Covad at 866.839.2887.

CUSTOMER INITIATED SERVICE CHANGE DUE TO CUSTOMER MOVE

All Covad Customers who are initiating a change in service due to a move require a Move Order. The process for a Move Order requires a physical move of the Customer Circuit from one location to another; therefore the existing line will need to be disconnected and a new order entered for the new location. Upon disconnecting the existing Customer Circuit, the Customer will be charged the standard Early Termination Fee (noted in the "Other Fees for Covad Internet Services" sections below). However, once the Customer establishes Covad Internet service at the new location and retains the Internet service for at least 30 days, Covad will apply a Retention Bonus equal to the Early Termination Fee plus fifty percent (50%) of the new Service's first month's monthly recurring fee in the form of a credit on the Customer's next invoice or credit card billing statement.

Move Orders can be initiated by calling Covad Customer Care at 1-888-64-COVAD, or by visiting SMART Account Manager at www.covad.net.

TeleSurfer and TeleSoho Customers may re-use their existing equipment at their new location provided that equipment is compatible with their new service. Customers need to inform the Covad Customer Care Representative that they are moving locations and are planning on reusing their existing equipment. If the Customer fails to inform the Covad Customer Care Representative of the Move Order, a new CPE will be shipped and Customer will be billed for a new CPE. If the Customer does not retain the new service for at least 30 days, the Retention Bonus will not be paid.

TeleSpeed and TeleXtend Move Orders will require Professional Installation services at the new location. Standard Professional Installation charges will apply. Customers are advised to allow 30 days for the service to be installed at the new locations. TeleSpeed and TeleXtend Customers may re-use their existing equipment at their new location. Customers need to inform the Covad Customer Care Representative that they are moving locations and are planning on reusing their existing equipment. If the Customer fails to inform the Covad Customer Care Representative of the Move Order, a new CPE will be installed by the Covad Field Service Technician and the Customer will be billed for a new CPE. Once the Customer establishes

TeleSpeed or TeleXtend Internet Service at the new location and retains the Internet service for at least 30 days, Covad will apply the aforementioned Retention Bonus in the form of a credit on the Customer's next invoice. If the Customer does not retain the new service for at least 30 days, the Retention Bonus and credit will not be paid.

In the event that Customer chooses to upgrade or downgrade to a different Internet Service requiring different CPE in connection with the move, Customer will need to order a new CPE and will be billed for the new CPE. Standard installation and equipment rebates available at the time of the move (if any) will apply. If Customer's requested Internet Service is not available at the new location or Covad does not provide any service to the Customer's new location, the disconnection will not be considered a move under this section. In such case, the standard Early Termination Fee will apply if applicable, and no Retention Bonus will be paid by Covad.

All Move Orders require the Customer to accept a new contract and new term agreement for the new service. Covad does not apply the Customer's previous contract or term agreement to the new service. Additionally, Customers will be subject to current Covad pricing for their new service. Covad does not guarantee that the Customer will be able to get the same pricing or service in their new location.

BILLING DISPUTES

If a Customer has a justified, good-faith dispute with any amounts on an invoice, Customer has (60) calendar days from the invoice date to claim a dispute by submitting in writing to support@covad.net or by calling Covad Customer Care at 1-888-64-COVAD. Customer must pay all amounts, whether or not in dispute, by the invoice due date. If Covad determines that Customer is entitled to a credit, Customer shall receive a credit on Customer's next invoice. If Customer fails to notify Covad of billing discrepancies within this (60) calendar day period, Customer will not be eligible for credit or invoice adjustments.

ACCEPTING NEW CONTRACTS

Covad may from time to time reduce pricing on existing services. Existing Customers have the opportunity to take advantage of the new pricing by accepting the terms of a new agreement. Unless otherwise stated, there will be an additional one or two year term requirements if the Customer accepts the new agreement. The Customer must visit SMART Account Manager (www.covad.net) to review any new pricing, and accept the terms of the new agreement.

OTHER FEES FOR COVAD INTERNET SERVICES

TELESURFER AND TELESOHO INTERNET SERVICES

INSTALLATION, REPAIR, AND TERMINATION FEES

Description of Service Provided	Price
TeleSurfer Internet Services Self Installation Kit	\$99.00
TeleSoho Internet Services Self Installation Kit	\$149.00
Professional Installation for TeleSurfer Internet Services	\$99.00
Professional Installation for TeleSoho Internet Services	\$175.00
Field Service Technician Dispatch Charge for TeleSurfer Internet Services	\$99.00
Field Service Technician Dispatch Charge for TeleSoho Internet Services	\$175.00
Missed Appointment Charge	\$99.00
Early Termination Fee for TeleSurfer and TeleSoho Internet Services – After completion of service installation option by Covad and prior to completion of Customer term.	Lesser of remaining contract value or \$250.00

TELESOHO IP ADDRESS FEES

IP-Address Block		in Set-Up Charge	Monthly Charge
256 with NAT	253 (NAT allows private IP address	Complimentary	Complimentary
	space behind the router)	default	default
8	5*	\$0	\$10

^{*} For this configuration, Covad uses two (2) static IP addresses to provide the service and assigns one (1) static IP address to the router. A total of three (3) static IP addresses will be unavailable to the Customer.

TELESPEED AND TELEXTEND INTERNET SERVICES

CUSTOMER PREMISES EQUIPMENT FEES

Customer Premise Equipment	Applicable Service(s)	Price
Netopia R4652-T IDSL/SDSL Router	TeleSpeed 144, 384, 768, 1.5	\$359.00
Efficient Networks Speedstream 5871 IDSL Router	TeleSpeed 144	\$359.00
Efficient Networks Speedstream 5851 SDSL Router	TeleSpeed 384, 768, 1.5	\$359.00
Netopia 4622 T1 Router	TeleXtend 384, 768, 1.5	\$599.00
Efficient Networks 5940 T1 Router	TeleXtend 384, 768, 1.5	\$599.00

IP ADDRESS FEES

IP Address Block	Usable	Set-Up Charge	Monthly Charge
256 with NAT	253 private IP Addresses behind the router	Complimentary default	Complimentary default
8	5*		Complimentary (By request only)
16**	13*	No Charge	\$10.00
32**	29*	(Requires IP Justification Form)	\$15.00
64**	61*		\$20.00
128**	125*		\$25.00
256**	253*	1	\$50.00

For these configurations, Covad uses two (2) static IP addresses to provide the service and assigns one (1) static IP address to the router.

INSTALLATION, REPAIR, CANCELLATION AND TERMINATION FEES

Description of Service Provided	Price
TeleSpeed Setup and Installation Charge	\$225.00
TeleXtend Setup and Installation Charge	\$450.00
Inside Wiring Charge - First Hour minimum	\$88.00
Additional 15 minute increments after initial hour	\$20.00
Field Technician Dispatch Charge - First hour minimum charge for dispatch during normal business hours	\$88.00
Additional 15 minute increments after initial hour	\$20.00
Early Termination Charge	Lesser of remaining
	contract value or \$500.00
Missed Appointment Charge	\$99.00
Special Construction Fees	See Below

A total of three (3) static IP addresses will be unavailable to the Customer. NAT is not available for these configurations.

** For configurations with 16, 32, 64, 128, or 256 IP addresses, the Customer must complete ARIN information forms, to justify the need for the large blocks of IP addresses. Covad does not guarantee approval of all IP address requests.

SPECIAL CONSTRUCTION FEES

For TeleXtend Internet Services, Special Construction Fees may apply for any additional non-standard work at the Central Office facility or Customer's premises necessary to deliver the service. Details of the special construction work along with the associated fees will be communicated to the Customer via email prior to any work beginning. If the Customer does not respond to Covad within twenty (20) days of receiving the special construction notice, the Customer's order will be cancelled. All TeleXtend orders requiring Special Construction require Customer approval in writing (including email acceptance of the Special Construction Fees) prior to processing. Any Special Construction Fees incurred by Covad will be charged to the Customer along with any other applicable one-time installation or equipment fees. If the Customer cancels a TeleXtend order after approving Special Construction Fees, the Customer will be responsible for any charges incurred by Covad as a result of that Special Construction plus any additional cancellation fees.

ADDITIONAL SERVICES FEES

DIAL-UP INTERNET SERVICE FEES

Service	Usage per Billing Cycle	Charge
Overage Usage	More than 150 hours for stand-alone Dial service More than 10 hours for TeleSurfer, TeleSoho, TeleSpeed and TeleXtend Internet Services	\$1.50/hour or any portion thereof
800 Service	Any amount of time above zero minutes	\$4.50/hour or any portion thereof

TELEDEFEND SERVICE FEES

Description of Service Provided		Charge
NetScreen device		\$0.00
TeleDefend Self Installation Charge		\$0.00
Termination Charge per Site - Post Self Installation Kit has been shipped but prior to 12-mon	th term.	\$500.00
	0-3 months	\$1,100
Returned Security Hardware charge - Failure to return NetScreen device within thirty (30) days of Termination. Charge based on age of NetScreen device from service start date.	4-6 months	\$950
	7-9 months	\$800
	10-12 months	\$650
	13-15 months	\$500
	16-18 months	\$350
	19-21 months	\$200
	22-24 months	\$50
	25+ months	\$0

If Customer chooses not to return Security Hardware the above charges will apply. All equipment should be returned in the original working condition and original packaging within thirty (30) days after Customer's disconnection request. Failure to return the equipment in the original packaging, in working condition within the thirty-day period will result in a charge for the equipment as set forth in the above table based on the age of the NetScreen device from service start date. Customer must call Covad Customer Care to receive a Return Materials Authorization ("RMA") number and include the RMA number with the package. Customer is responsible for any shipping charges for returned equipment. Covad will not accept equipment without RMA identification and will charge the Customer for the equipment based on the above table if the equipment is returned without RMA identification.

GLOSSARY

Backbone

- A major transmission path used for high volume network to network connections.
- In Covad's network, the backbone network consolidates data traffic from the individual DSL lines into a backbone network for delivery to the Internet and/or other regions.

Bandwidth

- The amount of data that can flow through a given communications channel in a specified period time, usually seconds. Bridge
- A device that connects two networks as a seamless single network using the same networking protocol.
- Bridges operate at the hardware layer and do not include IP routing functionality. They simply forward packets without analyzing and re-routing messages.

CO or Central Office

 A telephone company facility within which all local telephone lines terminate and which contains equipment required to switch Customer telecommunications traffic.

Commercially Reasonable Effort

- A service that does not carry a QoS (Quality of Service) or a SLA (Service Level Agreement), often times with no
 minimum throughput guarantees.
- Covad's ADSL Internet Services (TeleSurfer and TeleSoho Internet Services) are considered "commercially reasonable efforts"

CPE or Customer Premises Equipment

- Any equipment located at a Customer's premises. Modems, bridges and routers are considered CPE.
- Covad provides Netopia CPE for TeleXtend Internet Service, Netopia and Efficient Networks CPE for TeleSpeed Internet Service, and ZyXel CPE for TeleSoho Internet Service. For TeleSurfer Internet Services, Covad provides an Ethernet modem in the Self Installation Kit (no brand specified).

CSU/DSU or Channel Service Unit/Digital Service Unit

A common type of CPE for T1 services, the CSU/DSU terminates the physical connection and provides physical
protection and diagnostic and monitoring features.

Demarc or Demarcation Point

The point at the Customer premises where the line from the telephone company meets the premises wiring.

DHCP or Dynamic Host Configuration Protocol

- A protocol that allows end user workstation information including IP addresses to be dynamically assigned by a server on an as-needed basis.
- DHCP server functionality is built into most DSL routers.

DNS or Domain Name System

• The name resolution service for IP addresses that provides the friendlier text-based addresses for Internet resources. Example: 192.168.1.1 = www.yourwebpage.com.

DSLAM or Digital Subscriber Line Access Multiplexer

- The device typically deployed at the CO that terminates all the DSL lines serviced by the CO.
- Covad places it's own DSLAMs in leased space in a LEC's CO.

Dynamic IP

An IP address is assigned to the client for the current session or some other specified amount of time.

Encryption

- Scrambles data in flight so the data is of no use if intercepted. It is the conversion of data into a form, called a ciphertext, which cannot be easily understood by unauthorized people. In order to recover the contents of an encrypted signal, the
- correct decryption key is required.
- Common forms of encryption include DES and 3DES. Covad's TeleDefend Service uses 3DES.

Ethernet

- A LAN technology that uses CSMA/CD delivery that can run over different media (cabling).
- Most of today's Ethernet LANs use twisted pair 10Base-T wiring that can support both standard Ethernet at 10Mbps and Fast Ethernet at 100Mbps

Firewall

A device or software that filters the traffic exchanged between networks, enforcing each network's access control policy.

FOC or Firm Order Commitment

A FOC is provided by the LEC and references the date that the LEC will perform the necessary work for Covad to
establish a Customer's Internet service.

ILEC or Incumbent Local Exchange Carrier

Also known as the telephone company, telco, LEC, RBOC, etc.

Inside Wiring

- Refers to wiring on the Customer side of the demarcation point.
- Customers are responsible for maintaining and extending inside wiring as needed to deliver Covad Internet Services.

IP Address or Internet Protocol Address

A dotted decimal notation used to represent IP addresses. Example: 192.168.1.1

IPSec or Internet Protocol Security

- A developing standard for security at the network or packet processing layer. IPSec doesn't require changes to individual
 computers and is extensible, so new encryption standards can be swapped in as they become available.
- Provides 2 functions: authentication and encryption; and uses 3 components: AH, ESP and IKE. (AH -- Authentication Header, verifies authenticity of each packet. ESP -- Encapsulating Security Payload, encrypts the entire packet, and places it in a larger packet. IKE -- Internet Key Exchange, is the set of procedures that IPSec devices use to transfer security keys.)

Line sharing

- Line Sharing is a method of DSL line delivery that involves using an existing telephone line into the Customer's premises by electronically multiplexing the voice and data signals on the same physical wire.
- Line sharing separates the low voice frequencies and the higher data frequencies running across the same line Local Loop
- A generic term for the connection between the Customer's premises and the telephone company's serving wire center.

NAT or Network Address Translation

- An Internet standard that allows a Customer's local network to use private IP addresses, which are not advertised to other
 users on the Internet. The IP address used for the router is the only IP address visible to the public Internet.
- Covad offers NAT with certain configurations of TeleSoho, TeleSpeed and TeleXtend Internet Services.

NIC or Network Interface Card

 The hardware that forms the interface between the computer (or other network device) and not only the data communications network for the LAN but also the IP connection through the DSL bridge or router.

NID or Network Interface Device

 A phone company installed device that connects a Customer's inside wiring to the telephone network. It is typically a small box installed on the exterior premises, basement or garage.

NID Splitter

 A device that a Covad technician installs at the Customers NID for line sharing orders. The splitter separates the voice traffic from the data traffic on the Customer's existing phone line.

PPPoE or Point-to-Point Protocol over Ethernet

- Covad uses PPPoE software to establish an Internet connection for certain Internet services.
- For TeleSurfer Link, TeleSurfer, and TeleSurfer Plus Internet Services, PPPoE software is required on the Customer's PC.

RJ-11

 A standard modular connector (jack or plug) that supports two pairs of wires (4 wires). Commonly used for most PSTN CPE such as a telephone, fax machine, modem

R.I-45

- A standard modular connector that can support up to four pairs of wires (eight wires).
- Commonly used with Category 5 ("Cat 5") cabling to create 10Base-T or 100Base-T networks.

Router

- A router is a device that connects two networks. Routers are similar to bridges, but provide additional functionality, such
 as the ability to filter messages and forward them to different places based on various criteria.
- The Internet uses routers extensively to forward packets from one host to another.

Static IP

- An assigned IP address used to connect to a TCP/IP network.
- The IP address stays assigned to the specific host or network device, so the same address can always be used to reach that device.

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

ARB 584

IN THE MATTER OF COVAD COMMUNICATIONS COMPANY PETITION FOR ARBITRATION OF AN INTERCONNECTION AGREEMENT WITH QWEST CORPORATION

DIRECT TESTIMONY OF KAREN A. STEWART

ON BEHALF OF

QWEST CORPORATION

(Issue 1: Retirement of Copper Facilities)

February 25, 2005

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2	Q.	PLEASE STATE YOUR NAME, POSITION, EMPLOYER, AND BUSINESS
3		ADDRESS.
4	A.	My name is Karen A. Stewart. I am a Director in the Qwest Services Corporation
5		Regulatory Compliance Organization. My office is located at 421 SW Oak Street,
6		Portland, Oregon.
7	Q.	PLEASE REVIEW YOUR EDUCATION, WORK EXPERIENCE AND
8		PRESENT RESPONSIBILITIES.
9	A.	I received a Bachelor of Science degree in Business Administration from Portland
10		State University in 1980, and a Masters degree in Business Administration from the
11		University of Oregon in July 1994. I have been employed by Qwest and its
12		predecessor companies since 1981. I have held a variety of positions in Qwest,
13		including sales, product management, regulatory affairs, issues management, and
14		E911 project management and technical design.
15		I am currently a member of the Qwest Regulatory Compliance organization and
16		have represented Qwest in a number of workshops conducted under section 271 of
17		the Telecommunications Act of 1996 ("the Act") related to Qwest's provisioning of
18		unbundled network elements ("UNEs") in Arizona.
19	Q.	HAVE YOU PREVIOUSLY TESTIFIED?
20	A.	Yes. I have testified in the states of Arizona, Colorado, Idaho, Iowa, Minnesota,
21		Montana, Nebraska, New Mexico, North Dakota, Oregon, South Dakota, Utah,
22		Washington, and Wyoming.
23	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
24	A.	My testimony addresses Issue 1, as set forth in Covad's petition for arbitration. In

INTRODUCTION AND PURPOSE OF TESTIMONY

1

I.

particular, I focus on Qwest's and Covad's competing interconnection agreement
("ICA") language relating to the FCC's ruling in the Triennial Review Order
("TRO")1 confirming the right of incumbent local exchange carriers ("ILECs") to
retire the copper loops that are currently used in their networks. Qwest and Covad
have agreed that they will address the other issues relating to the TRO (Issues 2 and 3)
in their post-hearing briefs, and I therefore do not address those issues in my
testimony.

A.

My testimony relating to copper retirement demonstrates that Covad is seeking to impose obligations on Qwest that the FCC has rejected and that violate requirements of the Act. I show that Qwest's proposed ICA language, by contrast, accurately incorporates the rights and obligations established by FCC rules and thus should be adopted.

II. ISSUE 1: RETIREMENT OF COPPER FACILITIES (Sections 9.2.1.2.3, 9.2.1.2.3.1, and 9.2.1.2.3.2)

Q. PLEASE PROVIDE AN OVERVIEW OF THE DISPUTE RELATING TO THE RETIREMENT OF COPPER FACILITIES.

As Qwest and other carriers have increasingly moved from copper to fiber facilities, it has become a common practice to retire copper facilities in many circumstances when fiber facilities are deployed. The ability to retire copper facilities is important from a cost perspective, since, without that ability, carriers would be required to incur the costs of maintaining two networks. If carriers were faced with that duplicative cost, they would have reduced financial ability to deploy facilities to replace copper and,

¹ Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, 18 FCC Rcd. 16978 ¶ 195 (2003), aff'd in part and rev'd and vacated in part, U.S. Telecom Association v. FCC, 359 F.3d 554 (D.C. Cir. 2004).

therefore, reduced ability to deploy facilities that can support advanced
telecommunications services. Accordingly, in the TRO, the FCC confirmed the right
of ILECs to retire copper loops and copper subloops that they are replacing with fiber
facilities without obtaining regulatory approval before doing so. ² The only retirement
conditions that the FCC established are that an ILEC provide notice of its intent to
retire specific copper facilities so that, in some cases, CLECs can object to the FCC.
The dispute relating to this issue arises from Covad's attempt to condition Qwest's
right to retire copper facilities on onerous conditions that the FCC did not adopt and
that, if adopted, would reduce Qwest's ability to replace copper facilities with more
advanced network facilities. Specifically, in section 9.2.2.3.1 of its proposed ICA,
Covad attempts to prohibit Qwest from retiring copper facilities unless it provides
Covad or Covad's end-users an "alternative service" over a "compatible facility."
Further, under Covad's proposal, Qwest could not retire a copper facility unless the
alternative service it would be required to provide neither "increased the cost" nor
degraded the quality of service for Covad or its end-user. These burdensome
conditions are nowhere to be found in the TRO or in any other FCC order. They are
entirely of Covad's own making, unsupported by the Act or any rules implementing
the Act. Adding to this absence of legal support, Covad's proposal is so ambiguous
that it is incapable of being implemented in a reliable and predictable manner. For
example, Covad's proposed ICA language does not define the term "alternative
service," does not explain what would constitute an increase in cost, and does not
provide a standard for determining whether there is a "degradation" in quality. The
four state commissions that have ruled on Covad's proposal thus far – in Colorado,
Minnesota, Utah and Washington have accordingly all rejected Covad's proposed

² TRO at ¶ 271.

1 language and have ruled that it is inconsistent with the *TRO*.

Qwest's proposed language for sections 9.2.1.2.3.1 and 9.2.1.2.3.2, by contrast, is not only consistent with the *TRO*, but it also provides significant protections to Covad that are not even required by the *TRO*. Thus, in addition to including the retirement notice requirements that the *TRO* establishes, Qwest's language establishes that Qwest (1) will leave copper loops and subloops in service where it is technically feasible to do so and (2) will coordinate with Covad the transition of new facilities "so that service interruption is held to a minimum."

9 Q. WHAT IS MEANT BY THE TERM "RETIRING" COPPER FACILITIES?

As used in this context, "retiring" means to take facilities out of service. In some cases, such as with aerial facilities, taking them out of service can mean actually removing wire and cable from telephone poles. In other cases, facilities can be taken out of service by being deactivated or deleted from network inventory systems but not physically removed. In either case, the retirement of the facility eliminates the need to maintain it.

Q. UNDER THE FCC's RULING CONFIRMING ILECs' RIGHT TO RETIRE COPPER FACILITIES, IS IT NECESSARY FOR ILECs TO OBTAIN REGULATORY APPROVAL BEFORE RETIRING COPPER LOOPS AND

19 **SUBLOOPS?**

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A.

No. The *TRO* confirms ILECs' rights to retire copper loops and subloops that are being replaced with fiber, which is a ruling that advances the FCC's objective of increasing economic incentives for carriers to deploy fiber facilities.³ Specifically, in paragraph 271 of the *TRO*, the FCC stated that it "decline[s] to prohibit incumbent

 $^{^{3}}$ *TRO* at ¶ 281.

LECs from retiring copper loops or subloops that they have replaced with fiber." The FCC explained that the retirement of copper loops being replaced with fiber is permissible and that, in appropriate cases, ILECs must provide notice of such retirements pursuant to the FCC's network modification disclosure requirements:

"[W]e reiterate that our section 251(c)(5) network modification disclosure requirements . . . apply to the retirement of copper loops and copper subloops." In addition, in granting ILECs the right to retire copper loops that are being replaced with fiber, the FCC rejected CLEC proposals that would have required ILECs to obtain regulatory approval before retiring copper facilities.

Q. HAS THE FCC ESTABLISHED COPPER RETIREMENT RULES THAT ARE SPECIFIC TO SITUATIONS IN WHICH AN ILEC IS REPLACING COPPER LOOPS WITH FIBER-TO-THE-HOME ("FTTH") LOOPS?

Yes. As noted above, in paragraph 271 of the *TRO*, the FCC established the general rule that ILECs have a right to "retir[e][] copper loops or copper subloops that they have replaced with fiber." After confirming this general rule, the FCC then established notice requirements that are specific to the situation where an ILEC is replacing a copper loop or subloop with a FTTH loop. Specifically, ILECs must provide notice of such planned retirements to the FCC and, after receiving notice from the FCC of an ILEC's intent to retire a copper facility, a CLEC is permitted to object to the retirement in a filing with the FCC. Unless the FCC affirmatively allows the objection, it is deemed denied 90 days after the FCC's issuance of the retirement notice. Significantly, the FCC made it clear that these unique notice requirements

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⁴ *TRO* at ¶ 271.

⁵ TRO at ¶ 281

 $^{^6}$ TRO at ¶ 282. The TRO does not preempt evaluations by state commissions of whether loop retirements comply with state law. Id. at ¶ 284.

1 "apply only to the retirement of copper loops and copper subloops, but not to the 2 retirement of copper feeder plant."⁷

3 Q. DOES QWEST'S PROPOSED ICA LANGUAGE COMPLY WITH THESE

4 FCC RULINGS RELATING TO THE RETIREMENT OF COPPER

FACILITIES?

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A.

Yes. Qwest's language complies with and goes beyond the requirements in the TRO. First, pursuant to section 9.1.15 of the ICA – a recently added section that the parties have agreed upon – Owest will provide notice of all planned copper retirements, including notices relating to the retirement of copper feeder in addition to notices for the retirement of copper loops and subloops. Second, under section 9.1.15, Qwest will provide notice not just when it is replacing a copper facility with a FTTH loop, but whenever a copper facility is being replaced with any fiber facility. Third, consistent with the TRO, Qwest's proposed section 9.2.1.2.3 of the ICA establishes that in addition to complying with the FCC's notice requirements, Owest will comply with any applicable state requirements. Fourth, while the FCC rule relating to notice of network modifications permits an ILEC to provide notice by either filing a public notice with the FCC or by providing notice through industry publications or an Internet site, Owest has committed in sections 9.1.15 and 9.2.1.2.3 to provide three different types of notice: (1) through postings on its website; (2) by a public filings with the FCC; and (3) through e-mail notices that Qwest will send to CLECs. Qwest provides the website notice on its "disclosure website" at http://www.qwest.com/disclosures. This disclosure website has been used for other disclosures in recent years, and CLECS are familiar with it location and use.

⁷ TRO at ¶ 281 & n.829.

The information that Qwest provides in its notices includes the state and wire center where the facility is located, the specific location of the facility within the wire center, the anticipated date that the facility will be retired, and a description of the immediate effect of the retirement.

Q. HAVE OTHER STATE COMMISSIONS ISSUED RULINGS CONCERNING THE ADEQUACY OF THE NOTICE THAT QWEST PROVIDES WHEN DECIDING TO RETIRE COPPER FACILITIES?

Yes. The Washington Commission recently ruled that Qwest's proposed language for the interconnection agreement relating to notice of copper retirement is appropriate and will permit Covad to determine whether a retirement will affect its customers.⁸ In doing so, the Washington Commission specifically rejected Covad's "assertion that the FCC's rule requires the identification of specific Covad customers affected by the change, or places the burden solely on the ILEC to determine the impact of the change." The Colorado Commission similarly adopted Qwest's language relating to notice and rejected Covad's language, while modifying Qwest's language to require that notice be sent directly to Covad.¹⁰ The Utah Commission adopted some of Covad's proposed modifications to Qwest's notice language, but specifically declined to require Qwest to determine which of Covad's customers would be affected by a copper retirement, stating that "[w]e find it reasonable to expect Covad, not Qwest, to

A.

⁸ In the Matter of the Petition for Arbitration of an Interconnection Agreement Between Covad Communications Co. and Qwest Corp, Docket No. UT-043045, Order No. 06 at ¶ 21 (Wash. Comm'n, Feb. 9, 2005) (citations omitted) ("Washington Arbitration Order"), at ¶ 16.

⁹ *Id*.

¹⁰ Petition of Qwest Corporation for Arbitration of an Interconnection Agreement, Docket No. 04B-160T, Initial Commission Decision, Decision No. C04-1037 at 54 (Colo. Comm'n Aug. 27, 2004) ("Colorado Arbitration Decision"). After the Colorado arbitration, Qwest modified its language relating to notice, so that it now provides e-mail notices of retirements to CLECs.

1	make this determination." ¹¹ Finally, the Minnesota ALJ adopted Qwest's language
2	relating to notice, ruling that Qwest's language complies with the FCC's
3	requirements, and that Covad was improperly attempting to shift the responsibility for
4	determining the street addresses affected by a copper retirement from Covad to
5	Qwest. ¹²

Q. ALTHOUGH IT IS NOT NECESSARY FOR QWEST TO OBTAIN REGULATORY APPROVAL BEFORE RETIRING COPPER FACILITIES, DOES QWEST NEVERTHELESS TAKE INTO CONSIDERATION THE NEEDS OF CLEC'S BEFORE RETIRING THESE FACILITIES?

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A. Yes. First, before deciding to retire copper loops that are serving Qwest and/or CLEC end-users customers, Qwest routinely evaluates whether it is technically feasible to leave the copper loops in place. In many instances, Qwest decides not to retire copper loops when it deploys fiber facilities. Second, when it does retire a copper loop that a CLEC is using to provide DSL service, Qwest gives the CLEC the option of continuing to provide DSL service to the end-user customer through the use of CLEC-owned remote digital subscriber loop access multiplexers ("DSLAMs"). The CLEC can use Qwest remote collocation space to collocate a DSLAM and to continue providing DSL service to its end-user customers. Third, Qwest coordinates

¹¹ In the Matter of the Petition of Covad Communications Co. for Arbitration to Resolve Issues Relating to an Interconnection Agreement with Qwest Corp., Docket No. 04-2277-02, Arbitration Report and Order at 10-11 (Utah Comm'n, Feb. 8, 2005) ("Utah Arbitration Order"), at 10. (Emphasis in original.)

¹² In Matter of the Petition of Covad Communications Co. for Arbitration to Resolve Issues Relating to an Interconnection Agreement with Qwest Corporation, MPUC Docket No. P-5692, 421/IC-04-549, OAH Docket No. 3-2500-15908-4, Arbitrator's Report at ¶ 23 (Dec. 15, 2004) ("Minnesota Arbitration Order"), at ¶ 25. In voting to adopt the substance of the ALJ's rulings relating to copper retirement, the Minnesota Commission stated that it will require certain additions to Qwest's notice language. The Minnesota Commission voted recently to adopt the ALJ's rulings and is soon expected to issue a written order reflecting that ruling.

1	circuit changes with CLECs to ensure that transitions from copper facilities to new
2	fiber facilities are orderly and involve minimal disruptions of local exchange service.
3	Fourth, when Qwest replaces copper facilities with new copper facilities, it jointly
4	coordinates the transition to the new facilities with CLECs to minimize service
5	disruptions.

Q. DOES THE *TRO* PROVIDE SUPPORT FOR THE CONDITIONS COVAD SEEKS TO IMPOSE ON OWEST?

No. In fact, the FCC considered and rejected conditions that other CLECs proposed and that would have similarly compromised the right of ILECs to retire copper facilities. Several CLECs proposed that ILECs should not be permitted to retire any copper facilities without taking affirmative steps to avoid effects on CLEC service. For example, one party to the FCC's *TRO* proceeding proposed that ILECs should not be permitted to retire copper loops unless they permitted CLECs access to their broadband facilities. The FCC rejected this and other proposals, concluding that its notice rules "serve as adequate safeguards." There is no suggestion – and certainly no requirement – anywhere in the *TRO* or in any other FCC order that an ILEC is permitted to retire a copper facility only if, as Covad proposes, it provides an "alternative service" that neither "degrades service" nor "increases the cost" to Covad or its end-user customers.

Q. WHAT DETERMINATIONS HAVE OTHER STATE COMMISSIONS REACHED IN EVALUATING WHETHER COVAD'S "ALTERNATIVE

SERVICE" PROPOSAL IS CONSISTENT WITH THE TRO?

A.

¹³ TRO at ¶ 281 & n. 822.

TRO at ¶ 281.

A. As I discussed above, state commissions and ALJs in the four states in which Qwest and Covad have conducted arbitrations have uniformly rejected Covad's proposal and found that such proposal does not comply with the law. In rejecting Covad's proposal, for example, the Washington Commission emphasized that "[t]he FCC did not place conditions on an ILEC's retirement of copper facilities, and concerning FTTH loops, specifically rejected proposals to provide alternative facilities. The FCC found that its requirements for notice of planned network changes to provide 'adequate safeguards.'"

Similarly, in its order issued three weeks ago, the Utah Commission stated that it

finds "no support in the *TRO* for Covad's contention that hybrid loops should be treated differently under the FCC's copper retirement rules than are FTTH or FTTC loops. The FCC has made clear that ILECs may retire copper facilities, presumably *any* copper facilities, so long as they comply with the FCC's notice requirements."¹⁶ With respect to Covad's "alternative service" proposal, the Utah Commission found "nothing in federal or state law that would impose an obligation on Qwest to provide an alternative service at current costs for an xDSL provider prior to retirement of copper facilities."¹⁷

¹⁵ Washington Arbitration Order, at ¶ 21.

¹⁶ Utah Arbitration Order, at 10-11. (Emphasis in original.)

Id.

11		OVER COMPATIBLE FACILITIES, AS COVAD PROPOSES, WHAT
10	Q.	IF QWEST WERE REQUIRED TO PROVIDE AN ALTERNATIVE SERVICE
9		position concerning 'alternative' services."20
8		In doing so, she explained that "[t]here is no legal support in the TRO for Covad's
7		Finally, a Minnesota ALJ rejected Covad's copper retirement proposal in its entirety.
6		loops. ¹⁹
5		therefore permitted to retire copper loops that it replaces with hybrid copper-fiber
4		which Qwest is replacing copper loops with FTTH loops, and ruled that Qwest is
3		position that Qwest's right to retire copper facilities should be limited to situations in
2		without legal support. ¹⁸ In addition, the Colorado Commission rejected Covad's
1		The Colorado Commission likewise rejected Covad's proposal, finding that it is

A. If the Commission were to impose Covad's requirements on Qwest, it would reduce Qwest's economic incentive and ability to deploy fiber facilities, since compliance with those requirements would force Qwest to consider all such costs in any investment decision concerning whether to deploy fiber. If Qwest were to be faced

DEPLOY THE FIBER FACILITIES THAT SUPPORT ADVANCED

EFFECT COULD THAT HAVE ON QWEST'S DECISIONS WHETHER TO

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¹⁸ Colorado Arbitration Decision, at 54.

¹⁹ Petition of Qwest Corporation for Arbitration of an Interconnection Agreement, Docket No. 04B-160T, Decision No. C04-1348, Order Granting in Part and Denying in Part Application for Rehearing, Reargument, or Reconsideration at 10 (Colo. Comm'n, Nov. 16, 2004) ("Colorado Reconsideration Order").

²⁰ Minnesota Arbitration Order, at ¶ 23. As stated above, the Minnesota Commission voted recently to adopt the ALJ's rulings and is expected soon to issue a written order reflecting that ruling.

1 with costs of providing an "alternative service" over "compatible facilities" (as 2 defined by Covad) each time it considers whether to replace copper facilities with 3 fiber, the economics of that decision would be changed in a way that would make the 4 deployment of fiber less likely. In addition, Covad's proposal would prohibit Qwest 5 from recovering the costs of this undefined "alternative service" if the costs exceed 6 the amount that Covad is currently paying Owest for access to copper loops. A 7 requirement to provide an alternative service for which Owest may not recover its 8 costs would create an economic disincentive for deploying fiber that is clearly 9 inconsistent with the Act's objective, as set forth in section 706, of increasing the 10 deployment of advanced telecommunications facilities. 11 The FCC stated in the TRO that it was not preempting state commissions from 12 evaluating whether an ILEC's policies relating to loop retirements comply with state 13 law. Nevertheless, any state law requirements relating to this issue must be consistent 14 with the Act's objective of encouraging the deployment of advanced 15 telecommunications facilities, as well as its requirement that ILECs are permitted to 16 recover the costs they incur to provide interconnection and access to unbundled 17 network elements. 18 Q. PLEASE EXPLAIN FURTHER HOW QWEST'S ABILITY TO RETIRE 19 COPPER FACILITIES RELATES TO THE GOAL OF ENCOURAGING THE 20 DEPLOYMENT OF FACILITIES THAT SUPPORT BROADBAND 21 SERVICES. 22 A. In the TRO, the FCC identified the deployment of broadband services as one of its 23 paramount objectives, emphasizing that "[b]roadband deployment is a critical

J	l (domestic po	dicy objectiv	e that transce	ends the realm	n of communications.	.^^21

2 Accordingly, the FCC sought to formulate rules that would "help drive the enormous

3 infrastructure investment required to turn the broadband promise into a reality."22

An important component of the FCC's regulatory regime for promoting investment in broadband is its ruling confirming the right of ILECs to retire copper loops. The economic incentive of a carrier to deploy fiber loops increases if the carrier is permitted to retire copper loops when it deploys fiber. Without a right to retire copper, a carrier evaluating whether to deploy fiber would be faced with the duplicative costs of maintaining *both* the copper and the fiber facilities. A critical shortcoming of Covad's proposal is that it would require Qwest to either (1) not retire copper loops and incur the resulting duplicative maintenance costs or (2) retire copper loops, but only after providing an "alternative service" for which full cost recovery would not be allowed. Both of these options reduce Qwest's ability to deploy fiber facilities and are inconsistent with Qwest's rights to recover its costs for providing access to network elements to CLECs.

Q. DO YOU HAVE ADDITIONAL CONCERNS RELATING TO COVAD'S PROPOSAL FOR COPPER RETIREMENTS?

A. Yes. Covad's proposal also is improper because, as discussed above, it would prevent Qwest from recovering its costs, and also is so ambiguous as to be incapable of clear implementation. Covad's proposal would require Qwest to provide an "alternative service" at no increase in the cost that Covad is currently incurring in Oregon to provide DSL service to its end-user customers. This artificial cap on what

 $^{21 \} TRO \ at \ \P \ 212.$

Id.

1 Covad would be required to pay for an alternative service violates Qwest's rights 2 under the Act to recover the costs it incurs to provide unbundled network elements 3 and interconnection services. Specifically, section 252(d)(1) of the Act requires that 4 rates for interconnection and network element charges be "just and reasonable" and 5 based on "the cost (determined without reference to a rate-of-return or other rate-6 based proceeding) of providing the interconnection or network element." 7 Under Covad's proposal, Qwest would only be permitted to charge a maximum 8 monthly recurring rate of \$4.55 for the alternative service, since Covad is currently 9 paying the Commission-prescribed monthly rate of \$4.55 for access to the high-10 frequency portion of the unbundled loop. This rate would serve as a cap on Qwest's 11 cost recovery under Covad's proposal, regardless of the amount of the costs Owest 12 would incur to provide an alternative service. This artificial cap could prevent Qwest 13 from recovering its costs in violation of the Act's cost recovery requirement. 14 Moreover, the Commission established this rate after specifically reviewing the 15 recurring costs of line sharing, not some undefined "alternative" service. It is simply 16 inappropriate to use the cost for one product to establish a rate for a different 17 "alternative" service. 18 Q. WHAT CONCERNS DO YOU HAVE RELATING TO THE AMBIGUITY OF 19 **COVAD'S PROPOSAL?** 20 A. It is fundamental that ICA terms and conditions, as with any contract, should be 21 clearly defined to apprise parties of their rights and obligations, and therefore, to 22 thereby avoid or minimize disputes. Covad's "alternative service" proposal falls far 23 short of this basic requirement. 24 The most glaring contractual shortcoming of Covad's proposal is the absence of any definition of the "alternative service" that Qwest would have to provide upon retiring 25

1		a copper loop. Nowhere in its proposal does Covad define this term, which is central
2		to its proposal. Under the plain language of the ICA, therefore, Qwest would have no
3		way of knowing what alternative service to provide, or whether such a service would
4		meet the requirements of the ICA. Covad likewise fails to define the requirement that
5		the alternative service "not degradate the service or increase the costs to CLEC or
6		End-User Customers of CLEC." It does not propose, for example, any metrics to
7		determine whether the service has degraded. Nor does it offer any ICA language for
8		measuring whether the costs of service have increased.
9		In short, Covad's language fails to define with any clarity the parties' rights and
10		obligations, and would inevitably lead to costly and time-consuming disputes in the
11		implementation and administration of the ICA.
12	Q.	PLEASE EXPLAIN HOW COVAD HAS RECENTLY REVISED ITS
13		PROPOSAL RELATING TO COPPER RETIREMENT.
14	A.	Covad initially proposed ICA language that had its "alternative service" requirement
15		applying only when Qwest replaces a copper loop with a FTTH loop. In recent
16		filings in other states, however, Covad has changed its position by eliminating
17		application of the requirement to FTTH loops and, instead, proposing it for situations
18		where Qwest replaces a copper loop with a hybrid copper-fiber loop. In view of
19		Covad's continuing refusal to be clear about the type of "alternative service" it is
		•
20		seeking, Qwest is concerned that Covad ultimately may be seeking access to the
2021		seeking, Qwest is concerned that Covad ultimately may be seeking access to the broadband capabilities of hybrid loops.
	Q.	• • •

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LOOPS?

1 A. Yes. In paragraphs 288 and 290 of the TRO, the FCC ruled that ILECs are not 2 required to unbundle the broadband capabilities of hybrid loops. In reaching that 3 result, the FCC specifically considered and rejected arguments that Covad presented 4 in that proceeding in an attempt to obtain unbundled access to the broadband 5 capabilities of these loops: 6 We decline to require incumbent LECs to unbundle the next-generation 7 network, packetized capabilities of their hybrid loops to enable requesting 8 carriers to provide broadband services to the mass market. AT&T. 9 WorldCom, Covad, and others urge the Commission to extend our unbundling 10 requirements to the packet-based and fiber optic portions of incumbent LEC 11 hybrid loops. We conclude, however, that applying section 251(c) unbundling 12 obligations to these next-generation network elements would blunt the 13 deployment of advanced telecommunications infrastructure by incumbent 14 LECs and the incentive for competitive LECs to invest in their own facilities, 15 in direct opposition to the express statutory goals authorized in section 706. 16 The rules we adopt herein do not require incumbent LECs to unbundle any 17 transmission path over a fiber transmission facility between the central office 18 and the customer's premises (including fiber feeder plant) that is used to 19 transmit packetized information. Moreover, the rules we adopt herein do not 20 require incumbent LECs to provide unbundled access to any electronics or 21 other equipment used to transmit packetized information over hybrid loops, 22 such as the xDSL-capable line cards installed in DLC systems or equipment 23 used to provide passive optical networking (PON) capabilities to the mass 24 market.²³ 25 As this ruling shows, the FCC has made it clear that ILECs are not required to 26 unbundle the broadband capabilities of their hybrid loops. To the extent that Covad is 27 seeking access to those capabilities, its request violates the TRO. 28 Q. IS THIS FCC RULING RELATING TO HYBRID LOOPS RELEVANT TO 29 COVAD'S REVISED PROPOSAL FOR COPPER RETIREMENT? 30 Yes. As I discussed above, Qwest is concerned that the underlying intent of Covad's A. 31 new proposal may be to gain unbundled access to the broadband capabilities of 32 hybrid loops -- precisely what the FCC rejected in the TRO. In this regard, it is

significant that Covad has not offered a definition of the "alternative service" that

Qwest would have to provide before retiring a copper facility. Given the complete
vagueness of that term, if Covad's proposal were adopted, it is quite possible Covad
would claim that access to the broadband capabilities of hybrid loops is the
"alternative service" to which it would be entitled. That outcome would directly
violate the FCC's ruling.

7 Q. HAVE OTHER STATE COMMISSIONS RECENTLY ADDRESSED

COVAD'S REVISED PROPOSAL?

A.

Yes. As I discussed above, the Utah Commission considered and expressly rejected Covad's argument that limiting its alternative service proposal to hybrid loops would somehow make the proposal lawful, finding that there is "no support in the *TRO* for Covad's contention that hybrid loops should be treated differently under the FCC's copper retirement rules than are FTTH or FTTC loops."²⁴ The Colorado Commission also ruled very clearly that Covad's new focus on hybrid loops and its application of its "alternative service" proposal to those loops does not make the proposal lawful. The Commission explained:

In our reading of the TRO, ¶¶ 277-94, the FCC does not differentiate between requirements when "home run" copper is replaced with copper-fiber hybrid loops. Covad cites ¶¶ 277-279 of the TRO, stating that the copper retirement rules only apply to the extent that hybrid loops are an interim step to establishing all fiber FTTH loops. Nowhere in these paragraphs do we find this statement. In fact, the FCC indicates at footnote 847 that an ILEC can remove copper loops from plant so long as they comply with the FCC's Part 51 notice requirements, without any exclusion given to hybrid loops.

²³ TRO at ¶ 288. (Footnotes omitted and emphasis added).

²⁴ Utah Arbitration Order at 11.

1 As this ruling shows, Covad's newly revised language does not cure the flawed nature 2 of its proposal.

3 Q. PLEASE SUMMARIZE YOUR POSITION RELATING TO THIS ISSUE?

A. Qwest has proposed language that complies fully with the FCC's requirements relating to the retirement of copper facilities, and also goes beyond those requirements to minimize the possibility of service disruptions for Covad's end-user customers. By contrast, Covad has proposed unlawful conditions that would decrease Qwest's incentive to deploy fiber facilities, could prevent Qwest from recovering its costs, and, because of their ambiguity, would lead to inevitable disagreements and disputes in the parties' implementation of the ICA. Accordingly, the Commission should adopt Qwest's proposed ICA language relating to this issue.

III. CONCLUSION

13 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

14 A. Yes.

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BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON ARB 584

In the Matter of

COVAD COMMUNICATIONS COMPANY

Petition for Arbitration of an Interconnection Agreement with Qwest Corporation

DIRECT TESTIMONY OF MICHAEL NORMAN ON BEHALF OF QWEST CORPORATION

CLEC TO CLEC REGENERATION REQUIREMENTS (Disputed Issue 5)

FEBRUARY 25, 2005

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2 Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH **OWEST CORPORATION.** 3 A. My name is Michael Norman. My business address is 700 W. Mineral Ave., Littleton 4 5 Colorado. I am employed as a Director within the Technical and Regulatory Group of the Local Networks Organization of Qwest Corporation ("Qwest"). 6 7 Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE, AND PRESENT RESPONSIBILITIES. 8 9 A. I have been employed in the telecommunications industry for over 25 years. I began my 10 career in 1978 as a contractor for AT&T in Washington state surveying routes to place cable in rural areas. In 1980, I was hired by Qwest (formerly Mountain Bell and then U S WEST) 11 into the Local Network Organization. During my 14 years in the Local Network 12 Organization, I have held several different engineering positions including Outside Plant 13 Engineering, Tactical Planning, Central Office Engineering, and Network Planning. In 1999, 14 15 I was hired by Qwest Wireless as a Lead Network Engineer, where I participated in building and planning a new state-of-the-art Code Division Multiple Access ("CDMA") network. 16 In 2003, I began my current job as a Director in the Technical and Regulatory Group to 17 represent Owest in regulatory proceedings and to ensure compliance with regulatory 18

IDENTIFICATION OF WITNESS

I.

requirements.

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II. PURPOSE OF TESTIMONY

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- A. The purpose of my testimony is to provide technical expertise on Disputed Issue No. 5

 (Regeneration Requirements (Sections 8.2.1.23.1.4, 8.3.1.9, 9.1.10)). I will demonstrate that Qwest's language for the parties' Interconnection Agreement ("ICA") is operationally and technically reasonable and consistent with the FCC's rules and regulations.
- 7 III. ISSUE 5: CLEC TO CLEC REGENERATION REQUIREMENTS
 8 (SECTIONS 8.2.1.23.1.4, 8.3.1.9, 9.1.10)
- 9 Q. PLEASE EXPLAIN ISSUE 5.

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10 A. Very simply, Qwest permits CLECs to self-provision connections between them; thus,
11 under the FCC's rules, Qwest is not obligated to provide a CLEC-to-CLEC cross12 connection product. Qwest provides such a product as a service to the CLEC community,
13 but where channel regeneration is necessary, it provides the product under its FCC 1
14 Access Tariff. Covad's proposal would require Qwest to provide CLEC-to-CLEC
15 channel regeneration as a wholesale interconnection product on the same terms and
16 conditions as in an ILEC-to-CLEC connection or a CLEC-to-itself connection.

Q. WHAT IS CHANNEL REGENERATION, AND WHY IS IT NECESSARY?

Channel regeneration is required when the length of a circuit prevents the transmission of the proper signal strength to the point such that there is a degradation in signal quality.

There are industry standards, based on signal quality, that limit the length of the cables that join pieces of equipment. If the length of the cable exceeds the requirements as provided by the American National Standards Institute ("ANSI") Standard T1.102-2003

1		"Digital Hierarchy-Electrical Interface; Annex B," then regeneration of the signal is
2		required to satisfy acceptable circuit performance.
3	Q.	HOW OFTEN IS CHANNEL REGENERATION NECESSARY FOR A CIRCUIT
4		BETWEEN INTERCONNECTING CLECs?
5	A.	The need for CLEC-to-CLEC channel regeneration is rare. Due to the size of most of
6		Qwest's central offices, there would be no requirement for CLEC-to-CLEC regeneration
7		for all but a handful of central offices, even if the CLECs were placed at the far ends of the
8		offices from each other. In Oregon, Qwest has a total of 71 central offices and Covad has
9		collocation sites in [Confidential- XX] of those offices. Covad has never once requested
10		regeneration on either a Covad-to-itself connection or a Covad-to-CLEC connection in
11		Oregon. Further, with the existing space that is available in Qwest's central office in
12		Oregon, it is not likely that CLEC-to-CLEC connections would require regeneration. In
13		fact, here recently, Qwest received its first CLEC-to-CLEC regeneration request, although
14		the customer has not accepted Qwest's proposed offer to purchase Expanded
15		Interconnection Channel Termination ("EICT") out of the FCC 1 Access Tariff.
16	Q.	COVAD STATES THAT QWEST IS IN A POSITION TO MANAGE
17		COLLOCATION SPACE ASSIGNMENT AND CAN THEREFORE CONTROL
18		WHEN AND IF CLEC-TO-CLEC CONNECTIONS REQUIRE
19		REGENERATION. WILL YOU PLEASE RESPOND?

Certainly. Covad's argument that this Commission should adopt its proposed language

on this issue because Qwest determines whether a CLEC-to-CLEC connection would

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require regeneration, due to Owest's assignment of collocation space, fails. This 1 argument fails not only because Qwest's processes for assigning collocation space are not 2 at issue here, but also because Qwest does not make a unilateral determination of where a 3 CLEC's collocation space will be placed. 4 The FCC's rules require ILECs to provide a report to a requesting carrier that details the 5 collocation space available in a particular central office, such that the CLEC can indicate 6 its collocation space preferences prior to the assignment of collocation space. Covad can, 7 therefore, acquire information about space that is available in a central office and it can 8 9 request to be placed in a particular location in that office. In addition, Owest offers to

Further, Qwest provides collocation space on a first-come, first-served basis, and therefore, Qwest does not control the timing of individual CLEC collocation requests, the amount of space requested, or the evolution of CLEC relationships. It is safe to assume that CLEC business decisions over time may require circuit connections that need regeneration. It is unreasonable, however, to expect Qwest to absorb the cost of regeneration when Qwest is not involved in the exchange of traffic or the provision of any service related to the interconnection between such third parties.

CLECs the option of requesting a tour of its central offices to view any available space,

after which the CLEC may request an alternative space assignment. Thus, collocation

assignment is not a unilateral decision that Qwest makes.

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1	Q.	PLEASE GENERALLY DESCRIBE THE PARTIES' DISAGREEMENT ON THIS
2		ISSUE.
3	A.	Based upon the parties' interpretation of the FCC's rules and regulations, the parties
4		disagree upon whether Qwest is required to provide a wholesale channel regeneration
5		product on a CLEC-to-CLEC connection.
6	Q.	WHAT LANGUAGE IS QWEST PROPOSING ON THIS ISSUE?
7	A.	Qwest's proposed language for the relevant sections is set forth below, and it is consistent
8		with the FCC's rules. Qwest clarifies that if a CLEC does not wish to self-provision a
9		CLEC-to-CLEC connection and regeneration is required, the CLEC may order the
10		Expanded Interconnection Channel Terminations ("EICT") product out of Qwest's FCC
11		1 Access Tariff. Qwest's proposed language is as follows:
12		8.3.1.9 Channel Regeneration Charge. Required when the distance from the
13		leased physical space (for Caged or Cageless Physical Collocation) or from the
14		collocated equipment (for Virtual Collocation) to the Qwest network is of sufficient length to require regeneration. Channel Regeneration will not be
15 16		charged separately for Interconnection between a Collocation space and Qwest's
17		network or between non-contiguous Collocation spaces of the same CLEC.
18		Qwest shall charge for regeneration requested as a part of CLEC-to-CLEC Cross
19		Connections under the FCC Access No. 1 tariff, Section 21.5.2 (EICT). Cable
20		distance limitations are addressed in ANSI Standard T1.102-1993 "Digital
21		Hierarchy – Electrical Interface; Annex B".
22		8.2.1.23.1.4 CLEC is responsible for the end-to-end service design that uses
23		ICDF Cross Connection to ensure that the resulting service meets its Customer's
24		needs. This is accomplished by CLEC using the Design Layout Record (DLR)
25		for the service connection. Regeneration may be required, depending on the
26		distance parameters of the combination.
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28		9.1.10 Intentionally left blank.

Q. HOW IS THIS LANGUAGE DIFFERENT FROM THE LANUGAGE THAT QWEST ORIGINALLY PROPOSED?

A. This language confirms that Qwest will not charge for channel regeneration when
required by ANSI standards on connections between Qwest and a CLEC and between a
CLEC's non-adjacent collocation spaces. When channel regeneration is required on a
connection between a CLEC and its interconnecting CLEC partner, and the CLEC so
chooses, the CLEC may order Qwest's EICT product out of the FCC 1 Access Tariff,
which will thus ensure a templated signal between the two collocation spaces.

9 Q. IS QWEST'S LANGUAGE CONSISTENT WITH THE FCC's RULES AND 10 REGULATIONS?

12 Connections and amended 47 C.F.R. 51.323(h) to list only those situations in which an ILEC
13 has an obligation to provide a connection between the collocated equipment of two CLECs.
14 Specifically, ILECs must provide a connection between two CLEC collocation spaces: 1) if
15 the ILEC does not permit the CLECs to provide the connection for themselves, 2 or 2) under
16 Section 201 of the Act when the requesting carrier submits certification that more than 10
17 percent of the traffic will be interstate. Because Qwest permits CLECs to connect to each

¹ In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability, Fourth Report and Order (Fourth Advanced Services Order), CC Docket No. 98-147, FCC 01-204 (Rel. August 8, 2001).

² Pursuant to 47 C.F.R. § 51.323(h)(1), an ILEC is *not* required to provide a connection if "... the incumbent LEC permits the collocating parties to provide the requested connection for themselves"

³ Pursuant to 47 C.F.R. § 51.323(h)(2), "[a]n incumbent LEC is not required to provide a connection between the equipment in the collocated space of two or more telecommunications carriers if the connection is requested pursuant to section 201 of the Act..."

1		other outside their collocation space, and thereby removes itself from the CLEC-to-CLEC
2		relationship, it has no FCC-imposed obligation to provide a CLEC-to-CLEC connection,
3		much less regeneration for a CLEC-to-CLEC connection.
4		The absence of that CLEC-to-CLEC obligation is established by the express language of
5		Rule 51.323(h)(1), which specifically eliminates the requirement of an ILEC to provide a
6		connection between two CLECs' networks where the ILEC permits the CLECs to
7		establish that connection:
8 9 10 11 12		An incumbent LEC shall provide a connection between the equipment in the collocation spaces of two or more telecommunications carriers, <i>except to the extent the incumbent LEC permits the collocating parties to provide the requested connection for themselves</i> or a connection is not required under paragraph (h)(2) of this section. (Emphasis added).
13	Q.	HAS COVAD ACCEPTED QWEST'S PROPOSED LANGUAGE IN ANY OTHER
14		STATE?
15	A.	Yes. Covad has accepted Qwest's proposed language on this issue in Iowa, Nebraska,
16		North Dakota, South Dakota, Wyoming, Montana and Idaho.
17	Q.	WHAT IS COVAD'S LATEST PROPOSAL ON THIS ISSUE?
18	A.	Covad's proposal requires Qwest to provide channel regeneration for CLEC-to-CLEC
19		connections on the same terms and conditions as it charges for ILEC-to-CLEC
20		regeneration, which in Oregon's Exhibit 'A' is intentionally left blank in section 8.1.7. In
21		effect, Covad is asking this Commission to require Qwest to build its network for it,
22		which contravenes the purpose of the Telecommunication's Act (i.e., encouraging
23		CLECs to invest in facilities of their own).

1 Q. HOW CAN A CLEC CONNECT TO ANOTHER CLEC IN A QWEST CENTRAL 2 OFFICE?

A. There are two distinct types of CLEC-to-CLEC connections – direct connect and cross-connect. In a *direct* connection, two CLECs may connect directly with each other in a Qwest central office, thereby allowing CLECs direct access to each other for mutually exchanging traffic. In a *direct* connection, Qwest provides a route between the two CLEC collocation spaces; however, the CLEC engineers, provisions, and designs its own circuits.

With a *cross*-connection, CLECs may connect to each other on the same Qwest-owned Interconnection Distribution Frame ("ICDF"), whereby a jumper wire connects one CLEC to the other CLEC. In this cross-connection scenario, interconnecting CLECs may run their own facilities to the common ICDF, and they may provision the jumper wire connecting the two CLECs on the Qwest ICDF. Qwest will then provide the route for CLECs to place their facilities; however, the CLECs are responsible for the end-to-end design.

CLECs may also purchase from Qwest the connection from their collocation space to the Qwest ICDF and the jumper wire, which is known as Qwest's COCC-X product.

Sections 8.2.1.23 and 8.2.1.23.1.1 of the agreement being negotiated, which are undisputed in this arbitration proceeding, outline these two scenarios, while the undisputed portion of Section 8.2.1.23.1.4 confirms CLECs' responsibility for the end-to-end design of a cross-connection through the ICDF.

1 Q. CAN COVAD REGENERATE ITS OWN SIGNAL, AND IF SO, HOW?

Yes. Covad may regenerate its own signal. As I explain above, Covad may perform a
direct connection between it and a CLEC partner, or it may employ a cross-connection
architecture. In a direct connection, if regeneration were required, Covad would place
regeneration equipment (known as a repeater) between the parties' collocation spaces in
order to boost the signal. In such a scenario, Covad would order collocation space
(whether caged, cageless or virtual) near the mid-point where equipment would be placed
to regenerate its signal to meet the industry standards.

In a cross-connection architecture, both Covad and its CLEC partner would bring facilities to a common ICDF, and would then run a jumper between the two connection points. If the connection were to require regeneration, either Covad or its partner could order collocation (whether caged, cageless or virtual) on either side of the ICDF for placement of regeneration equipment.

Q. DOES COVAD HAVE AN ALTERNATIVE TO SELF-PROVISIONING A CLEC-TO-CLEC CONNECTION WHERE REGENERATION IS REQUIRED?

16 A. Yes. If Covad were to choose not to self-provision a connection or any necessary

17 regeneration between it and its CLEC partner, Covad could order the EICT product out of

18 Qwest's FCC 1 Access Tariff. The EICT product is a finished service, which means that

19 Qwest guarantees a templated signal for the entire length of the end-to-end circuit. If the

20 circuit were to require regeneration, the EICT product includes such regeneration.

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1 Q. IS THE FCC 1 ACCESS TARIFF EICT PRODUCT REASONABLY PRICED?

2 A. Yes. In fact, in the Colorado re-hearing on this issue, Covad's witness Michael Zulevic

agreed. The EICT product is located under Section 21.5.2 of the FCC 1 Access Tariff,

where the charges are listed as follows under Private Line Transport Service EICT. The

5 prices reflect per termination charges as follows.

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6	<u>Type</u>	<u>USOC</u>	NRC	Recurring Charge
7	DS1 (1.544 Mbps)	TKCJX	\$313.25	\$17.22
8	DS3 (44.736 Mbps)	TKCKX	\$329.00	\$52.50

Q. COVAD SUGGESTS THAT CLEC-TO-CLEC CONNECTIONS SHOULD BE

TREATED THE SAME AS ILEC-TO-CLEC AND CLEC TO ITSELF

CONNECTIONS. DO YOU AGREE WITH COVAD'S RATIONALE?

No. In its petition, Covad cites to the FCC's Second Report and Order for the

proposition that Qwest should provide CLEC-to-CLEC regeneration "on the same terms

Qwest provides regeneration for other cabling arrangements in its central offices."⁴

There is nothing in the Second Report and Order, however, which supports Covad's

proposition. This is especially so because the Second Report and Order involves a

discussion of ILEC-to-CLEC connections, and not CLEC-to-CLEC connections.

Furthermore, there is a fundamental difference between CLEC connections with a third

party and those connections between Qwest and a CLEC. Qwest delivers all CLEC-

⁴ See page 22, Issue 5 of Covad's Petition citing In the Matter of Local Exchange Carrier's Rates, Terms and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport, Second Report and Order, CC Docket No. 93-162, FCC 97-208 (Rel. June 13, 1997), ¶¶ 117-118 ("Second Report and Order").

ordered circuits between the CLEC's collocation space and Qwest's network with the proper signal quality by first designing the circuit. Then, as part of provisioning, Qwest tests the circuit to ensure the service quality is met. Qwest designs circuits to ensure that the cable between the Qwest-provided active elements and the Qwest central office cross-connects will meet proper signal level before delivering the circuit to a CLEC. In addition, Qwest partners with the CLEC to test both ends to maintain circuit integrity.

During the 271 proceedings, charges for CLEC-to-Qwest channel regeneration were thoroughly debated. Despite Qwest being permitted by the FCC and state commissions to charge for channel regeneration on such a connection, Qwest agreed that it would *not* charge for providing this regeneration, unless regeneration was not required by ANSI standards but was specifically requested by a CLEC. Through the course of these arbitration proceedings, Qwest has also agreed not to charge for channel regeneration if it is required on a connection between a CLEC's non-adjacent collocation spaces.

Q. WHY SHOULD CLEC-TO-QWEST CONNECTIONS, AND ANY RESULTING REGENERATION REQUIREMENT, BE TREATED DIFFERENTLY FROM CLEC-TO-CLEC CONNECTIONS?

A. For connections between a CLEC and Qwest in a Qwest central office, Qwest is a party to the connection and, as stated above, has agreed not to charge to regenerate a signal between it and a CLEC. The rationale behind this policy is that in a Qwest-to-CLEC scenario, Qwest maintains the ability to test, and maintains the connection, because it is a party to the connection. In a CLEC-to-CLEC connection, Qwest is *not* a participant in the relationship, and therefore has no control over or involvement with the facilities. If a

CLEC, who is interconnecting with another CLEC, asks Qwest to provision the

connection (instead of provisioning its own facility or contracting with another company

to provision the facility under Section 8.2.1.23 of the ICA), Qwest will provide the

facility, including the testability, but will charge a market rate for that connection.

Qwest's ability to charge a market rate encourages the CLEC to invest in its own

facilities, thereby furthering the goals of the Telecommunications Act.

IV. SUMMARY AND CONCLUSION

Q. PLEASE SUMMARIZE YOUR TESTIMONY?

A. Qwest permits CLECs to connect to each other outside of their collocation space. Thus, under 47 C.F.R 51.323(h)(1), Qwest is not required to provide a CLEC-to-CLEC connection, much less regeneration for a CLEC-to-CLEC connection. Qwest's proposed language on this disputed issue is consistent with Qwest's obligations under the FCC's rules and regulations. Covad's proposed language, on the other hand, has no sustainable basis in law. Accordingly, Qwest believes that the Commission should adopt Qwest's proposed language on this disputed issue.

16 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

17 A. Yes, it does.

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CERTIFICATE OF SERVICE

ARB 584

I hereby certify that on the 25th day of February, 2005, I served the foregoing **QWEST CORPORATION'S DIRECT TESTIMONY OF WILLIAM EASTON**, **KAREN STEWART AND MICHAEL NORMAN** in the above entitled docket on the following persons via U.S. Mail, by mailing a correct copy to them in a sealed envelope, with postage prepaid, addressed to them at their regular office address shown below, and deposited in the U.S. post office at Portland, Oregon.

Lisa F. Rackner Ater Wynne LLP 222 SW Columbia St. Suite 1800 Portland, OR 97201-6618 Greg Diamond Covad Communications Co 7901 Lowry Blvd. Denver, CO 80230

DATED this 25th day of February, 2005.

QWEST CORPORATION

By:

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