BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

IN THE MATTER OF THE CONTINUED COSTING AND PRICING OF UNBUNDLED NETWORK ELEMENTS, TRANSPORT AND TERMINATION	**)** **)** **)** **)** **)**	**DOCKET NO. UT 003013 PART D**

REBUTTAL TESTIMONY OF

ROBERT J. HUBBARD

ON BEHALF OF

QWEST CORPORATION

MARCH 7, 2002

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I. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, EMPLOYER AND BUSINESS ADDRESS.

A. My name is Robert J. Hubbard. I am employed by Qwest Corporation, as a Director in the Local Network Organization. My business address is 700 West Mineral, Littleton, Colorado 80120.

Q. HAVE YOU PREVIOUSLY FILED DIRECT TESTIMONY IN PART D OF THIS HEARING?

A. Yes, I filed Direct Testimony in Part D of this cost hearing, on November 7, 2001.

II. PURPOSE AND ISSUES OF REBUTTAL TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I will provide rebuttal testimony to the testimony filed by Mr. Griffith of Commission Staff, Mr. Price on behalf of WorldCom, Mr. Lathrop on behalf of WorldCom and COVAD witnesses Mr. Cabe and Mr. Donovan.

Q. ARE THERE OTHER ISSUES THAT NEED TO BE BROUGHT TO THE COMMISSIONS ATTENTION IN YOUR REBUTTAL TESTIMONY?

A. Yes. The Commission has ruled in the 271 proceeding that UDIT and EUDIT will be priced utilizing the same elements. Because of this ruling, I would like to strike all parts of my Direct Testimony dated November 7, 2001 related to UDIT and

EUDIT. Specifically, I would like to strike the testimony appearing at page 8, line 9 through page 11, line 19. I would also like to strike the exhibit marked as Exhibit RJH-9.

Q. HAVE THE PARTIES REACHED AN AGREEMENT ON THE WAY THAT A CLEC CAN ACCESS A QWEST VAULT IN THE CASE THAT MANHOLE 1 IS FULL.

A. Yes. Qwest and XO have reached an agreement through technical talks and that agreement is attached as Exhibit RJH-11.

III. TESTIMONY OF MR. GRIFFITH

Q. MR GRIFFITH (PAGE 7, LINES 1 THROUGH 16) ADDRESSES REGENERATION. HE MAKES THE RECOMMENDATION THAT QWEST SHOULD CLEARLY STATE IF THE QWEST STANDARDS AND ANSI STANDARDS ARE THE SAME AND THAT QWEST SHOULD DEFINE IN THE SGAT THE ANSI STANDARDS. WILL YOU PLEASE RESPOND TO THESE ITEMS?

A. Yes, the Qwest and ANSI standards are the same and the ANSI standard is specified in 8.3.1.9.

> 8.3.1.9 Channel Regeneration Charge. Channel Regeneration will not be charged separately for Interconnection between a Collocation space and Qwest's network. If based on the ANSI Standard for cable distance limitations, regeneration would not be required but is specifically requested by CLEC, then the Channel Regeneration

Charge would apply. Cable distance limitations are based on ANSI Standard T1.102-1993 "Digital Hierarchy – Electrical Interface; Annex B."

IV. TESTIMONY OF MR. PRICE

Q. PLEASE DEFINE REMOTE COLLOCATION.

A. Remote Collocation is defined as the placement of CLEC equipment necessary to access UNEs within Qwest owned or leased Outside Plant ("OSP") structures. When building OSP structures, Qwest is obligated to consider CLEC demand for UNEs as part of the space requirement analysis. In addition, if Qwest chooses to deploy DSLAMs in a remote location, collocation space for similar CLEC equipment must be accommodated.

Remote Collocation is available at new and existing OSP structures wherever technically feasible. One example of an OSP structure is the Remote Terminal, which provides Qwest and CLECs with common access to space and power. Remote access to subloop network elements (e.g. subloop feeder, subloop distribution) is obtained at the Feeder Distribution Interface (FDI). CLEC requests to remotely collocate at other OSP structures will be considered on a case-by-case basis through the remote collocation process.

Q. MR. PRICE, IN HIS DIRECT TESTIMONY, ADDRESSES SEVERAL ELEMENTS OF REMOTE TERMINAL (RT) COLLOCATION. WILL

YOU PLEASE PROVIDE THE ASSUMPTIONS THAT ARE INVOLVED IN RT COLLOCATION.

A. The following assumptions form the basis for RT Collocation: Qwest currently offers Remote Collocation at existing sites and new DA Hotel sites. The DA Hotel OSP planning team provides participating CLECs with Qwest's proposed deployment of DA Hotels, by wire center, at a Distribution Area ("DA") level. Following site disclosure, CLECs have 30 days to notify Qwest of their desire to participate in joint planned remote collocation. This will allow Qwest to correctly size the DSLAM Hotel to house equipment, provide for power consumption, and heat dissipation requirements. When CLECs do not participate in a DA Hotel Build, Qwest will add 15% to the size of the DA Hotel and allow for additional terminations at the FDI. Upon completion of the build, the additional space will be offered on a first come, first serve basis.[1]

When Qwest remotely deploys a DSLAM (at which an additional cabinet has not been installed next to the FDI), a DA Hotel will be placed next to the FDI. CLECs are responsible for installing and maintaining their equipment at remote sites. Additional capacity in the OSP structure for non-forecasted growth will be allocated on a first come, first serve basis.

[1] The Ameritech/SBC merger, FCC 00-336, ¶34, requires SBC to make available 15% of a new OSP cabinet and 20% of a CEV/HUT to unaffiliated carriers.

Q. MR PRICE, AT PAGE 12, LINES 4 TO 11, BASES HIS ASSUMPTIONS ON THE AVERAGE NUMBER OF RT'S OBTAINED FROM SBC. WHAT IS THE ACTUAL NUMBER OF DA HOTELS IN THE STATE OF WASHINGTON?

A. In the state of Washington, Qwest has deployed an average of 8.31 DA Hotels per wire center in which CLEC's have the ability to place their DSLAM equipment.(Qwest has not deployed in every wire center in Washington).

Q. IS QWEST REQUIRED BY THE FCC TO UNBUNDLE DLC OR DSLAM PLATFORMS?

A. No, it is not. Qwest is required by the FCC to provide unbundled loops from its integrated digital loop carrier systems but not to unbundle the systems themselves. DSLAMs are part of the packet switched network and, as such, are subject to unbundled packet switching rules discussed by Ms. Malone and Mr. Craig. The FCC has not ordered the DSLAM platform itself to be unbundled.

V. TESTIMONY OF MR. LATHROP

Q. MR. LATHROP STATES, AT PAGE 6, LINE 19 THROUGH PAGE 7, LINE 6, THAT QWEST COLLOCATION PROJECT MANAGEMENT CENTER (CPMC) TIME SHOULD BE REDUCED FROM 2 HOURS TO ONE HOUR. DO YOU AGREE WITH HIS ASSERTION?

A. No. Mr. Lathrop provides absolutely no information to base his recommendation

that Qwest should be ordered to change the CPMC time from 2 hours to 1 hour.

Q. COULD YOU PLEASE PROVIDE THE ACTIVITIES THAT GO INTO QWEST'S ASSUMPTION THAT TWO HOURS OF CPMC TIME IS REQUIRED?

A. Qwest's Collocation Project Management center ("CPMC") is the gateway for assuring a request for a CLEC to CLEC connection is handled properly.

A CLEC to CLEC order involves the necessary step of having Qwest's CPMC review the CLEC's request for completeness. During this task, Qwest prints all associated e-mails and forms from the CLEC to start a working file, or job folder. This includes assigning a Billing Account Number ("BAN") and entering the information into the collocation database.

Once all of the information is properly documented and entered into to the database, the CPMC determines which engineer (wire center specific) should receive the request.

Once all of the data has been thoroughly validated free of errors or questions, the CPMC forwards the work package information on to the appropriate engineers (Common Systems Planner (CSPEC) and Interoffice Facility (IOF) Planner).

If the CLEC to CLEC request has errors or questions, it is up to the CPMC to make contact with the Wholesale account team and the customer to further clarify any issues that arise. The clarification work can take several hours of the CPMCs time. This clarification work may include coordinating a conference call with the CLEC, so that clarifying questions can be answered.

Once the engineers have determined the feasibility of the request, the information is forwarded back to the CPMC to validate and update the collocation database. After the CPMC updates the database, the CPMC forwards the information to the Wholesale account team and on to the CLEC.

Considering all of the activities and tasks performed by the CPMC (project manager) and the need to build a database file, prepare a comprehensive package for the engineer, and update and forward the information obtained back to the customer, 2 hours of labor performed in the CPMC is conservative.

Q. MR. LATHROP ALSO STATES ON PAGE 7, LINES 8 THROUGH 23, THAT QWEST'S TIME FOR CSPEC IS OVER STATED. WHAT FUNCTIONS DOES THE CSPEC GROUP TAKE TO FINALIZE A JOB?

A. Once the Common Systems Planner ("CSPEC") receives the work request from the CPMC, a Common Planning Document ("CPD") is opened. This database tracks all of the necessary information (material and labor) pertinent to each and

every job. The CSPEC planner will create a CPD regardless of whether additional cable racking is required for a CLEC to CLEC request because all jobs require a CPD opened to track work.

Once the CPD is opened and populated with the scope of the job (synopsis of job), dates associated with the job, and the funding authorization for the job, the CSPEC planner will hand the job off to the IOF engineer for actual design.

The IOF design engineer will look at the Central Office Equipment Facility Management ("COEFM") system, request a "walk-through" of the central office in question, designs the job based on records and walk through report, and creates the design work package ("DWP") stating what work is required.

Q. ON PAGE 7, LINE 18, MR. LATHROP STATES THAT QWEST DOES NOT NECESSARILY CONDUCT AN "IN-PERSON" WALK-THROUGH OF ITS CENTRAL OFFICE. WILL YOU PLEASE RESPOND TO THIS ALLEGATION?

A. Qwest performs "walk-through" on all of its CLEC to CLEC direct connection jobs. The walk-through provides a field verification for racking availability; this includes type of racking required, a clear path in the racking, and necessary capacity in the racking path.

Q. ON PAGE 8, LINES 1 THROUGH 5, MR. LATHROP STATES THAT THE FORMS/FOLLOW UP SHOULD BE NO MORE THAN TWO HOURS. PLEASE RESPOND TO HIS STATEMENT.

A. The functions involved in Forms/Follow Up include Quality Check and SICM/ATR Cable Route Walk Through. Qwest performs quality checks on all work performed and completed within its central offices. The State Interconnection Manager for Qwest performs a walk-through of the central office with the customer. In Qwest's experience, on average, these functions take 2.5 hours to complete.

Q. MR. LATHROP STATES, ON PAGE 11, LINES 4 THROUGH 22, THAT QWEST SHOULD HAVE AN EFFICIENTLY DEPLOYED COLLOCATION AREA AND THAT WOULD INCLUDE CABLE RACKING BETWEEN (LIKELY ADJACENT) COLLOCATION ARRANGEMENTS. WILL YOU PLEASE RESPOND TO THIS STATEMENT?

A. Qwest does place collocation arrangements in close proximity to one another; however, once space is exhausted in an existing central office area, no argument exists, Qwest must look for other locations in that central office. So, the argument that Qwest doesn't engineer efficiently doesn't work, there is only so much square footage between the walls regardless of where we began placing collocation.

In addition, many central offices have required building additions to accommodate CLEC needs as well as Qwest needs. Building additions do not always provide adjacent space for CLEC or Qwest, since the new shape and structure is reliant on the amount of land Qwest can build on, and as well, building codes, zoning requirements, etc.

Q. MR. LATHROP ADDRESSES CABLE RACKING CAPACITIES ON PAGE 13 OF HIS DIRECT TESTIMONY AND THE FACT THAT QWEST SHOULD USE CABLE RACKING ASSUMPTIONS IN THE CLEC TO CLEC COST STUDY INPUT. DO YOU AGREE WITH HIS ASSUMPTION?

A. No. Mr. Lathrop seems to forget that the existing cable racking assumption is for cable racking that runs throughout the central office. The CLEC to CLEC racking is only going between CLECs and is built for them in the collocation area, and it would more than likely, run in a different route than what Qwest would build for itself. Therefore, the assumption that you could apply existing cable racking averages into a CLEC to CLEC assumption is flawed. The Qwest cost study assumes that three CLEC's may use the racking, which is generous, because in reality it should probably be more like two CLEC's utilizing this racking as Qwest would not be using this racking and more than likely the racking would only run between two CLECs.

Q. ON PAGE 16 OF MR. LATHROP'S TESTIMONY HE ADDRESSES THE ISSUE THAT THERE SHOULD BE LITTLE CHARGE FOR ENGINEERING WITHIN THE CLEC TO CLEC CROSS CONNECTION PRODUCT. WILL YOU ADDRESS THIS ISSUE?

A. Even though, as Mr. Lathrop states, the CLEC provides the design layout within the ASR, Qwest still designs the route from the APOT information provided by the CLEC and then this circuit has to be designed and built within the TIRKS database. Qwest has provided the appropriate time estimates for completing this project.

Q. MR. LATHROP ADDRESSES THE SPACE INQUIRY REPORT COSTS AND TIMES ASSOCIATED WITH THESE COSTS. WILL YOU RESPOND TO MR. LATHROP'S ASSERTIONS?

A. Mr. Lathrop asserts that Qwest maintains an inventory of certain pieces required by the FCC for inclusion in this report that the time Qwest spends should be reduced. However, what his analysis fails to mention is that the inventory systems do not allow mechanized reporting of the specifics required, but require an individual view. Not only does Qwest verify and match its own documentation, Qwest also verifies that CLEC's request accurately reflects the location (i.e. address and CLLI are for the same location) so that Qwest investigates and provides the report for the correct (and desired) location.

Q. WHAT STEPS MUST QWEST UNDERTAKE TO PROVIDE THE SPACE INQUIRY REPORT?

A. Once the CSPEC planner receives the verified request, individual assessment begins. In spite of the implication of Mr. Lathrop's testimony to the contrary, presence in inventory does not translate into a mechanized report. The central office drawing database (COEFM) contains drawings of space; however, the available space determination falls squarely within the interpretation of the planner since open spaces are identified, not "collocation space."

The planner must identify all open space in the location, floor to floor and section to section. If spaces have been reserved, the planner must also evaluate the purpose of that reservation whether it is for a CLEC or Qwest to determine if it is available for collocation equipment. Additionally, the layers of the data base system require the individualized approach. For instance, where space is at a premium and an existing space exists, the planner must evaluate whether that space could in fact be utilized for equipment. To obtain a rational and complete assessment, contact must be made with the appropriate real estate group, IOF planners, State Interconnect Manager (SICM) and central office personnel. The same communications needs apply when space is identified as appropriate for grooming of circuits.

Each location has unique requirements and idiosyncrasies that must be considered prior to finalizing a space report. Engineering efficiency requires this internal communication to ensure that the needs of individual locations are considered. While building addition information may be readily available to certain groups and standardized email a proven practice, emails do not reduce the need for discussions about the reality of the addition or conversion plans that have not yet begun.

Q. DO THE STEPS YOU OUTLINED REFLECT THE ACTUAL WORK QWEST IS REQUIRED TO PERFORM TO PROVIDE A SPACE INQUIRY REPORT?

A. Yes. As I stated, even though the information is mechanized, actual manual evaluation of the information is required, and Qwest reflects the time required to provide this report.

Q. MR. LATHROP ASSERTS THAT QWEST USES INFLATED TIMES TO DEVELOP ITS SPACE OPTIONING COSTS. PLEASE RESPOND TO THESE ASSERTIONS.

A. Again, Mr. Lathrop provides no information to back up his claim that Qwest inflates its time estimates. The Space Option product allows a CLEC to reserve space in a Qwest central office for up to one year for transmission equipment, three years for circuit switching equipment, and five years for power equipment.

The optioned space is offered for Caged, Cageless and Virtual Collocation. The space option may be open for several years and Qwest must evaluate the initial request, which requires virtually the same amount of time as another type of request to process at the onset. Systems must be opened, groups informed, investigation of space performed, assignments and communications made. The nonrecurring fee for all collocation space option requests covers the processing of the application, feasibility, common space engineering, records management and administration of the First Right of Refusal process.

Q. MR. LATHROP DOESN'T SEEM TO UNDERSTAND WHAT THE FIRST RIGHT OF REFUSAL PART OF THE SPACE OPTION PRODUCT INCLUDES. COULD YOU EXPLAIN WHAT THIS REFERS TO?

A. Yes. This refers to a CLEC that has space optioned for them and Qwest receives a valid collocation application from another CLEC and calls for the option party to exercise its First Right of Refusal, or relinquish its space option. The option party may exercise its First Right of Refusal by submitting either a collocation application or by submitting a collocation space reservation application. This requires time for the IAC group to track and provide the Option Enforcement Notice to the CLEC.

Q. ON PAGE 32 OF MR. LATHROP'S TESTIMONY HE ADDRESSES THE BONA FIDE REQUEST COST STUDY AND AGAIN STATES THAT OUR COSTS ARE TOO HIGH. WILL YOU ADDRESS THIS ISSUE?

A. The fact is, that most requests are technically feasible and no technical feasibility is required. Therefore, these new requests should be processed as Special Requests. If there is a technical feasibility issue (a technology never deployed in the network before), by its very nature, many people will be consulted - actual "thinking" time is required for creative solutions to emerge to new questions. Plus several conferences will be held to determine how to provision the request, initial kick off upon receipt of the request, intermediate conference calls to determine where we are and follow-up before the feasibility response to make sure we are addressing the CLEC's question and the team understands our response.

VI. TESTIMONY OF MR. CABE AND MR. DONOVAN

Q. COVAD WITNESSES, RICHARD CABE AND JOHN DONOVAN, ASSERT IN THEIR REPLY TESTIMONIES THAT QWEST SHOULD NOT CHARGE THE CLEC FOR COOPERATIVE TESTING. WILL YOU PLEASE RESPOND TO THIS ASSERTIONS?

A. This claim is absurd. The purpose of cooperative testing is to enable a CLEC to perform its own tests on a loop and to decide whether the loop meets its specifications. The CLEC's specifications may be different than Qwest’s,

depending on the CLECs use of the loop. If the CLEC desires a loop that meets Qwest's standards and does not need to test for its own standards, it can simply order basic installation with performance testing. Qwest will then test the loop, provide the results and repair any faults. At the end of the process Qwest will either provide a loop that meets the requested NCNI codes or affirm that no loop exists on that route.

The whole purpose of cooperative testing is to allow the CLEC to test the loop to make sure that it meets the CLEC's specific needs. If the CLEC determines that the loop will not satisfy its requirements, under cooperative testing, the CLEC can request either that Qwest remove certain impediments or check for certain other problems in the loop and make adjustments. At the end of the process, the CLEC can accept the loop or cancel the order. This saves the possible delays of completing test reports on loops and avoids disputes concerning how a loop performs and who is at fault for alleged problems. By engaging in cooperative testing with both the ILEC and CLEC available at the same time, both parties can agree on exactly what is happening with the loop.

If Covad believes this process is not necessary, it can order a basic install with performance testing, or even basic installation. Under these options, after receiving the loop, Covad can send it back if it fails Covad's tests, and request either adjustments of the loop delivered or a substitute loop. A fundamental

purpose of cooperative testing is to expedite resolution of any issues found by the CLEC and to allow a CLEC to determine for itself whether a loop meets its own special needs.

Contrary to the suggestions in Mr. Cabe's and Mr. Donovan's testimony, cooperative testing can provide substantial benefits that go beyond the testing Qwest performs by itself on loops.

Q. DOES QWEST OFFER DIFFERENT OPTIONS FOR CLECS TO PROVISION ORDERS?

A. Currently, Qwest offers five (5) provisioning options – each applicable to any of the unbundled elements offered today. Each of these options offers the CLEC and their end user customer a different "level" of testing and coordination depending on the needs and wants of the CLEC. Each of these "levels" requires Qwest to conduct or perform work of varying degree involving multiple organizations, and each requires either a greater or lesser number of work steps.

Q. PLEASE EXPLAIN THE BASIC INSTALLATION FOR AN UNBUNDLED LOOP.

A. There are two methods for providing Basic Installation on an unbundled loop. The two methods are dependent on whether the circuit is an existing or new circuit.

If the circuit is existing, the Central Office Technician (COT) is required to perform a "lift and lay" procedure, clear the order with the Center, and clear the order with the CLEC. The "lift and lay" procedure entails the physical moving of a jumper from the Qwest central office network equipment to the CLEC's demarcation point within the Qwest central office. With this work complete, the end user is now "connected" to the CLEC's network. Upon completion of this step, the COT contacts the Center and close the service order with the Center personnel. Finally, Qwest must notify the CLEC that the provisioning is complete on the unbundled loop service order.

When installing a new loop, work from both the COT and an Installation/Maintenance (I&M) Technician may be required. The COT performs the "lift and lay" and the I&M Technician may need to place cross connects, at the Cross-Box (located in the field). The I&M Technician may also have to connect the buried service wire (BSW) to the distribution pair at the pedestal feeding the home. In addition, the same technician may have to add capacity to the existing NID to allow termination of the "new" loop. At this point, the technician will perform testing to assure continuity to the end user's Network Interface Device (NID).

Q. HOW DOES THE BASIC INSTALLATION WITH PERFORMANCE TESTING DIFFER FROM THE BASIC INSTALLATION OPTION?

A. The basic installation with performance testing option provides the same work efforts described in Basic for either a new or existing customer; however, the performance testing data is forwarded to the CLEC via the Implementor/Tester in the Center. The relaying of this testing data, either verbally or via email, within 48 hours of completion, requires additional customer contact with the CLEC. Hence, an additional work step, and additional costs.

Q. HOW DOES THE BASIC INSTALLATION WITH COOPERATIVE TESTING DIFFER FROM THE BASIC INSTALLATION OPTION?

A. Again, the work efforts described in the Basic option are followed but in this instance, Qwest works with the CLEC, through the Implementor/Tester to perform cooperative testing. This testing could include, but is not limited to, a Qwest technician, at either the CO or in the field, placing tone on the line or placing a short across the circuit at the CLEC's request. This will allow the CLEC to conduct testing from varying locations within their circuit and for the CLEC to validate that the loop they are accepting will meet the technical parameters of the service they intend to provide to their end user. Once again, these additional work steps are over and above those involved in the Basic Installation Option. In this case, the additional work includes a call to the CLEC

to perform the cooperative testing and the performance of the tests themselves. Subsequent to this activity is, of course, the closing of the service order.

Q. HOW DOES THE COORDINATED INSTALLATION WITHOUT COOPERATIVE TESTING DIFFER FROM THE BASIC INSTALLATION OPTION?

A. This option is a "lift and lay" procedure that offers CLEC the ability to coordinate the conversion activity. At the CLEC designated "Appointment Time," the Qwest Implementor/Tester will contact the CLEC and ask if they are ready for Qwest to proceed with the conversion activity – in other words, are they ready for the installation activity to take place. If they are ready, Qwest will perform the "lift and lay" and then advise the CLEC when the "lift and lay" procedure is complete. This coordination takes place in Qwest's Coordinated Cut Center (QCCC), a Center specifically designed to handle coordinated requests from the CLEC. This option is different from "with cooperative testing" in that the CLEC chooses not to have Qwest perform a cooperative test with them prior to order closure. Qwest delivers the loop to the CLEC at a designated time that allows the CLEC to coordinate any minimal outage with their end user.

Q. HOW DOES THE COORDINATED INSTALLATION WITH COOPERATIVE TESTING DIFFER FROM THE BASIC INSTALLATION OPTION?

A. This option not only gives the CLEC the ability to designate a specific time for Qwest to perform their work but also gives the CLEC the latitude to perform "Cooperative" testing with Qwest once the unbundled loop has been installed. Once again, this cooperative testing allows the CLEC to conduct testing from varying locations within their circuit and for the CLEC to validate that the loop they are accepting will meet the technical parameters of the service they intend to provide to their end user. This level of coordination and cooperative testing involves a number of work steps – more than those required during a Basic Installation. Hence, more time and labor.

Q. WOULD YOU SHOW A COMPARISON OF THE WORK GROUPS AND THE WORK STEPS INVOLVED IN EACH INSTALLATION OPTION THAT QWEST OFFERS?

A. Yes. See chart below.

Installation Option Comparison

	Basic Installation Option	Coordinated without Cooperative Testing Option	Basic with Performance Testing Option	Basic with Cooperative Testing Option	Coordinated with Cooperative Testing Option
WORK GROUPS					
Central Office	**X**	**X**	**X**	**X**	**X**
I&M Tech	**X**	**X**	**X**	**X**	**X**
RCMAC[2]	**X**	**X**	**X**	**X**	**X**
OCO[3]	**X**		**X**	**X**	
QCCC		**X**			**X**
WORK STEPS					
Conduct Performance Testing	**X**	**X**	**X**	**X**	**X**
Clear with CLEC	**X**	**X**	**X**	**X**	**X**
Relay Performance Results to the CLEC			**X**	**X**	**X**
Contact CLEC at Coordinate Time		**X**			**X**
Contact CLEC to perform Cooperative testing				**X**	**X**
Email Test within 48 hours on Email form			**X**	**X**	**X**

[2] Recent Change Management Administration Center

[3] Overall Control Office

Q. COVAD INITIATED DATA REQUEST #60 THAT TRACKED COOPERATIVE TESTING RESULTS. HAVE YOU REVIEWED THIS DATA REQUEST?

A. Yes. I reviewed the information that was provided for cooperative testing on Covad orders that were completed in the month of January. Of the 197 orders for cooperative testing, Qwest, on its pre-test fixed 53 loops (27%) prior to the cooperative test with Covad. This indicates that Qwest is adequately performing pre-test prior to cooperative testing with the CLEC.

Q. MR. CABE (AT PAGE 5) ASSERTS THAT COOPERATIVE TESTING IS A PROCEDURE INTENDED TO OVERCOME QWEST'S FAILURE TO ADEQUATELY PERFORM BASIC INSTALLATIONS. WILL YOU RESPOND TO THIS ASSERTION?

A. Mr. Cabe's assertion is absolutely ridiculous. The performance test that Qwest performs on all loops are designed to test the facility and it's ability to transport a specific signal. The performance tests are conducted only on that portion of the loop that is actually a part of Qwest's network. In other words, the circuit meets Qwest's and industry standards. Despite the existence of industry standards, many CLEC's have not studied the standards enough to understand what tests that they really want to conduct. Therefore, I believe it is out of lack of knowledge, that CLECs who request cooperative testing don't understand what tests were conducted with performance testing. Therefore, they simply order every order

with cooperative testing and ask us to re-perform our performance test with them on the line. This is the most popular of the cooperative tests requested. It is usually not run any different with the CLEC on the line than it is run before we contact the CLEC. Outside of that, the second most popular requested test is a "loop-back" test. This allows the CLEC to include their network in the facility and to ensure continuity from the CLEC switch out. This is a full facility test (which means that both the CLEC network and Qwest network are included in the test).

On cooperative testing, this is solely at the CLEC's direction. They dictate what tests we perform. Qwest is open as to what test capabilities the CLEC customer has on hand, being open to assist (with established charges) with whatever trouble condition the CLEC customer is working to solve. The expectations include that the troubles are being isolated in or out of each network and the technicians involved are professional and knowledgeable in their field. The nature of the trouble, the particular equipment and even the personal preference of a tester can drive a customer to request specific tests.

Q. MR. CABE AND MR. DONOVAN STATE IN THEIR TESTIMONY THAT COPPER T1 LINES ARE NOT CONSIDERED FORWARD-LOOKING TECHNOLOGY. WILL YOU RESPOND TO THIS ASSERTION?

A. In Part B of this docket, Qwest witness, Mr. Dick Buckley, provided rebuttal testimony on this very issue when he rebutted Mr. Cabe at that time. I have included the rebuttal testimony of Dick Buckley, dated February 7, 2001, as Exhibit RJH-12**.** Mr. Buckley, in his rebuttal testimony starting on page 8, states that "copper pairs are still an economically efficient, forward-looking solution." Mr. Buckley also states that every cost model that he has seen used for interconnection and universal service fund proceedings includes copper facilities for a portion of the feeder network. These models include the FCC Synthesis Model, the Benchmark Cost Proxy Model, and the HAI model.

Q. MR DONOVAN SEEMS TO IMPLY THAT IT IS A SIMPLE METHOD TO PROVIDE POTS AND DATA OVER AN EXISTING ALCATEL LITESPAN SYSTEM. WOULD YOU COMMENT ON THIS ISSUE?

A. It is not as easy as Mr. Donovan would like you to believe. First it would be necessary to conduct an evaluation to determine if fiber facilities are available to the ATM switch. If no facilities were available, then Qwest would have to install them.

Next, Qwest would have to perform a card upgrade to increase the memory capacity of the DLC Central Processing Unit ("CPU"). After upgrading the memory, Qwest would have to buy and load the DLC operating software. After completing the software upgrade, it would be necessary to add two ATM Bank

Control Unit ("ABCU") cards to the DLC to provide the fiber connection mentioned above from the DLC to the ATM switch. An ATM switch port would then be assigned, and the fiber would be connected to the ATM.

As this description shows, Mr. Donovan has oversimplified the process of converting an existing Alcatel Litespan System to permit it to provide advanced services.

Q. WHAT TYPE OF INDIVIDUAL CHANNEL CARD WOULD BE REQUIRED FOR THE ALCATEL LITESPAN SYSTEM?

A. ASDL Digital Line Unit ("ADLU") cards are vendor-specific and configured for a specific type of DLC system and network configuration. Today, the only vendor that provides a line card for advanced services is Alcatel.

Q. CAN THE ADLU CARD BE UNBUNDLED AS A STAND-ALONE NETWORK ELEMENT. IS THIS POSSIBLE?

A. No, it is not possible for several reasons. First, the ADLU does not even function as a stand-alone network element. The ADLU card provides voice/data combination functionality and limited routing capability. It does not function alone to permit service as a standard element. Further the card will not function without power. Finally, the ADLU line card shares the CPU and transport platform of the DLC system. Therefore, the ADLU is *not capable* of functioning

as a stand-alone network element and should not be unbundled as a separate network element.

Q. IS THERE A PHYSICAL NETWORK DEMARCATION POINT IN THE ADLU LINE CARD?

A. No. The ADLU line card shares a common backplane with the DLC platform. This means the advanced services traveling through it are commingled with those of Qwest's for transport back to the central office.

Q. WITHOUT A DEMARCATION POINT, HOW WOULD A CLEC "PICK UP" ITS DATA TRAFFIC FROM QWEST?

A. The data is formed into packets at the DLC platform and transported back to an ATM switch. The CLEC would "pick up" packets at the ATM switch.

Q. WOULDN'T THIS AMOUNT TO UNBUNDLED PACKET SWITCHING?

A. Yes, it appears that is what Mr. Donovan is suggesting. Qwest witnesses Kathy Malone and Joseph Craig address both the policy and technical issues of Unbundled Packet Switching.

Q. IS QWEST REQUIRED BY THE FCC TO UNBUNDLE DLC OR DSLAM PLATFORMS?

A. No, it is not. Qwest is required by the FCC to provide unbundled loops from its integrated digital loop carrier systems but not to unbundle the systems themselves. DSLAMs are part of the packet switch network and, as such, are subject to unbundled packet switching rules. The FCC has not ordered the DSLAM platform itself to be unbundled.

Q. PLEASE DESCRIBE THE CIRCUMSTANCE IN WHICH QWEST HAS AN OBLIGATION TO OFFER UNBUNDLED PACKET SWITCHING.

A. Qwest is obligated to offer unbundled packet switching when the following four conditions exist:

- Qwest has deployed digital loop carrier systems ("DLC");
- There are no spare copper loops available capable of supporting xDSL services;
- Qwest has placed a DSLAM for its own use in a remote Qwest premises but has not permitted the CLEC to collocate its own DSLAM at the same remote Qwest premises; and
- Qwest has deployed packet switching capability for its own use.

Q. WHAT AUTHORITY DOES QWEST RELY UPON FOR ITS ASSERTION THAT ACCESS TO UNBUNDLED PACKET SWITCHING IS REQUIRED ONLY IN A LIMITED CIRCUMSTANCE?

A. In its UNE Remand Order, the FCC found "one limited exception to [its] decision to decline to unbundle packet switching."[4] The FCC then laid out its criteria: where the ILEC has deployed digital loop carrier (DLC) systems, no spare copper

[4] UNE Remand Order at ¶313.

facilities are available, and the incumbent has placed its DSLAM in a remote terminal. The FCC went on to find that the ILEC will not be required to offer access to unbundled packet switching "if it permits a requesting carrier to collocate its DSLAM in the incumbent's remote terminal, on the same terms and conditions that apply to its own DSLAM."[5]

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes.

[5] Id.