

BEFORE THE
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

QWEST CORPORATION,

Complainant,

v.

LEVEL 3 COMMUNICATIONS, LLC; PAC-
WEST TELECOM, INC.; NORTHWEST
TELEPHONE INC.; TCG-SEATTLE;
ELECTRIC LIGHTWAVE, INC.;
ADVANCED TELECOM GROUP, INC.
D/B/A ESCHELON TELECOM, INC.;
FOCAL COMMUNICATIONS
CORPORATION; GLOBAL CROSSING
LOCAL SERVICES INC; AND , MCI
WORLDCOM COMMUNICATIONS, INC.

Respondents.

Docket No. UT-063038

DIRECT TESTIMONY OF

GLENN BLACKMON, Ph.D.

ON BEHALF OF

**LEVEL 3 COMMUNICATIONS LLC AND
BROADWING COMMUNICATIONS, LLC**

February 2, 2007

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1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Glenn Blackmon, Ph.D. My business address is 203 20th Ave. SE, Olympia,
4 Washington 98501. My e-mail address is mail@glenn.blackmon.com.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am self-employed as an economic and policy consultant in the telecommunications and
7 utilities field. I have been retained by Level 3 Communications LLC and Broadwing
8 Communications, LLC to testify in this proceeding.

9 **Q. WHAT ARE YOUR EDUCATION AND EXPERIENCE
10 QUALIFICATIONS?**

11 A. I hold Ph.D. and master's degrees in public policy from Harvard University and a
12 bachelor's degree in economics from Louisiana State University. From 1995 until 2006 I
13 was employed at the Washington Utilities and Transportation Commission (hereinafter
14 referred to as "Commission" or "UTC"). I was the Commission's economics advisor in
15 1995-96, during which time I advised the commissioners in the interconnection case, UT-
16 941464, and the U S WEST general rate case, UT-950200. From 1996 to 2004 I was
17 Assistant Director for Telecommunications. From 2004 to 2006 I was Director of
18 Regulatory Services.

19 Prior to working at the Commission, I was a consultant in private practice, where
20 my clients included both regulated companies and consumer advocates, and an analyst
21 for the Washington State Senate Energy and Utilities Committee. I have presented
22 testimony as an expert witness before this Commission, as well as the Illinois and Idaho
23 commissions.

1 I am the author of a book, *Incentive Regulation and the Regulation of Incentives*
2 (Boston: Kluwer Academic Publishers, 1994). I have authored or co-authored articles on
3 utility regulation and economic theory published in *American Economic Review*, *Journal*
4 *of Regulatory Economics*, *Yale Journal on Regulation*, *Journal of Risk and Uncertainty*,
5 and *Public Utilities Fortnightly*.

6 **Q. PLEASE DESCRIBE THE EXPERT TESTIMONY THAT YOU HAVE**
7 **PREVIOUSLY PROVIDED TO THIS COMMISSION ON**
8 **TELECOMMUNICATIONS ISSUES.**

9 A. I have testified on the appropriate level and structure of reciprocal compensation
10 arrangements between interconnecting carriers, reform of access charges, rates for
11 unbundled network elements, de-averaging of UNE loop rates, the extent of competition
12 in local exchange markets, competition policy, the effect of mergers and assets sales on
13 public policy, service quality performance and measures, and other issues.

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY AT THIS TIME?**

15 A. I have been asked by Level 3 and Broadwing to provide public policy analysis and
16 recommendations concerning the issue of “virtual NXX” or “VNXX” in response to the
17 Qwest complaint against competitive carriers in Washington in this case. My testimony
18 will include discussion of prior analyses conducted by staff at the Commission and
19 relevant Commission precedent on the topic of intercarrier compensation for locally
20 dialed ISP-bound traffic and VNXX generally. My testimony also responds to the
21 testimony of the Staff witness, Mr. Robert Williamson, as well as Qwest witnesses
22 Mr. Larry Brotherson, Mr. Phillip Linse, and Dr. William Fitzgerald.

23 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

24 A. The main points of my testimony are:

- 1 1. The UTC's precedents since 2003 on issues related to the interconnection
2 obligations of carriers exchanging locally-dialed ISP-bound traffic, when it
3 applied the FCC's rates for Internet-bound calls to VNXX traffic, are sound and
4 should continue to be followed. UTC precedent is based on a reasonable and
5 principled interpretation of the *ISP Remand Order* and subsequent related orders
6 and decisions.
- 7 2. Qwest and Staff read too much into the industry numbering guidelines by
8 concluding that they prevent the UTC from authorizing VNXX arrangements.
- 9 3. Possible concern about the adequacy of numbering resources should not cause the
10 UTC to prohibit VNXX arrangements.
- 11 4. If VNXX arrangements are prohibited or assessed access charges, the result will
12 harm customers and interfere with efficient network design by establishing
13 arbitrary price differences based on irrelevant design differences.
- 14 5. Prohibiting VNXX arrangements will hinder the public policy objective favoring
15 widespread and affordable access to the Internet.
- 16 6. Imposing intrastate access charges on Internet-bound calls will result in a mis-
17 pricing of termination services that is much larger than the mis-pricing error that
18 regulators sought to correct in the *ISP Remand Order*.
- 19 7. VNXX arrangements do not unfairly deprive incumbent local exchange
20 companies of access revenues, because dial-up Internet traffic was virtually
21 nonexistent in the historical era described by Staff and because those historical
22 arrangements preceded the current policy of open competition.
- 23 8. VNXX arrangements do not interfere with the state's efforts to promote universal
24 service.
- 25 9. The UTC's administrative rules governing telecommunications companies do not
26 prohibit the use of VNXX arrangements.

27 **Q. WHAT IS YOUR RECOMMENDATION REGARDING THE USE OF**
28 **VNXX ARRANGEMENTS IN THIS STATE?**

- 29 A. If the UTC concludes that it is not preempted by the FCC on this issue, it should continue
30 to permit the use of VNXX arrangements for locally dialed calls to ISPs and ESPs and to
31 apply the FCC's rate structure and mirroring provisions to all Internet-bound traffic.

1 **Q. AT THE OUTSET, CAN YOU PROVIDE YOUR WORKING DEFINITION**
2 **OF “VIRTUAL NXX” OR “VNXX”?**

3 A. An NXX is a telephone prefix, such as the 664 portion of the Commission’s telephone
4 number, 360 664-1160. Each combination of area code (or NPA) and NXX is assigned by
5 numbering administrators to a single geographic area, called a rate center or rate area.
6 Generally speaking, an NXX is referred to as “virtual” when that block of telephone
7 numbers is assigned to customers who are not physically located in the rate center
8 associated with the NPA-NXX number block. Any definition of this term is necessarily
9 informal. There is no industry-standard definition, but this definition is consistent with
10 ones the Commission has established in a number of its prior proceedings on this topic.

11 **Q. DO YOU CONCUR WITH THE DEFINITIONS OF VNXX SET FORTH**
12 **IN QWEST’S TESTIMONY AND THE DEFINITION PROPOSED BY**
13 **STAFF?**

14 A. No. Staff’s definition inappropriately imbeds a legal conclusion – “contrary to the
15 COCAG rule” – in the definition. An even larger problem with the Staff and Qwest
16 definitions is that they apply it only to competitive local exchange companies, when the
17 reality is that some incumbent local exchange company services also provide for the
18 assignment of telephone numbers to a customer whose physical location is outside the
19 rate center associated with that number. Finally, both the Staff and Qwest testimonies
20 characterize VNXX using provocative terms such as “fools” and “disguised.”

21 **II. REVIEW OF PRIOR COMMISSION DECISIONS**
22 **RELATING TO VNXX ARRANGEMENTS**

23 **Q. WHAT IS YOUR UNDERSTANDING OF THE BACKGROUND EVENTS**
24 **LEADING UP TO THIS CASE?**

25 A. The Commission has been called upon to deal with Internet-related traffic issues since the
26 beginning of its work implementing the federal Telecom Act of 1996. Even the initial

1 efforts to establish cost-based reciprocal compensation rates for local transport and
2 termination were affected by the quantity and nature of Internet-bound traffic. The
3 VNXX issues first became sharply focused in 2002, when the Commission dismissed a
4 petition for declaratory ruling on the propriety of VNXX arrangements (Docket UT-
5 02667) and instead conducted a policy-oriented review (Docket UT-021569). The
6 Commission concluded in that second proceeding that a general statement defining
7 allowable uses of VNXX arrangements was unnecessary.

8 In 2003 the Commission considered issues very similar to those in this case in the
9 CenturyTel-Level 3 arbitration (Docket UT-023043). In this case the Commission
10 interpreted the FCC's *ISP Remand Order* and concluded that the order established the
11 compensation structure for all calls to Internet service providers (ISPs), including those
12 using VNXX arrangements. In 2006 the Commission decided two more arbitrations in a
13 similar fashion (Docket UT-053056 and Docket UT-053059). The Commission has
14 addressed ISP-bound traffic issues in other proceedings as well, including Dockets UT-
15 023042 and UT-033035.

16 **Q. IF THE COMMISSION WERE TO GRANT QWEST'S COMPLAINT IN**
17 **THIS PROCEEDING, HOW WOULD THAT AFFECT THESE PRIOR**
18 **DECISIONS?**

19 A. The results would be contradictory. The ostensible reason that this case is not simply a
20 rehash of those prior cases is that Qwest is now challenging the use of VNXX
21 arrangements rather than the rates to be charged for traffic over those arrangements. The
22 Commission has decided that the FCC's compensation structure applies to Internet-bound
23 calls over VNXX arrangements, but it would undermine that decision if it prohibited
24 VNXX arrangements. The Commission should understand that even though Qwest has

1 framed this as an issue about whether VNXX arrangements are permissible, the
2 fundamental debate is the same as in earlier cases, namely the money being paid for
3 VNXX traffic. The Commission has considered variations on the same arguments being
4 made in this case multiple times before and it made proper findings concerning
5 intercarrier compensation for VNXX traffic in those prior cases.

6 **III. APPLICATION OF INDUSTRY NUMBERING**
7 **GUIDELINES TO VNXX ARRANGEMENTS**

8 **Q. DO YOU AGREE WITH THE CONCLUSION OF STAFF AND QWEST**
9 **THAT VNXX ARRANGEMENTS VIOLATE THE INDUSTRY'S**
10 **GUIDELINES FOR ASSIGNMENT OF NUMBERING RESOURCES?**

11 A. No. This interpretation is inconsistent with the actual language of the relevant guidelines
12 and the actual practice within the industry.

13 **Q. PLEASE EXPLAIN WHY YOU REACH A DIFFERENT CONCLUSION.**

14 A. Let me begin by stating an area of agreement with Staff and Qwest. We agree that there
15 are circumstances where numbers may be assigned to customers outside the rate center
16 without violating the numbering guidelines. There appears to be no dispute that a foreign
17 exchange service offered by tariff is a permissible use of numbering resources. Staff
18 testimony appears to conclude that this is *the only* permissible use of a numbering
19 resource outside its assigned rate center, but that conclusion is not supported by the actual
20 language of the guideline:

21 It is assumed from a wireline perspective that CO Codes/blocks allocated
22 to a wireline Service Provider are to be utilized to provide service to a
23 customer's premise physically located in the same rate center that the CO
24 Codes/blocks are assigned. Exceptions exist, for example tariffed services
25 such as foreign exchange service.

1 As Mr. Williamson notes, this statement appears at Section 2.14 of the *Central Office*
2 *Code (NXX) Assignment Guidelines (COCAG)*. Section 2 of the COCAG states
3 assumptions and constraints upon which the assignment guidelines are based, rather than
4 rules about how NXXs may be assigned. In other words, the statement is positive rather
5 than normative.

6 Even if one were to accept that Section 2.14 was a normative statement, the words
7 do not support Staff's reading. If there were but a single exception in the form of FX
8 services, the statement would not refer to "exceptions" in the plural and would not use the
9 terms "for example" and "such as."

10 **Q. YOU HAVE STATED THAT THE PROVISION QUOTED BY STAFF**
11 **AND QWEST IS AN ASSUMPTION RATHER THAN A RULE. DO THE**
12 **INDUSTRY NUMBERING GUIDELINES HAVE ANY ACTUAL RULES**
13 **ON HOW NUMBERS ARE TO BE ASSIGNED TO CUSTOMERS?**

14 A. Yes. The industry guidelines for assignment of telephone numbers to customers are
15 found in a separate document, *Guidelines for the Administration of Telephone Numbers*.
16 [<http://www.atis.org/inc/docs/finaldocs/TN-Administration-Guidelines-Final-Documen->
17 [8-15-03.doc](http://www.atis.org/inc/docs/finaldocs/TN-Administration-Guidelines-Final-Documen-8-15-03.doc)] These guidelines contain several requirements on assignment of numbers –
18 such as a requirement for sequential number assignment and restrictions on reserving
19 numbers – but they have no provision restricting the use of numbers on a geographic
20 basis. As with COCAG Section 2.14, the use of numbers to serve customers within the
21 rate center is an assumption (stated in Section 1.0) rather than a requirement, and further,
22 it is identically qualified to recognize exceptions.

1 **Q. BOTH QWEST AND STAFF EMPHASIZE THAT THE NPA-NXX**
2 **SYSTEM IS GEOGRAPHICALLY BASED. WHAT IS YOUR**
3 **UNDERSTANDING OF THE GEOGRAPHIC BASIS OF THE**
4 **NUMBERING SYSTEM?**

5 A. The numbering system is geographically based in the sense that every telephone prefix
6 (NXX) is associated with a single, geographically specified rate center. This is illustrated
7 in the COCAG's purpose statement (section 1.0):

8 While the ultimate delivery of any call to a CO code (NXX) need not be
9 geographically identified, by necessity initial routing is geographically
10 defined. Therefore, for assignment and routing purposes, the CO code
11 (NXX) is normally associated with a specific geographic location within
12 an NPA, from which it is assigned. For some companies this is also used
13 for billing purposes.

14 Carriers interact with each other based on the geographic location of the rate center, not
15 on the geographic location of the individual customer premise. If a carrier assigns a
16 number to a customer outside the rate center, that carrier remains responsible for proper
17 routing of calls based on the geographic location of the rate center associated with the
18 NXX.

19 **Q. ARE THERE EXAMPLES OF TELEPHONE NUMBERS BEING**
20 **ASSIGNED TO CUSTOMERS WHOSE PREMISES ARE NOT WITHIN**
21 **THE GEOGRAPHIC BOUNDARIES OF THE RATE CENTER?**

22 A. Yes, while the great majority of telephone numbers are used within the rate center in the
23 manner described by Mr. Williamson, there are many examples where numbers are
24 assigned outside the rate center. Beyond the example used in the numbering guidelines, a
25 common and increasingly established example of an exception to the general rule is
26 numbering for voice over Internet protocol (VOIP) service. It has become virtually a
27 standard feature of this service to offer customers the opportunity to get a number in a
28 distant city. Qwest advertises this as a feature of its own VOIP service. There is even a

1 service called IPKall [<http://ipkall.com>] that advertises, “Free Washington state phone
2 number to your Internet phone.” It uses Washington state numbers to connect computer-
3 to-computer VOIP services like Free World Dialup [<http://freeworlddialup.com>] to the
4 public switched telephone network.

5 Within the state of Washington, thousands of telephone numbers are used for
6 VOIP services, as well as for trigger numbers for other enhanced service applications like
7 international callback service and as destination numbers for fax-to-e-mail services and
8 enhanced voice messaging platforms. These examples all share the characteristic of
9 providing service to customers who have no nexus to the rate center where the numbering
10 resource is assigned.

11 **Q. WOULD IT BE REASONABLE FOR THE COMMISSION TO ENFORCE**
12 **THE NUMBERING GUIDELINES IN A WAY THAT ALLOWED ILECS**
13 **TO OFFER FX SERVICES BUT PROHIBITED OTHER CARRIERS**
14 **FROM USING VNXX ARRANGEMENTS?**

15 A. No. That would result in discrimination among carriers based on specific pricing
16 structures, network architectures, and the technology they employ. The lawfulness of a
17 service such as FX should not depend on the network design used to provide it or how
18 one provider might choose to price its services. State and federal law prohibits
19 unreasonable discrimination and barriers to entry, and a requirement to mimic the
20 incumbent’s network architecture would arguably violate those laws.

21 **Q. HOW DO YOU INTERPRET THE TERM “TARIFFED SERVICES” IN**
22 **THE TWO NUMBERING GUIDELINES DOCUMENTS?**

23 A. The term “tariffed” should not be read literally, e.g., to apply only to those services
24 offered through a tariff. Apparently neither Staff nor Qwest would read it literally, either,
25 since they do not contend that Qwest’s business foreign exchange service violates the

1 numbering guidelines simply because it is offered on a commercial or contract basis
2 instead of a filed tariff. Rather, this term reflects the understanding of the industry that
3 the numbering guidelines must accommodate, rather than dictate, the decisions of
4 regulators about what services are to be authorized.

5 **Q. HAVE WASHINGTON REGULATORS ALREADY PROVIDED THIS**
6 **TYPE OF GUIDANCE TO NUMBERING ADMINISTRATORS?**

7 A. I am not aware of any actual dispute where someone has tried to challenge the
8 assignment to numbering resources based on a claim that the numbers would be assigned
9 outside the rate center. However, the interconnection arbitration decisions that I discussed
10 earlier would make it clear to the numbering administrators that VNXX arrangements are
11 a permissible exception to the geographic provisions in the industry guidelines.
12 Numbering administrators would likely rely on the UTC's decision about whether VNXX
13 arrangements are an acceptable use of numbering resources and would not, as others have
14 suggested in this case, let numbering policy dictate what services may or may not be
15 offered to Washington consumers.

16 **Q. SHOULD THE UTC PROHIBIT VNXX ARRANGEMENTS FOR FEAR**
17 **THAT IT IS A WASTEFUL OR EXCESSIVE USE OF NUMBERING**
18 **RESOURCES OR BASED ON A CONCERN THAT THE SUPPLY OF**
19 **TELEPHONE NUMBERS COULD BE EXHAUSTED?**

20 A. No. While one primary purpose of the industry numbering guidelines is to promote the
21 efficient use of limited numbering resources, there is no evidence that VNXX
22 arrangements contribute to a shortage of numbering resources. Indeed, the Commission
23 has already considered the relationship between VNXX arrangements and number
24 conservation in Docket UT-021569 and declined in that proceeding to make any change
25 to the way numbering resources were used for Internet-bound calling. Washington state

1 has many stranded thousand-number blocks in outlying rate centers, due to the use of
2 many rate centers and inefficient assignment practices prior to the implementation of
3 number pooling. Moreover, if the UTC were to prohibit VNXX arrangements, carriers
4 would likely not give up their numbers but instead try to duplicate a legacy network
5 architecture and “create” customer premises within the geographic local calling areas like
6 Qwest effectively does today. What today is called a “VNXX” would become just
7 another “NXX”(or more accurately, an “NXX-X” since carriers use thousand-number
8 blocks rather than full prefixes). Thus a ban on VNXX arrangements would have
9 virtually no effect on the supply of numbering resources.

10 **Q. SHOULD THE NUMBERING GUIDELINES BE INTERPRETED OR**
11 **APPLIED IN A WAY THAT RESULTS IN BARRIERS TO ENTRY FOR**
12 **COMPETITIVE SERVICES?**

13 A. No. Regulators have long recognized the potential for anti-competitive results through
14 numbering administration. The FCC established an independent numbering
15 administration organization to prevent this result. It has made it clear that numbering
16 administration exists to: (1) facilitate entry into the communications marketplace; (2) not
17 unduly favor or disfavor any particular industry segment or group of communications
18 consumers; and (3) not unduly favor one technology over another. [47 C.F.R. § 52.9(b)]

19 **IV. EFFECT OF VNXX ARRANGEMENTS ON**
20 **EFFICIENT NETWORK DESIGN**

21 **Q. SHOULD THE COMMISSION, IN DECIDING WHETHER TO**
22 **CONTINUE AUTHORIZING VNXX ARRANGEMENTS, CONSIDER**
23 **THE LIKELY EFFECT OF ITS DECISION ON THE ABILITY OF**
24 **CARRIERS TO DESIGN EFFICIENT LOCAL NETWORKS?**

25 A. Yes. From its earliest decisions on interconnection and local competition the UTC has
26 considered the effect of alternative policy proposals on the ability of carriers to operate

1 efficient and reliable networks. It would be naïve to believe that a decision to impose
2 access charges on out-of-area Internet-bound calls would simply cause ISPs to begin
3 paying access charges to ILECs with no effect on network design. Compensation rules
4 create incentives that will affect network design.

5 **Q. WHY SHOULD THIS BE A PARTICULAR CONCERN TO THE**
6 **COMMISSION IN THIS PROCEEDING?**

7 A. A number of factors combine to create the potential for skewed network design decisions
8 if the Commission prohibits the use of VNXX arrangements. The VNXX arrangements
9 that are used to provide dial-up Internet access service represent an alternative design of
10 the arrangements that would otherwise be used to provide this service. Network designers
11 have substantial flexibility in deciding where information will be converted from circuit-
12 switched modems to packet-switched data. If regulators place an arbitrarily high price on
13 a particular network design (such as the design wherein modems are located near the
14 terminating switch rather than near the originating switch), engineers will design around
15 that price. A network design placing the modem-to-packet conversion within the rate
16 center will result in compensation at the rates established in the FCC's orders. This
17 creates a readily available alternative for network designers to use in avoiding arbitrarily
18 high access charges. A final factor is that many competitive local exchange companies
19 have not mimicked the hub-and-spoke design traditionally employed by local exchange
20 companies and instead have used a smaller number of more centrally located switches to
21 provide service. Because their switches are already outside the local calling area in many
22 instances, additional and costly transport facilities could be consumed simply to send
23 Internet-bound calls back to the outlying rate center for the modem-to-packet conversion
24 that would otherwise happen at the CLEC switch. A call that would otherwise be

1 transported a single time from the outlying rate center to the Internet backbone would
2 instead travel that route three times – first to reach the CLEC switch, second to return to
3 the modem in the outlying rate center, and third (as packet data) to reach the Internet
4 backbone.

5 **Q. SHOULD THE COMMISSION TRY TO FIND THE NETWORK DESIGN**
6 **THAT IS MOST EFFICIENT AND REQUIRE COMPANIES TO USE**
7 **THAT DESIGN?**

8 A. No. The best policy for the Commission is technological neutrality, in which regulators
9 minimize arbitrary price differences and let companies design their own networks. The
10 UTC has no discretion about what price will apply with one network design – where
11 locally dialed Internet-bound traffic is converted from modem to packet within the rate
12 center. To establish an artificially high price for a close substitute – where locally dialed
13 Internet-bound traffic is converted from modem to packet outside the rate center – would
14 skew the incentive of network designers to minimize cost. Conversely, if the UTC
15 continues to apply consistent prices to all Internet-bound traffic, each company will be
16 free to make its own decision about how to offer efficient and reliable service at the
17 lowest possible cost. That approach will promote fair competition and efficient use of
18 scarce resources.

19 **Q. YOU HAVE EXPLAINED WHY COMPETITORS SHOULD NOT BE**
20 **COMPELLED TO MIMIC OR REPLICATE THE INCUMBENT'S**
21 **NETWORK DESIGN. SHOULD INCUMBENT CARRIERS BE FREE TO**
22 **USE VNXX ARRANGEMENTS IN PROVIDING SERVICE FOR DIAL-UP**
23 **INTERNET ACCESS?**

24 A. They should be, and are, free to do so. The CLECs have entered the market using a
25 different network design, and it is entirely appropriate for incumbents to consider
26 whether they are providing service in the most cost-efficient manner.

1 **V. ROLE OF VNXX ARRANGEMENTS IN**
2 **PROMOTING AFFORDABLE ACCESS TO THE**
3 **INTERNET**

4 **Q. HOW WILL THE COMMISSION’S DECISION IN THIS CASE AFFECT**
5 **ITS ABILITY TO PROMOTE AFFORDABLE ACCESS TO THE**
6 **INTERNET?**

7 A. A decision to begin requiring payment of access charges for traffic over VNXX
8 arrangements would have an adverse effect on the ability of consumers, particularly
9 consumers in rural areas, to get affordable access to the Internet. Such a decision would
10 raise costs for Internet service providers.

11 **Q. SHOULD THIS ADVERSE EFFECT BE A CONCERN TO THE**
12 **COMMISSION?**

13 A. Yes. Dial-up Internet access is now so widely available across the state that it may be
14 hard to remember the public policy concern that existed when many outlying areas could
15 not make a local call to connect with the Internet. That concern was definitely present at
16 the UTC in the mid- to late-1990s. Broadband connections have become more available
17 since that time, but there continue to be many families that either cannot obtain or cannot
18 afford broadband service. By arbitrarily increasing the cost of dial-up access in outlying
19 areas, the Qwest/Staff proposal would create the possibility once again that citizens in
20 smaller towns could not make an affordable connection to the Internet. Paying toll
21 charges for dial-up connections would greatly increase the price of Internet access. For
22 example, a family using only 30 minutes per day of Internet access would see their
23 Internet cost increase by \$45 per month (and that amount assumes a vary favorable toll
24 rate of 5 cents per minute). Narrowband (dial-up) access in rural areas would cost more
25 than broadband in urban areas. This result would harm consumers.

1 Even where this action would not cut off all Internet access, it could greatly
2 reduce the choice of providers available to consumers. Incumbent local exchange
3 companies may have little trouble complying with a requirement to place modem banks
4 in every local calling area, since this imposition would reflect their existing network
5 design, but other providers who do not locate central offices in every exchange may be
6 shut out of the market. The Commission should endeavor to avoid such an anti-
7 competitive result.

8 **VI. APPLICATION OF INTRASTATE ACCESS**
9 **CHARGES TO INTERNET-BOUND TRAFFIC**

10 **Q. THE STAFF TESTIMONY DESCRIBES THE HISTORY AND ROLE OF**
11 **ACCESS CHARGES AND THE DEVELOPMENT OF RECIPROCAL**
12 **COMPENSATION RATES APPLICABLE TO INTERNET-BOUND**
13 **TRAFFIC. IN YOUR OPINION, DOES THIS HISTORY JUSTIFY THE**
14 **IMPOSITION OF ACCESS CHARGES TO INTERNET-BOUND CALLS?**

15 A. No. To the contrary, it is my opinion that it would be inconsistent with the history and
16 role of access charges to apply them to Internet-bound calls. That is especially true in
17 light of the FCC's decision in the *ISP Remand Order*, and its subsequent *Core*
18 *Forbearance Order*, but it would hold even if the UTC had an open field to establish any
19 compensation regime for this traffic. There is no history of using high access charges on
20 Internet-bound calls to hold down other phone rates. Therefore, any suggestion that
21 ILECs somehow lose access revenues as a result of VNXX arrangements for Internet-
22 bound traffic is incorrect.

23 **Q. PLEASE EXPLAIN.**

24 A. Staff describes the historical role of access charges in contributing to the cost of operating
25 the telephone network. That regime involved charging substantially more than the

1 economic cost of originating and terminating interexchange (“long distance” or “toll”)
2 calls, thereby allowing local rates to be lower than they otherwise would be at any given
3 level of overall telephone company revenue. That regime was developed before there was
4 any Internet-bound traffic or indeed any Internet. The fact that the Commission
5 historically supported a policy of charging more for interexchange voice calls than for
6 local voice calls says little or nothing about what the appropriate charge is for data calls
7 to the Internet. Incumbent local exchange companies have not relied on large access
8 revenue streams for Internet-bound calls to keep local service affordable, because
9 Internet-bound calls did not exist until recently.

10 The history, albeit brief, of intercarrier compensation policy for data calls is one
11 of seeking to establish rates that reflect economic costs rather than artificial subsidies.
12 The UTC rejected suggestions that intercarrier compensation should follow the access
13 model and recognized in its first generic cost case that even the lower cost-based rates
14 developed for local voice traffic would not be accurate for Internet-bound calls. Staff’s
15 testimony notes with approval that the FCC ordered lower rates for Internet-bound traffic.
16 It is hard to reconcile that favorable view of lower, cost-based rates for *termination* of
17 Internet-bound calls with the suggestion that rates for *origination* of Internet-bound calls
18 should be increased dramatically.

19 **Q. WHAT IS THE MAGNITUDE OF THIS DIFFERENCE BETWEEN**
20 **ACCESS RATES AND ISP TERMINATION RATES?**

21 A. If the Commission bans VNXX arrangements for Internet-bound traffic, Qwest would be
22 able to charge the caller \$0.014441 per minute, or about 86 cents per hour. If the
23 Commission continues to authorize VNXX arrangements, Qwest would pay the
24 interconnecting carrier \$0.0007 per minute, or about 4 cents per hour. This, if you were

1 to look at roughly the amount of traffic that Level 3 terminates from Qwest end-users
2 monthly (400,000,000 MOU/month) the result of applying originating intrastate access to
3 that traffic instead of terminating ISP reciprocal compensation would be that Qwest
4 would bill Level 3 \$5,776,400 monthly rather being billed \$280,000. This obviously
5 demonstrates that the Qwest/Staff position is economically untenable, particularly if one
6 considers the fact that Qwest considers payment of \$280,000 to a terminating carrier to
7 be excessive.

8 **Q. DO YOU UNDERSTAND THIS COMMISSION TO HAVE A POLICY OF**
9 **SEEKING TO PROTECT INCUMBENT LOCAL EXCHANGE**
10 **COMPANY ACCESS REVENUES?**

11 A. No. The UTC moved away from the historical policy of revenue preservation in its
12 access charge reform rulemaking in 1998 (Docket UT-970325). In that proceeding, the
13 UTC decided that it would not, at that time, require a reduction in access charges but
14 would make those revenue streams more contestable by shifting most of the revenue to
15 the originating rate element. This policy contemplated that competition would result in a
16 reduction over time in the revenues derived by incumbent local exchange companies
17 from access charges. Since that time the UTC has also reduced access rates in individual
18 company rate proceedings, thereby moving further from the historical reliance on access
19 revenues to support low local rates.

20 **Q. STAFF NOTES THAT ACCESS CHARGES HELP SUPPORT**
21 **UNIVERSAL SERVICE. DO VNXX ARRANGEMENTS THREATEN**
22 **UNIVERSAL SERVICE POLICY BY AVOIDING ACCESS CHARGES?**

23 A. No. Any suggestion that VNXX hurts universal service because access charges “provide
24 funds for certain Universal Service programs” is misplaced. The rates now being charged
25 for intrastate access were developed without including any meaningful amount of

1 Internet-bound traffic, so any universal service support is already built into a rate that
2 need not apply to VNXX traffic. More significantly, the type of access charges that are
3 used to support universal service would not apply to Internet-bound traffic even if the
4 UTC were to prohibit VNXX arrangements. The issue with VNXX traffic is whether
5 *originating* access charges should be paid to the incumbent local exchange companies
6 whose customers make Internet calls. Originating access charges in Washington state do
7 not support universal service; universal service support is exclusively funded through
8 *terminating* access charges (WAC 480-120-540).

9 **Q. DR. FITZSIMMONS TESTIFIED FOR QWEST THAT INTERNET**
10 **SERVICE PROVIDERS SHOULD PAY ACCESS CHARGES IN ORDER**
11 **TO SEND PROPER PRICE SIGNALS REGARDING COST CAUSATION.**
12 **DO YOU TAKE ISSUE WITH HIS ANALYSIS?**

13 A. Yes. It is really quite remarkable to hear an argument grounded in economic efficiency
14 that reaches the conclusion that access charges should be paid on any type of traffic.
15 Access charges are not based on the cost of providing access services; as I noted earlier,
16 they are much higher than the economic cost of the service. Even if one were to accept
17 Dr. Fitzsimmons' conclusion that the Internet service provider is the "cost causer" in the
18 transaction of an Internet-bound call, it would hardly advance economic efficiency to
19 charge that "cost causer" multiples of the actual cost in the form of access charges. The
20 economic cost of terminating an Internet-bound call is on the order of four cents per hour,
21 yet the access charges that Dr. Fitzsimmons would apply are approximately 86 cents per
22 hour.

1 **Q. PLEASE RESPOND TO HIS CONCLUSION THAT THE INTERNET**
2 **SERVICE PROVIDER SHOULD BE HELD RESPONSIBLE FOR COSTS**
3 **INCURRED WHEN QWEST’S CUSTOMERS MAKE AN INTERNET-**
4 **BOUND CALL.**

5 A. Dr. Fitzsimmons believes that Internet-bound calls generate additional switching and
6 transport costs that are not compensated for in the rate paid for local exchange service.
7 He contends that ISPs cause these costs by offering a service that Qwest’s customers are
8 induced to use. The problem with this analysis is that it can be applied to any
9 telecommunications service between two persons. One can always argue that the
10 recipient of the call induced the caller to make the call. Even the unwelcome
11 telemarketing call is arguably “caused” by the recipient being a probable target for the
12 sales pitch. This argument proves nothing because it proves too much.

13 Rather than engage in theoretical debate about who caused the call, it would be
14 better for the Commission to apply accepted principles of cost responsibility. These
15 principles hold the originator of the call responsible for the cost of the call. The cost of
16 origination, transport, and termination of calls originated by Qwest’s customers is a
17 matter for Qwest to address with its customers, regardless of whether the call is
18 terminated at an ISP served by Qwest or by a CLEC. If Qwest’s local rate is not sufficient
19 to cover these costs – a fact certainly not demonstrated here – then the rate level or rate
20 structure should be revised to correct that problem.

21 **Q. IS IT YOUR CONTENTION THAT ISPS SHOULD NOT BE**
22 **RESPONSIBLE FOR ANY COSTS?**

23 A. No. All telecommunications customers are responsible for the costs of their connection
24 to the network, even when they are not originating any calls. ISPs are likewise

1 responsible for these costs, which they would pay to the local exchange company
2 providing their network connection.

3 **Q. DR. FITZSIMMONS FOCUSES ON THE COST OF TRAFFIC**
4 **DELIVERED TO “NON-LOCAL ISPS.” IS THERE A VALID**
5 **DISTINCTION BETWEEN NON-LOCAL AND LOCAL ISPS IN**
6 **DECIDING WHO SHOULD BE RESPONSIBLE FOR TRANSPORT AND**
7 **TERMINATION COSTS?**

8 A. No, there is not. Even if one were to accept the conclusion that ISPs should pay for the
9 calls they receive, there is no basis to limit that result to the ISPs outside the local area.
10 When Qwest delivers an Internet-bound call to a CLEC, its costs are the same regardless
11 of whether the call is ultimately delivered to an ISP in the local area or to an ISP in
12 another area. The compensation paid by Qwest to the CLEC is based on the costs that
13 Qwest avoids by having the CLEC perform the call termination function.

14 **Q. DO YOU AGREE WITH DR. FITZSIMMONS THAT THIS**
15 **COMPENSATION ISSUE IS IMPORTANT DUE TO THE LARGE**
16 **VOLUME OF DIAL-UP INTERNET TRAFFIC?**

17 A. Yes, the information data supplied by Dr. Fitzsimmons reinforces the point I was making
18 earlier that dial-up service continues to be important. I disagree with his conclusion that
19 economic efficiency will be advanced by imposing access charges on a subset of those
20 calls. Charging radically different rates for dial-up traffic based on factors that have
21 nothing to do with the economic cost of the service, namely the identity of the firm
22 providing the termination service and the geographic location of the ISP’s equipment,
23 will not result in better price signals or better allocation of resources.

1 **Q. DR. FITZSIMMONS APPEARS TO BELIEVE THAT THE *ISP REMAND***
2 ***ORDER* SUPPORTS HIS ECONOMIC ANALYSIS. DO YOU SHARE THIS**
3 **CONCLUSION?**

4 A. I do to an extent, but he takes it too far. The FCC certainly was motivated by the
5 concerns that Dr. Fitzsimmons identifies, namely that above-cost compensation rates
6 would lead to arbitrage opportunities and excessive compensation. These concerns
7 motivated the FCC, once it had determined that this type of traffic was interstate, to apply
8 a different compensation structure than was applied to local voice traffic. The FCC later
9 modified that compensation structure in the *Core Forebearance Order*, deciding in that
10 order that some of the initial provisions were unnecessary. However, at no time did the
11 FCC impose originating access charges. Thus, the problems of economic distortion and
12 arbitrage that Staff and Qwest witnesses identify have already been considered and
13 addressed by the FCC in establishing the compensation structure that now applies to
14 Internet- bound traffic. Economic efficiency will be served by applying that structure to
15 the VNXX arrangements at issue in this proceeding, if the Commission concludes that it
16 is not pre-empted by the FCC.

17 **VII. APPLICATION OF THE WASHINGTON**
18 **ADMINISTRATIVE CODE TO VNXX ARRANGEMENTS**

19 **Q. WHAT IS YOUR UNDERSTANDING OF STAFF'S POSITION**
20 **REGARDING PROVISIONS OF THE WASHINGTON**
21 **ADMINISTRATIVE CODE THAT APPLY TO VNXX**
22 **ARRANGEMENTS?**

23 A. Mr. Williamson's testimony is that VNXX arrangements violate "Commission rules." He
24 refers specifically to two sections of the Commission's rules, WAC 480-120-021 and
25 WAC 480-120-265. He asserts that a VNXX arrangement "bypasses the intent behind

1 those rules by originating and terminating traffic between two local calling areas without
2 the application of toll charges.”

3 **Q. WHAT IS THE RELEVANT PROVISION IN WAC 480-120-021?**

4 A. This section contains definitions used elsewhere in the chapter. The only relevant
5 definition is “local calling area,” a term used in WAC 480-120-265 Local calling areas.

6 **Q. WHAT ARE THE PROVISIONS OF WAC 480-120-265 LOCAL CALLING**
7 **AREAS?**

8 A. WAC 480-120-265 establishes the process that the Commission will follow in deciding
9 whether the scope of a company’s local area is adequate. The Commission adopted this
10 rule to provide a structure in which it would consider petitions, legislative requests, and
11 informal complaints from customers about the size of their local calling area. It also
12 specifies the factors that the Commission will consider in evaluating a local calling area.

13 **Q. DOES WAC 480-120-265 HAVE ANY PROVISION REGARDING THE**
14 **ASSIGNMENT OF TELEPHONE NUMBERS TO CUSTOMERS WHOSE**
15 **PREMISES ARE OUTSIDE THE RATE CENTER ASSOCIATED WITH**
16 **THAT TELEPHONE NUMBER?**

17 A. No. The rule says nothing about telephone number assignment. The rule is about when
18 and how the Commission might order a company to increase the number of rate centers
19 included in a given local calling area.

20 **Q. DOES WAC 480-120-265 ALLOW INCUMBENT LOCAL EXCHANGE**
21 **COMPANIES TO DICTATE THE SCOPE OF LOCAL CALLING AREAS**
22 **THAT COMPETITIVE LOCAL EXCHANGE COMPANIES CAN OFFER**
23 **TO THEIR CUSTOMERS?**

24 A. No. Each company – ILEC or CLEC – defines the local calling area when it offers local
25 service to the public. The rule does not require CLECs to mirror ILEC calling areas,

1 though in practice they almost always do. The rule applies only when a company defines
2 its local calling area in a way that someone considers unreasonably small.

3 **Q. DOES THE COMMISSION HAVE ANY RULE THAT EITHER**
4 **PROHIBITS OR ALLOWS VNXX ARRANGEMENTS?**

5 A. No, there is no administrative rule on this topic. The rule cited by Staff says nothing
6 either way about whether VNXX arrangements are permissible.

7 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

8 A. Yes.