#### **BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON**

### **ARB 665**

In the Matter of LEVEL 3 COMMUNICATIONS, LLC's Petition for Arbitration Pursuant to Section 252(b) of the Communication Act of 1934, as amended by the Telecommunications Act of 1996, and the Applicable State Laws for Rates, Terms, and Conditions with QWEST CORPORATION

## QWEST CORPORATION'S DESCRIPTION OF NETWORK DIAGRAMS

During the telephone conference of April 20, 2006, Judge Petrillo requested that the parties provide their narrative description the network diagrams. On April 24, 2006, Level 3 Communications LLC ("Level 3") provided its two-page version of the network diagrams. On April 26, 2006, Qwest Corporation ("Qwest or QC") provided its two-page version of the network diagrams. Although the two sets of diagrams are similar, there are a few significant differences, the substance of which can be addressed at the on-the-record technical conference scheduled for May 23-24, 2006.

The following explanation of the diagrams refers to the set of diagrams filed by Qwest on April 26, 2006. Given the fact that Qwest will have representatives present at the technical conference prepared to speak in detail about the diagrams, the following explanations are high-level in nature. Should the Commission desire more detail from Qwest prior to the technical conference, Qwest will be happy to provide it.

#### A. Explanation of Diagram 1: "Level 3/QC Interconnection Architecture."

Although Diagram 1 appears complicated, its purpose is quite simple. It provides an overview of the interconnection of networks.

One point at which the two networks meet is located at Qwest's Portland central office in the upper left hand box to the left of the network components entitled "BTE Mux." A second point is at Qwest's Bend central office (depicted in the second box from the top on the left side of the diagram). Both points are represented by a vertical line labeled "POI" ("Point of Interconnection"). Everything to the left of the POI is owned by Qwest Corporation.

The language/protocol of the circuit switched telephone network is time division multiplexing ("TDM"). The principal language/protocol of the Level 3 network is Internet Protocol ("IP"). The portions of the diagram illustrating TDM facilities are represented with solid lines between network components. The portions represented by IP facilities are represented by dashed lines. Thus, although most of the Level 3 network is IP-based, a portion of Level 3's network (the area between the POI and the vertical line entitled "TDM to IP") uses TDM.

The Media Gateway is the point at which the TDM-IP and the IP-TDM conversion takes place for both ISP calls and VoIP calls.

On the left side of the diagram, several different scenarios are illustrated. Some involve different combinations of Qwest-provided Direct Trunked Transport ("DTT") (red solid lines), Qwest-provided Tandem Transport (black solid lines), and Private Line circuits (blue solid lines). Given the complexity of the multiple scenarios, it will be far more efficient for Qwest representatives to explain the different configurations at the technical conference.

The two boxes labeled "STP" at the top of this diagram represent the SS7 signaling network that is used by Qwest and Level 3 that is essential for the efficient routing of calls.

Finally, a vertical red line labeled "secondary POI" has been placed in two different locations on the left side of the diagram. Qwest has agreed that they may be placed on the diagram for

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illustrative purposes, so long as it is clear that their existence on the diagram does not represent Qwest's agreement that the concept of a "secondary POI" has any legal or factual basis. However, given that Level 3 takes the position that these two points are legally significant, for the benefit of the Commission, Qwest has not objected to them being illustrated on the diagram (subject to Qwest's position that the concept has no merit). Qwest and Level 3 will, of course, explore their positions on this issue at hearing and in briefs.

# B. Explanation of Diagram 2: "QCC Wholesale Dial/Level 3 Managed Modem Comparison."

Diagram No. 2 is a high level comparison of the differences between the network configurations for Level 3's Managed Modem service that uses VNXX and Qwest Communications Corporation's (QCC's) Wholesale Dial service that uses a combination of retail PRI and private line service. QCC is an affiliate of QC. Level 3's Managed Modem and QCC's Wholesale dial are offered through different regulatory constructs. However, both QCC's Wholesale Dial service and Level 3's Managed Modem service are sold to ISPs to facilitate dial-up access to the Internet for customers of those ISPs.

In both cases, the customer of the ISP dials a local number. In the case of QCC, the local number is provided as part of PRI service (a retail local exchange service) that QCC purchases in each LCA from which it wishes to have calls originated for its ISP customers. Unlike Level 3, QCC does not obtain its numbering resources from NANPA. The traffic is then transported by QCC to its Network Access Service over a Private Line service that QCC purchases from QC. The Network Access Server provides the initial modem functionality for QCC's ISP customers. From that point, QCC sends the traffic to the ISP and on to the Internet as directed by the end-user customer. As noted, the arrangement between QC and QCC does not involve interconnection between two

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telecommunications carriers, but is instead an end-user relationship based on the provision of retail business services by QC to QCC that any end-user may purchase. When QCC purchases service from QC as an end user, QCC does not charge intercarrier compensation for terminating the traffic to ISPs.

In the Level 3 portion of the of the diagram, and unlike QCC, Level 3 obtains local telephone numbers from the North American Numbering Plan Administrator ("NANPA") in its capacity as a competitive local exchange carrier ("CLEC'). The diagram, insofar as it depicts a connection between Qwest and Level 3, involves an interconnection arrangement between telecommunications carriers, not an end user relationship.

DATED this 10th day of May, 2006.

Respectfully submitted,

QWEST CORPORATION

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Carla M. Butler Sr. Paralegal

May 10, 2006

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

Re: ARB 665

Dear Ms. Nichols Anglin:

Enclosed for filing please find an original and (5) copies of Qwest Corporation's Description of Network Diagrams, 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: Enclosures L:\Oregon\Executive\Duarte\ARB 665 (Level 3)\PUC Transmittal Ltr 5-10-06.doc

#### **CERTIFICATE OF SERVICE VIA E-MAIL**

I do hereby certify that a true and correct copy of the foregoing QWEST'S CORPORATION'S DESCRIPTION OF NETWORK DIAGRAMS was served on the 10<sup>th</sup> day of May, 2006 via e-mail electronic transmission upon the following individuals:

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DATED this 10<sup>th</sup> day of May, 2006.

## **QWEST CORPORATION**

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