BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Petition of QWEST CORPORATION for Arbitration of an Interconnection Agreement with UNION TELEPHONE COMPANY d/b/a UNION CELLULAR under Section 252 of the Federal Telecommunications Act	**)**	**DOCKET NO. 04-049-145**

DIRECT TESTIMONY

OF

ANN MARIE CEDERBERG

FOR

QWEST CORPORATION

[Disputed Issues: 1, 2, 3]

QWEST EXHIBIT 1

OCTOBER 4, 2005

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I. IDENTIFICATION OF WITNESS

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION WITH QWEST CORPORATION.

A. I am Ann Marie Cederberg. My business address is 700 W. Mineral Ave., Littleton Colorado. I am employed as a Director within the Network Policy Group of the Public Policy Organization of Qwest Services Corporation. I am testifying on behalf of Qwest Corporation ("Qwest").

Q. PLEASE DESCRIBE YOUR EDUCATION, BACKGROUND AND EMPLOYMENT EXPERIENCE.

A. I have been employed in the telecommunications industry for over 27 years. I began my career in 1978 with Western Electric, then Qwest's predecessor The Mountain States Telephone and Telegraph Company, Mountain Bell, which later became part of U S WEST Communications, Inc. I have been employed within network operations, currently known as the Local Network Organization for the last 11 years. As an employee of the Local Network Organization, I had responsibility for projects that were designed to ensure and maintain adequate levels of network capacity within the central offices as well as outside plant. My Local Network Organization responsibilities have provided me with an extensive background and in-depth experience in all aspects of the public switched telephone network. From January 1, 1997 until May 2002 I worked exclusively on the

2002 Olympic Winter Games in Salt Lake City building the telecommunications network for the Games.

In June 2002, I accepted a position within Qwest's Outside Plant ("OSP") Planning Organization as the Planning Manager for Outstate South Colorado. While I held this position I gained experience in the deployment strategies for outside plant facilities to better meet customer needs. I also managed the Land Development Group engineers and coordinators, the OSP Construction and Engineering group, and the Maintenance, Locate and Buried Service wire groups.

In May 2005, I accepted my current position as a Director within the Network Policy Group, where I am responsible for ensuring compliance with the Telecommunications Act of 1996 (the "Act") and state regulations. My responsibilities include, but are not limited to, providing representation before the Federal Communications Commission ("FCC") and state commissions on issues relating to the network elements and architectures for both wireline and wireless networks. I am a graduate of the University of Denver and have over 3500 hours in continuing education in telecommunications.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to present and explain Qwest's positions on an Interconnection Agreement with Union Telephone Company, d/b/a Union Cellular ("Union Cellular"). For clarity I have prepared Exhibit AMC-1. This exhibit provides a

witness list and table of issues, which shows issue and page number correlations. I provide a brief history of the negotiations between Qwest and Union Cellular. I will testify as to why an Interconnection Agreement is necessary between Qwest and Union Cellular in order to interconnect and exchange traffic in compliance with the Act. I will clarify the distinction between Union Telephone Company, the ILEC, and Union Cellular. I will also describe how Qwest and Union Telephone Company currently interconnect and how Union Cellular sends and receives wireless telephone calls not only to Qwest, but to all other telecommunications providers in the state of Utah with whom Qwest is interconnected. (See Exhibit AMC-2) My testimony will show that Qwest's network architectures and positions are appropriate, technically sound, and non-discriminatory. Qwest believes that there are five (5) issues remaining that the parties have been unable to resolve through negotiations:

Issue Number 1 involves the extent to which an Interconnection Agreement should govern the terms and conditions under which Qwest and Union Cellular interconnect.

Issue Number 2 concerns the definition of an Access Tandem.

Issue Number 3 concerns the establishment of a Point of Interconnection ("POI") within the Qwest local serving area.

Issue Number 4 addresses the appropriate treatment of transit traffic; and

Issue Number 5 involves a dispute concerning the proper handling and compensation for non-local traffic.

My testimony will address Issues 1-3 and Mr. Robert Weinstein will address Issues 4-5. Furthermore, my testimony will show that Qwest seeks to meet the interconnection needs of Union Cellular, and at the same time ensure that the services that Qwest provides comply with law. The language proposed by Qwest should be adopted by the Commission, as it is consistent with the Act and FCC rulings.

III. HISTORY OF INTERCONNECTION AGREEMENT NEGOTIATIONS BETWEEN QWEST AND UNION CELLULAR.

Q. PLEASE PROVIDE A BRIEF HISTORY OF NEGOTIATIONS WITH UNION CELLULAR FOR AN INTERCONNECTION AGREEMENT.

A. On September 30, 2004, Qwest filed a Petition for Arbitration in Utah. It is my understanding that subsequent to a procedural schedule being established by the Commission, Qwest and Union Cellular engaged in negotiations over the terms and conditions of an Interconnection Agreement. Progress was made during those negotiations and, as a result, the parties waived the statutory deadline and extended such deadline four times in an effort to resolve as many of the issues as possible. Although Qwest and Union Cellular have made significant progress and have resolved many issues, the five issues I noted earlier in my testimony remain in dispute.

Q. WHAT IS UNION CELLULAR'S GENERAL POSITION REGARDING NEGOTIATION OF AN INTERCONNECTION AGREEMENT?

A. While Union Cellular has engaged in negotiations since Qwest filed its Petition for Arbitration, Qwest believes it is still Union Cellular's position that the access tariffs of its parent company, Union Telephone Company, the incumbent local exchange carrier ("ILEC"), should govern the termination of all traffic including Intra-MTA wireless traffic destined for Union Cellular.

Q. DO YOU AGREE WITH UNION CELLULAR'S POSITION THAT THE ACCESS TARIFFS OF UNION TELEPHONE COMPANY, THE LOCAL EXCHANGE CARRIER, SHOULD GOVERN THE TERMINATION OF ALL TRAFFIC, INCLUDING INTRA-MTA WIRELESS TRAFFIC BETWEEN QWEST AND UNION CELLULAR?

A. No. The FCC has determined that compensation for transport and termination of local traffic between an ILEC (i.e., Qwest) and a wireless carrier (i.e., Union Cellular) should be addressed under Sections 251 and 252 of the Telecommunications Act of 1996 ("Act").[1] In Sections 251 and 252, "Congress designed a comprehensive system" under which carriers "enter into Interconnection Agreements setting forth the terms and conditions of their business relationship."[2] Any assertion that the access tariffs of a wireless company's ILEC affiliate should dictate local interconnection "evades the

[1] First Report and Order, 11 FCC Rcd. at 16005 ¶ 1023.
[2] *Verizon North v. Strand*, 309 F. 3d 935, 939 (2002).

exclusive process required by the 1996 Act, and effectively eliminates any incentive to engage in private negotiation, which is the centerpiece of the Act."[3] A carrier that seeks compensation for terminating local traffic cannot ignore or bypass the "detailed process for interconnection," including review of agreements by the relevant state commission, set out by Congress in the Act.[4] By pointing to Union Telephone Company's ILEC access tariffs, Union Cellular is attempting to avoid its obligations under Sections 251 and 252 of the Act as well as specific FCC rules that require companies like Union Cellular to negotiate agreements for the exchange of Intra-MTA wireless traffic.

Q. IS UNION TELEPHONE COMPANY OPERATING AS AN INDEPENDENT WIRELINE LOCAL EXCHANGE CARRIER IN UTAH?

A. Yes. Union Telephone Company, the ILEC, is currently operating as an Independent Wireline Local Exchange Carrier in the exchange of Christmas Meadows, Greendale, Manila and Dutch John. However, Union Cellular is doing business as a wireless service provider in Utah as well.

[3] *Id*. At 940. (*Emphasis added*); see also *MCI Telecommunications Corp. v. GTE Northwest, Inc.*, 41 F. Supp. 2d 1157, 1178 (D. Or. 1999); *Iowa Utilities Board v. FCC*, 120 F. 3d 753, 801 (8th cir. 1997) (noting the "Act's design to promote negotiated binding agreements").

[4] *Verizon v. Strand*, 309 F.2d at 944; *see also TSR Wireless v. US West Communications,* 15 FCC Rcd. 11166 at ¶ 29 (2000) (FCC's reciprocal compensation rules apply "regardless of … charges … contained in a federal or state tariff.)

Q. DESCRIBE UNION CELLULAR'S OPERATIONS AS A WIRELESS PROVIDER IN UTAH.

A. As stated in Union Cellular's response to the Petition for Arbitration of Qwest Corporation in Utah, Union Cellular admits that "Union is a commercial mobile radio service ("CMRS") provider extending wireless service in parts of Colorado and Utah and the whole of Wyoming under the trade name of Union Cellular." Union Cellular has identified numerous codes in the LERG as being assigned to its cellular and PCS business. Union Cellular has wireless NXX codes associated with the following Utah towns: Logan, Vernal, Duchesne, Manila, Christmas Meadows, Dutch John, Greendale and Garden City.

IV. ISSUE 1: SHOULD THE COMMISSION ADOPT WIRELESS "TYPE 2" INTERCONNECTION, AS PROPOSED BY QWEST, OR INTERCONNECTION THROUGH UNION TELEPHONE COMPANY'S ACCESS TANDEM, AS PROPOSED BY UNION CELLULAR?

Q. HOW IS QWEST PROPOSING TO INTERCONNECT WITH UNION CELLULAR?

A. As stated in Union Cellular's response to the Petition for Arbitration, Union Cellular "is a commercial mobile radio service ("CMRS") provider extending wireless service in parts of Colorado and Utah and the whole of Wyoming under the trade name of Union Cellular." Because Union Cellular is a wireless provider, Qwest is proposing "Type 2" interconnection.

Q. WHAT IS "TYPE 2" INTERCONNECTION?

A. Type 2 interconnection is one of two standard forms of interconnection between wireline LECs and CMRS providers.[5] With Type 2, the wireless carrier's mobile switching center is directly connected to the LEC's tandem.[6] Type 2 is the industry standard interconnections between wireline and wireless carriers who own their own switches and are assigned numbers by the national numbering administrator. Exhibit AMC-3 is a diagram of a typical Type 2 interconnection arrangement. Qwest and the WSP must create trunking between the WSP's Mobile Switching Center (MSC) and Qwest's switching office to enable Qwest to identify, route and rate the traffic the WSP delivers to Qwest. "Type 2" wireless interconnection is used to create this direct trunking between the WSP's MSC and the Qwest's switching office. In Type 2 interconnection, all or a major block of an NXX code is directly associated with the WSP MSC. The North American Numbering Plan Administrator (NANPA) assigns number resources in major blocks to the WSP. When any end user anywhere in the world dials a number associated with that MSC, the LERG will instruct all carriers to direct that call to the WSP's switch. Type 2 WSP's interconnect with Qwest by establishing a Point of Interconnection ("POI").

[5] *See The Need to Promote Competition and Efficient Use of Spectrum for Radio Common Carrier Services*, 2 FCC Rcd. 2910, 2915 (FCC 1987).

[6] *See Developing a Unified Intercarrier Compensation Regime*, 16 FCC Rcd. 9610 (FCC 2001), at ¶¶92-93.

Q. HAS QWEST ENTERED INTO INTERCONNECTION AGREEMENTS WITH WIRELESS CARRIERS OTHER THAN UNION CELLULAR PROVIDING FOR TYPE 2 INTERCONNECTION?

A. Yes. Qwest has entered into many Type 2 Interconnection Agreements with wireless carriers for Utah and other states that provide for Type 2 Interconnection. As I mentioned, Type 2 is the industry standard for interconnection between wireline LECs, such as Qwest, and wireless carriers that own their own switch, such as Union Cellular. In Utah Qwest has 18 Type 2 Interconnection Agreements in place with wireless carriers.

Q. WHAT FORM OF INTERCONNECTION ARE THE PARTIES CURRENTLY USING IN UTAH?

A. Pending the outcome of this proceeding, the parties are currently operating under an interim Type 2 Wireless Interconnection Agreement that was executed by the parties in May 2005. This interim agreement language was approved by the Commission on August 22, 2005. See Exhibits AMC 4 & 5 for interim agreement traffic exchange.

Q. DOES TYPE 2 INTERCONNECTION ENABLE THE PARTIES TO DETERMINE THE APPROPRIATE CHARGES FOR CALL TERMINATION?

A. Yes. Under FCC regulations, reciprocal compensation charges, not access charges, apply to calls that are placed and received within the same "Major Trading Area" ("MTA").[7] MTAs are much larger than wireline local calling areas, and are the geographic areas used to determine whether a wireline call is "local" and subject to cost-based reciprocal compensation. Thus, many wireless calls that are subject to reciprocal compensation would be subject to substantially higher access charges if they were wireline calls. The trunks used in a Type 2 arrangement should carry only wireless calls (*i.e.*, calls to or from a wireless device). This enables the parties to ensure that reciprocal compensation, not access charges, apply to calls that are placed and received within the same MTA.

Q. HOW IS UNION CELLULAR PROPOSING TO INTERCONNECT WITH QWEST?

A. Union Cellular is proposing to interconnect through Union Telephone Company's ILEC access tandem which is located in Mountain View, Wyoming. Under that proposal, wireline and wireless traffic would be exchanged over the same trunks.

[7] *See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, 11 FCC Rec. 15499 (FCC 1996), at ¶ 1036 ("*Local Competition Order*"); *id*. at ¶ 1043.

Q. DOES UNION'S PROPOSAL RAISE ANY ISSUES WITH REGARD TO WHETHER THE PARTIES COULD DETERMINE THE CHARGES THAT SHOULD BE BILLED FOR CALL TERMINATION?

A. Yes. As mentioned above, wireline and wireless calls are subject to different regulations for the purpose of determining whether the terminating carrier is owed reciprocal compensation or access charges. Under Union's proposal, wireline and wireless traffic would be delivered over the same trunks, but no suitable proposal has been made for the parties to determine which charges apply under the applicable regulations.

Q. ARE YOU SAYING THAT IT IS NEVER APPROPRIATE TO USE THE SAME TRUNKS TO DELIVER BOTH WIRELINE AND WIRELESS TRAFFIC?

A. No. For example, as described in more detail in the accompanying testimony of my colleague, Robert Weinstein, Qwest provides transiting for many wireless carriers (in addition to CLECs and small ILECs). By "transiting," I mean that calls placed by the end-user customers of a wireless carrier to the end-user customers of third-party carriers are delivered by the wireless carrier to Qwest, which then delivers the call to the terminating LEC. Wireless transit traffic is delivered to the terminating LEC over the same trunks over which Qwest delivers wireline calls placed by Qwest's end-user customers. Transiting helps wireless carriers and small LECs reduce costs by enabling them to avoid having to build out their networks to interconnect directly with every other carrier.

Q. BUT DOESN'T QWEST'S USE OF THE SAME TRUNKS TO DELIVER TO THE TERMINATING CARRIER BOTH WIRELINE TRAFFIC AND WIRELESS TRANSIT TRAFFIC RAISE THE SAME CONCERN AS UNION'S PROPOSAL WITH REGARD TO THE DETERMINATION OF THE APPROPRIATE CHARGES FOR CALL TERMINATION?

A. No. Qwest compiles and makes available to other carriers, including the terminating LECs, records that distinguish between wireline and wireless traffic. These records enable the terminating carriers to determine and bill the appropriate charges, and enable the invoiced carriers to verify that they have been billed the appropriate charges. Qwest's transit records comply with standards adopted by the Ordering and Billing Forum ("OBF") for the Exchange Message Interface ("EMI").

Q. HAS UNION DEMONSTRATED THAT IT HAS THE CAPABILITY TO PROVIDE, OR EVEN OFFERED TO PROVIDE, SIMILAR RECORDS DISTINGUISHING, FOR BILLING PURPOSES, BETWEEN WIRELINE AND WIRELESS TRAFFIC THAT, UNDER ITS PROPOSAL, WOULD BE TRANSPORTED OVER THE SAME TRUNKS?

A. No.

Q. HAS UNION CELLULAR SUGGESTED ANY OTHER MEANS BY WHICH, UNDER ITS PROPOSAL, IT COULD OR WOULD DISTINGUISH BETWEEN WIRELINE AND WIRELESS TRAFFIC FOR THE PURPOSE OF DETERMINING THE APPROPRIATE CHARGES FOR CALL TERMINATION?

A. No.

Q. WOULD UNION'S PROPOSAL, IF ACCEPTED BY THE COMMISSION; IMPACT ADVERSELY ANY CARRIERS IN ADDITION TO QWEST?

A. Yes. Transit traffic includes calls between the end-user customers of Union Cellular and third-party carriers, including other CMRS carriers, CLECs and small wireline ILECs. The third-party carriers often use Qwest's transit records to determine their charges for call termination, or to verify that the terminating carrier has charged them the appropriate termination charges. Under Union Cellular's proposal, however, Qwest would not be able to prepare and provide to other carriers transit records distinguishing between Union Cellular's wireless traffic, and Union Telephone Company's ILEC wireline traffic.

Q. HOW SHOULD THE COMMISSION RULE AS TO ISSUE 1, THE FORM OF INTERCONNECTION?

A. The Commission should adopt Qwest's proposal for Type 2 interconnection. Type 2 is the form of interconnection used by the parties today, is the industry standard, and is the

only proposal before the Commission that would ensure that the parties are able to distinguish between wireline and wireless traffic for billing purposes.

V. ISSUE NO. 2: DEFINITION OF ACCESS TANDEM

Q. WHAT IS THE NATURE OF THE DISPUTE BETWEEN THE PARTIES IN ISSUE NUMBER 2?

A. Qwest disputes Union Cellular's proposal to define the term "Access Tandem" to include Union Telephone Company's wireline access tandem.

Q. WHAT IS QWEST'S PROPOSED DEFINITION OF AN ACCESS TANDEM?

A. Qwest proposes the following language:

> 4.3 "Access Tandem Switch" is a switch used to connect End Office Switches to Interexchange Carrier switches. Qwest's Access Tandem Switches are also used to connect and switch traffic between and among Central Office Switches within the same LATA and may be used for the exchange of Local Traffic.

Q. WHAT IS UNION CELLULAR'S PROPOSED DEFINITION OF AN ACCESS TANDEM?

A. Union Cellular proposes the following language:

> 4.3 "Access Tandem Switch" is a switch used to connect End Office Switches to Interexchange Carrier switches. Qwest's Access Tandem Switches are also used to connect and switch traffic between and among Central Office Switches within the same LATA and may be used for the exchange of Local Traffic. (Union has added)"Union's Access Tandem Switches are also used to connect and switch traffic between and among Central Office Switches and may be used for the exchange of Local Traffic".

Q. WHY IS QWEST OPPOSED TO UNION 'S PROPOSED LANGUAGE?

A. Qwest opposes Union Cellular's language because it is Union Cellular that is a party to the agreement, not Union Telephone Company the ILEC. The configuration of Union Telephone Company's ILEC network on its side of the POI is neither relevant to the designation of the POI, nor the trunking arrangements necessary for connecting Union Cellular to the appropriate Qwest tandems for the exchange of Mobile to Land and Land to Mobile traffic.

Q. WHY IS IT APPROPRIATE TO INCLUDE QWEST'S ACCESS TANDEM DEFINITION?

A. As an incumbent, Qwest originally deployed an Access Tandem network architecture in which all End Office switches within a LATA subtend an Access/Toll Tandem. As an incumbent, Qwest's architecture is subject to interconnection at any technically feasible point. This architecture allowed for the origination, transport and termination of access/toll traffic. Exhibit AMC-6 is an illustration of a typical Access/Toll Tandem network architecture and a typical Intra-LATA toll call flow. Exhibit AMC-7 illustrates a typical Access Tandem network architecture and a typical Terminating Switched Access toll call flow.

As is illustrated in both Exhibits AMC-6 and AMC-7, a toll call, be it Intra-LATA or Originating or Terminating Switched Access, does not involve the use of the Local Tandem network and uses only the Access/Toll Tandem network. An Originating

Switched Access call is transported from the end office across Interoffice Toll trunks to the Access/Toll Tandem where the access tandem routes the call to an IXC using access service trunks. With the proliferation of wireless networks with their expanded local calling paradigms and their need to interconnect to the PSTN in general, and Qwest in particular, the function of Qwest's Access tandems was expanded. Connection to Qwest Access Tandems allows WSP's to access all end offices within a LATA facilitating Intra-MTA calling. This approach is consistent with industry practice. However, by all accounts, Union Cellular is using a network architecture that does not conform to the traditional and widely accepted standards of call routing for wireless traffic.

Q. IS EXISTENCE AND FUNCTION OF UNION TELEPHONE COMPANY'S TANDEM GERMANE TO HOW UNION CELLULAR SHOULD INTERCONNECT WITH QWEST?

A. No**.** Union Cellular's MSC is in close proximity to Union Telephone Company's wireline switch. Union Cellular could interconnect with Qwest by creation of a trunk group from the Union Cellular's "POI" to Qwest's switch. This would require minor augment of facilities and could be accomplished in a relatively rapid timeframe. The wireless traffic that Union Cellular wants to transport would then allow for accurate and appropriate compensation. The Union Telephone Company ILEC tandem should not be an element of the network configuration in a Type 2 interconnection arrangement between Qwest and Union Cellular.

Q. WHY IS QWEST'S PROPOSED LANGUAGE APPROPRIATE?

A. Qwest's proposed language explains the function performed by a Qwest Access Tandem Switch. This reference is important because it defines and explains where in the Qwest network the Union Cellular calls can be routed and the association these calls have to other switches relative to the handling of those calls. There is no need to make reference to the Union Telephone Company's ILEC tandem switch since that switch has no relevance to the type of interconnection required for wireless traffic.

Q. WHAT ACTION DO YOU RECOMMEND THIS COMMISSION TAKE?

A. The Commission should reject Union Cellular's continued attempt to charge access charges for wireless traffic by broadening the definition of the term "Access Tandem". Union Cellular would like to include Union Telephone Company's ILEC wireline access tandem as part of the Interconnection Agreement when it is really behind the POI. Qwest has the right to designate the Point of Interconnection at which Qwest delivers traffic to Union Cellular. The interconnection between Qwest and Union Cellular does not include the wireline portion of Union Telephone Company; therefore, Union Cellular's expansion of the Access Tandem definition is inappropriate for the Type 2 Wireless Interconnection Agreement between Qwest and Union Cellular. For purposes of interconnection between Qwest and Union Cellular, the parties' ICA should address the trunks that carry the wireless traffic specifically and how traffic is carried to the end offices that serve the customers in Qwest's Local Service Territory.

VI. ISSUE NO. 3: POINT OF INTERCONNECTION (POI) LOCATION(S).

Q. WHAT IS THE NATURE OF THE DISPUTE BETWEEN THE PARTIES IN ISSUE NUMBER 3?

A. The dispute concerns the location of the POI. Qwest's position is that the POI must be within Qwest's incumbent LEC serving territory. Because the Interconnection Agreement is for the exchange of local traffic with an ILEC, the POI must be in the ILEC's local serving area. Union Cellular disagrees.

Q. WHAT LANGUAGE DOES QWEST PROPOSE?

A. 4.68 "Point of Interface" "Point of Interconnection" or "POI" is a physical demarcation between the networks of two LEC's (including a LEC and Union). The POI is that point where the exchange of traffic takes place. This point establishes the technical interface, the test point(s), and the point(s) for operational division of responsibility. The POI must be established at any technical feasible location selected by Union in Qwest territory in the LATA.

6.1.1 This Section describes the Interconnection of Qwest's network and Union's network for the purpose of exchanging Local, Non-Local and Transit traffic. Qwest will provide Interconnection at any technically feasible point requested by Union within its network. Qwest's Wireless Interconnection Service is provided for the purpose of connecting End Office Switches to End Office Switches or End Office Switches to Local or Access Tandem Switches for the exchange of Local Traffic; or End Office Switches to Access Tandem Switches for the exchange of Local, Non-Local or Jointly Provided switched Access Traffic. Qwest Tandem to Union Tandem switch connections will be provided where technically feasible. New or continued Qwest Local Tandem to Qwest Access Tandem and Qwest Access Tandem to Qwest Access Tandem Switch connections are not required where Qwest can demonstrate that such connections present a risk of switch exhaust and that Qwest does not make similar use of its network to transport the local calls of its own or any Affiliate's End User Customers.

6.1.2.1 The Parties will negotiate the facilities arrangement used to interconnect their respective networks. Union shall establish at least one Physical Point of

Interconnection in Qwest territory in each LATA where Union has local End User Customers and/or has a NPA/NXX rated to a Rate Center within the LATA. The Parties shall establish, through negotiations, one of the following Interconnection Agreements (1) a DS1 or DS3 Qwest Provided Entrance Facility; (2) Collocation; (3) negotiated Mid-Span Meet POI facilities; or (4) Other technically feasible methods of Interconnection.

6.3.1.4.1 Direct Trunked Transport (DTT) is available between the Serving Wire Center of the POI and Qwest's Tandem or End Office switches. The applicable rates are described in Appendix A. DTT facilities are provided as dedicated DS3 or DS1 facilities.

6.3.1.4.2 Mileage shall be measured for DTT based on V&H coordinates between the Serving Wire Center of the POI and the Qwest Tandem or End Office.

Q. WHAT LANGUAGE DOES UNION CELLULAR PROPOSE?

A. 4.68 "Point of Interface" "Point of Interconnection" or "POI" is a physical demarcation between the networks of two LEC's (including a LEC and Union). The POI is that point where the exchange of traffic takes place. This point establishes the technical interface, the test point(s), and the point(s) for operational division of responsibility. The POI must be established at any technical feasible location selected by Union in Qwest territory in the LATA**.** *The parties may agree to the POI other than in Qwest territory that is technically feasible.*

6.1.1 This Section describes the Interconnection of Qwest's network and Union's network for the purpose of exchanging Local, Non-Local and Transit traffic. Qwest will provide Interconnection at any technically feasible point requested by Union *("within its network" was removed by Union).* Qwest's Wireless Interconnection Service is provided for the purpose of connecting End Office Switches to End Office Switches or End Office Switches to Local or Access Tandem Switches for the exchange of Local Traffic; or End Office Switches to Access Tandem Switches for the exchange of Local, Non-Local or Jointly Provided switched Access Traffic. Qwest Tandem to Union Tandem switch connections will be provided where technically feasible. New or continued Qwest Local Tandem to Qwest Access Tandem and Qwest Access Tandem to Qwest Access Tandem Switch connections are not required where Qwest can demonstrate that such connections present a risk of switch exhaust and that Qwest does not make similar use of its network to transport the local calls of its own or any Affiliate's End User Customers.

6.1.2.1 The Parties will negotiate the facilities arrangement used to interconnect

their respective networks*. ("Union shall establish at least one Physical Point of Interconnection in Qwest territory in each LATA where Union has local End User Customers and/or has a NPA/NXX rated to a Rate Center within the LATA". This language was deleted by Union).* The Parties shall establish, through negotiations, one of the following Interconnection Agreements (1) a DS1 or DS3 Qwest Provided Entrance Facility; (2) Collocation; (3) negotiated Mid-Span Meet POI facilities; or (4) Other technically feasible methods of Interconnection.

6.3.1.4.1 Direct Trunked Transport (DTT) is available between the Serving Wire Center of the POI and *either Party's* Tandem or End Office switches. *("Qwest's" was deleted and Union inserted "either party")* The applicable rates are described in Appendix A. DTT facilities are provided as dedicated DS3 or DS1 facilities.

6.3.1.4.2 Mileage shall be measured for DTT based on V&H coordinates between the Serving Wire Center of the POI and *either Party's* Tandem or End Office. *("Qwest" was deleted and Union inserted "either Party's")*

Q. WHAT IS THE POI?

A. The point of interconnection, (POI) is the point of demarcation between two networks where traffic is delivered from one to the other. This point establishes the technical interface, the test point(s), and the point(s) for operational division of responsibility. This allows both Qwest and Union Cellular to retain sole responsibility for the management, control, and performance of its respective network. The POI can be established at any technically feasible location selected by an interconnecting carrier (e.g. Union Cellular) in Qwest incumbent serving territory. It is Qwest's position that interconnection is appropriately obtained by establishing a demarcation point (or POI) between Qwest's network and Union Cellular's network.

Q. WHAT DOES TECHNICALLY FEASIBLE MEAN?

A. The statute and FCC's regulations are clear in mandating that the incumbent LEC provide interconnection at any "technically feasible" point. However, technical feasibility should only be applied to the existing network. Interconnection under the Act refers specifically to connecting with an incumbent's network. Technical feasibility does not require interconnection to include network extension and certainly not beyond an incumbent's serving territory. The incumbent is not required to extend its network to accommodate interconnection. Therefore, the interconnection requirement should be limited to any technically feasible point within the existing network.[8]

Q. WHAT IS THE BASIS FOR QWEST'S POSITION REGARDING THIS ISSUE?

A. Qwest's position is based on the existing laws and rules governing interconnection between wireline providers and CMRS providers. Section 251c (2) (B) of the 1996 Act, which provides that such interconnection occur "at any technically feasible point *within the ILEC's network."* (Emphasis added) The POI established by Union Cellular must be within the LATA as well as within Qwest's local serving territory. Union Cellular is serving customers located within Qwest's local serving territory and it is thus inappropriate for Union Cellular to expect or require Qwest to build facilities beyond its territory in which Union Cellular is serving customers. Union Cellular is requesting interconnection to Qwest's network so that it may exchange traffic of customers it serves

[8] In the matter of the Investigation into U S WEST Communications, Inc.'s Compliance with § 271 © of the Telecommunications Act of 1996, Decision No. R01-848, Docket No. 971-198T (2001) at p. 23-25.

located within Qwest's Utah serving territory. Qwest should not be required to build interconnection facilities to Wyoming, outside of Qwest's incumbent serving territory in Utah to facilitate such interconnection.

Q. WHY IS IT NECESSARY FOR THE POI TO BE LOCATED IN EACH LATA AND WITHIN QWEST'S LOCAL SERVING TERRITORY?

A. An ILEC can only transport traffic within a LATA. It is only logical that the point of interconnection must be located within the geography in which Qwest can legally transport traffic. Requiring the location of the POI to be within Qwest's local serving area ensures that the parties are in compliance with the Act and the FCC rules. As noted earlier in my testimony, Section 251c (2) (B) of the 1996 Telecommunications Act, requires interconnection "at any technically feasible point within the ILEC's network." In addition, the current FCC rules which require Qwest to provide interconnection only within its service territory as Section 51.305 of the FCC's regulations, 47 CFR 51.305 states:

> (a) An incumbent LEC shall provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the incumbent LEC's network:
>
> (1) For the transmission and routing of telephone exchange traffic, exchange access traffic, or both;

(2) At any technically feasible point within the incumbent LEC's network (Emphasis added) including, at a minimum:

(i) The line side of a local switch;

(ii) The trunk-side of a local switch;

(iii) The trunk interconnection points for a tandem switch;

(iv) Central office cross-connect points;

(v) Out-of-band signaling transfer points necessary to exchange traffic at these points and access call related databases

The LEC is the "incumbent" for the territory in which it has provided wireline local service. Thus, the FCC's regulations establish that interconnection is to occur within Qwest's wireline local service territory.

Q. WHAT IS UNION CELLULAR'S POSITION REGARDING ISSUE NUMBER 3 AND POI LOCATIONS?

A. Union Cellular has proposed language that would require Qwest to agree to locate the POI in a technically feasible point geographically outside of the territory in which Qwest is the incumbent LEC.

Q. WHY IS QWEST OPPOSED TO UNION CELLULAR'S PROPOSED LANGUAGE?

A. Qwest is opposed to Union Cellular's proposed language because Union Cellular wishes to determine the location of the POI based on its network configuration, without regard to

industry practice and the requirements in Section 251c (2) (b) of the 1996 Act. Qwest has entered into numerous Type 2 wireless Interconnection Agreements in Utah that comply with the explicit obligations imposed on Qwest and other ILECs as set forth by the 1996 Act. Union Cellular's proposal redefines the physical point of interconnection by transferring the responsibilities for establishing the POI to Qwest.

Q. WHAT ACTION DO YOU RECOMMEND THIS COMMISSION TAKE.

A. The Commission should reject Union Cellular's proposed language to establish the POI outside of the territory for which Qwest is the incumbent LEC. Requiring the location of the POI to be within Qwest local serving area ensures that the parties are in compliance with the Act and the FCC rules. As noted earlier in my testimony, Section 251c (2) (B) of the 1996 Telecommunications Act, requires interconnection "at any technically feasible point within the ILEC's network." In addition, the current FCC rules require Qwest to provide interconnection only within its service territory.

VII. CONCLUSION

Q. HOW SHOULD THE COMMISSION RESOLVE THE DISPUTED ISSUES PRESENTED IN THIS ARBITRATION PROCEEDING?

A. For the reasons described in my testimony, the Commission should approve Qwest's language because Qwest seeks to strike a balance between meeting the interconnection needs of Union Cellular and at the same time ensuring that the services that Qwest provides comply with governing law. Qwest's positions and the Type 2 Wireless

Interconnection Agreement language proposed by Qwest should be adopted by the Commission because both are consistent with the Act and FCC rulings

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes it does. Thank you.

State of Colorado)
) ss.
County of Denver)

I, Ann Marie Cederberg, being first duly sworn on oath, state that the answers in the foregoing written testimony are true and correct to the best of my knowledge, information and belief. Except as stated in the testimony, the exhibits attached to the testimony were prepared by me or under my direction and supervision, and they are true and correct to the best of my knowledge, information and belief. Any exhibits not prepared by me or under my direction and supervision are true and correct copies of the documents they purport to be.

_____
Ann Marie Cederberg

SUBSCRIBED AND SWORN TO this 4th day of October, 2005.

_____
Notary Public