Exhibit No. ___ T (RW-1T)
Docket No. UT-063038
Witness: Robert Williamson

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

QWEST CORPORATION Complainant, v. LEVEL 3 COMMUNICATIONS, LLC, PAC-WEST TELECOMM, INC., NORTHWEST TELEPHONE, INC., TCG SEATTLE, ELECTRIC LIGHTWAVE, INC., ADVANCED TELECOM, 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

Robert Williamson

STAFF OF
WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION

November 20, 2006

TABLE OF CONTENTS

Q. Please state your name and business address.

A. My name is Robert Williamson, and my business address is 1300 South Evergreen Park Drive Southwest, P.O. Box 47250, Olympia, Washington, 98504-7250. My business e-mail address is bwilliam@wutc.wa.gov.

Q. By whom are you employed and in what capacity?

A. I am employed by the Washington Utilities and Transportation Commission as a Utility Engineer in the Telecommunications Section.

Q. Please state your qualifications to provide testimony in this proceeding.

A. I have provided a description of my qualifications as Exhibit No. ____ (RW-2).

Q. Have you presented testimony before this Commission in other cases?

A. Yes I have. I testified in Docket No. UT-011439 concerning a petition for a line extension waiver and in Docket No. UT-030614 concerning a petition by Qwest for competitive classification of business services.

Q. What is the purpose of your testimony?

A. My testimony presents Staff's position that the practice know as "VNXX" violates existing industry telephone number assignment standards, commission rules, company tariffs defining local calling areas and extended area service, and is a kind of toll bypass scheme, which the Commission has acted to prevent in the past.

In order to explain what it means for competitive local exchange company to assign its customers "virtual NXX" or "VNXX" codes and why it is improper, I first need to explain three things: 1) the industry standards for telephone number assignment, 2) the way calls are "rated" as either local or long distance, and 3) the regulatory issues surrounding dial-up internet service providers. Although it may not be clear at first what relevance my overview of these topics has to VNXX, I think it is necessary to set the stage in this way so that my later testimony on VNXX makes sense.[1]

I. WIRELINE TELEPHONE NUMBER ALLOCATION

Q. How are wireline telephone numbers allocated?

A. Wireline telephone numbers are generally assigned geographically, based on the physical location of the subscriber's premises. Telephone numbers have been assigned this way since the beginning of dialable telephony.[2] As competing telephone companies began to realize that the importance of the network relied on the number of people who could be reached, a system of standardized numbering was settled on, and with the birth of American Telephone and Telegraph (AT&T) in the early 1900s, it was strengthened. The switching centers, and later local calling areas, were and continue to be geographic areas. The location of the calling and called party is what still differentiates between "free" local area calls and long distance calls and is the basis for all intercarrier compensation.

[1] "To understand telecom policy one confronts a vexing conundrum: to comprehend the whole of telecommunications policy, one must first understand its parts; but to understand the parts, one must first understand the whole." Nicholas Lemann in the New Yorker as quoted in Digital Crossroads, Jonathan Neuchterlein and Philip Weiser, MIT Press, 2005.

[2] Almon Strowger, a Kansas City undertaker who tired of losing business due to misrouting of calls by the human operator, invented the first automatic dial telephone system in 1891. Mr. Strowger's Step-by-Step (SxS) switches essentially made operators obsolete.

The standard practice in the telephone industry (endorsed by state and federal regulators on public policy grounds) has been that customers are allowed to make local calls – calls within a local calling area – for a low monthly rate with no limit upon the number of calls. Long distance calls, on the other hand, are priced on a per-minute of use (MOU) basis. As discussed in more detail below, carriers that provide long distance service – interexchange carriers – pay access charges to local exchange carriers for the right to "access" the local networks (*i.e.*, to the local switching and loop facilities that are the most costly part of the local telephone network). The system of access charges, which began in the 1970s when competition started in the long distance market, was necessary to preserve AT&T's longstanding rate design that set long distance MOU rates relatively high in order to keep local flat rates low.

Q. Please explain briefly what standards exist for telephone numbering plans in North America and this state.

A. Telephone numbering plans for public telephone networks worldwide conform to standards established by the International Telecommunications Union (ITU).[3] Under the ITU standards, the world is divided into nine geographic World Zones, numbered one through nine. World Zone 1 has been assigned country code "1", which is shared by 18 countries in North America.

Within World Zone 1, national numbers are formatted according to the North American Numbering Plan. The format for all international numbers (including those in World Zone 1) is defined by the ITU in section E.164 of its standards (a 16-digit

[3] The ITU is a U.N. agency. It is based in Geneva, Switzerland and is arguably the most important telecom standards setting-body in the world. The ITU's work includes telephony, IP voice, telematics, and more.

numbering scheme that provides a unique telephone number for every subscriber in the world). In 1995, the FCC created the North American Numbering Council (NANC), which makes recommendations to the FCC on numbering issues and oversees the North American Numbering Plan Administrator.[4] The North American Numbering Plan Administrator, created at the same time, is an impartial entity responsible for administering telecommunications numbering resources in an efficient and non-discriminatory manner.[5] NeuStar, Inc. is currently the administrator for the North American Numbering Plan.

Q. Are there industry standards for the assignment of North American Numbering Plan numbers?

A. Yes. The North American Numbering Plan Administrator is directed by the FCC to administer telephone resources based on FCC and state commission orders and in accordance with the guidelines developed by the North American Industry Numbering Committee.[6] The Alliance for Telecommunications Industry Solutions (ATIS) publishes that set of guidelines for the assignment of NXXs,[7] entitled "Central Office Code [NXX] Assignment Guidelines" (COCAG).[8] Those guidelines are used as a standard for assigning numbers throughout North America. The COCAG defines NXX codes (or Central Office codes/blocks) in a geographic manner in section 2.14:

> It is assumed from a wireline perspective that CO codes/blocks allocated to a wireline service provider are to be utilized to provide service to a customer's premise *physically located* in the same rate center that the CO

[4] *See* 47 CFR § 52.11.
[5] *See* 47 CFR § 52.12.
[6] *See* 47 CFR §§ 52.13(b) and (c).
[7] An NXX is the second set of three digits in a 10 digit telephone number: NPA-NXX-XXXX.
[8] Central Office Code Assignment Guidelines Final Document, ATIS-0300051 (May 5, 2006).

codes/blocks are assigned. Exceptions exist, for example tariffed services such as foreign exchange service. (Emphasis added.)

The COCAG defines a rate center as "the smallest geographic area used to distinguish rate boundaries."[9]

Q. What principle does the North American Numbering Plan use in distributing the number resource?

A. The North American Numbering Plan (NANP) generally defines a geographic hierarchy. The area served by the NANP is divided into distinct geographic areas, each of which is assigned a three-digit Numbering Plan Area (NPA)[10] code (commonly known as an "area code"). Each NPA is divided into numerous three-digit Central Office codes, or NXXs, with each NXX code serving as many as 10,000 subscriber numbers. Historically, wireline NXX codes have represented a geographic local calling area for call rating.

Q. Are there exceptions to the geographic allocation of NANP numbers?

A. Yes. Some NPAs in the format N00 and N11 are not geographic in nature but are used for special purposes. Those NPAs formatted N11 are used for common public purposes. Some of those NPAs are 911 (emergency services), 511 (Department of Transportation road conditions) and 411 (information). The most common example of an NPA formatted in N00 is the 800 NPA, used to provide a "free" call to all originators because the called party pays for all charges.

[9] Id pg. 52.
[10] The NPA is most commonly the first set of three digits in a 10 digit telephone number: NPA-NXX-XXXX.

Q. "Foreign exchange service" is listed in the COCAG standard as an exception to the rule that carriers are to use NXXs to provide service to a customer's premise physically located in the calling area to which the NXX is assigned. What is foreign exchange service?

A. Foreign Exchange Service, or "FX" as it is commonly known, provides local telephone service from a central office *outside* a customer's local calling area. A user can pick up a phone and dial calls in a geographically distant "foreign" local calling area; the user also receives calls from the "foreign" local calling area without the calling party incurring toll charges. FX service is commonly used by businesses that provide service on a regional basis and want to receive calls without the calling customer incurring toll charges. The telephone company provides FX service by connecting the FX customer's physical location to the location of the company's central office in the distant local calling area. The FX customer pays the regular rate for the local service but also pays an extra charge for the facility that connects their physical location to the distant telephone company switch, like a very long loop. The FX customer pays a monthly facility fee[11] to be physically connected to the local calling area of their choice.

Q. What is a local calling area?

A. In the state of Washington, WAC 480-120-021 defines a local calling area as: "one or more rate centers within which a customer can place calls without incurring long distance (toll) charges." What constitutes a "local" call as opposed to a "long distance" call is defined in each incumbent local exchange telecommunications company's tariff through the provision of local calling areas. Qwest's "Exchange and Network Services Tariff"

[11] The facility fee varies by distance and is referenced in the appropriate telephone company tariff.

contains this definition: "Local service" is "the area within which exchange access service is furnished between customer premises located within the local service area."[12] A "Local service area" is defined as "the area within which exchange access service is provided under specific rates. The area may include one or more exchanges without the application of toll charges."[13]

Q. What is extended area service?

A. Extended area service[14] is a service that provides customers an enlarged local calling area that may encompass a number of geographical areas that have strong common interests.[15] Local exchange companies, with state commission approval, may extend a calling area and charge a higher monthly service rate. The higher monthly rate, as approved by this Commission, makes up for the lost access charge revenue.

II. RATING AND ROUTING OF CALLS (ACCESS CHARGES/RECIPROCAL COMPENSATION)

Q. Briefly explain what access charges are and how they are used.

A. When long distance competition began in the 1970s, regulators had to devise a mechanism for allocating two categories of the costs of a long distance call: long distance transport and the cost of "accessing" the local network.[16] The mechanism

[12] WN40 Exchange and Network Services Washington, § 2.1.
[13] Id.
[14] *See* WAC 480-120-265.
[15] For example, customers in Yelm can obtain EAS service that enables them to make "free" local calls to Qwest's adjoining Olympia LCA. The policy reason for this is that Yelm residents tend to patronize businesses, medical services, and government services located in the Olympia LCA.
[16] The cost of long distance transport consists mainly of the cost of the large "pipes" or facilities that connect local calling areas via tandem switches to one another. These cable or fiber facilities and switches are used exclusively for interexchange calls. The cost of accessing the local network, on the other hand, consists mainly of the cost of the

adopted was called access charges. There are two distinct types of access charges: switched access and special access. Only switched access charges are at issue in this case. A long distance carrier pays originating switched access charges to the local carrier whose customer originates the call and also pays terminating switched access charges to the local carrier whose customer is terminating the call. The long distance company passes those charges on to its customers, on a per-minute basis for all "switched access" calls, *i.e.*, calls that pass to/from the long distance network through the local carrier's switches. Access charges are used in the recovery of a local telephone company's total costs. Access charges have historically been used to keep down the price of local service and provide funds for certain Universal Service programs.

Q. Who regulates access charges?

A. The FCC regulates what local exchange carriers charge interexchange carriers for originating and terminating calls between customers in different states (*i.e.*, interstate access charges). The states regulate what local exchange carriers charge interexchange carriers[17] for calls between customers located within the same state (*i.e.*, intrastate access charges).

Q. What does it mean to properly "rate" a call?

A. A call is rated as toll or local by the digits dialed. Rating just means to assign the proper billing category to a call, *i.e.*, local or inter-local, intrastate, interstate, or international.

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switching facilities and loops that extend to each customer's premises. These local facilities are used not only for local calling (i.e., calls between customers in the same local calling area), but also for originating and terminating calls between exchanges (i.e., interexchange or "toll" calls).

[17] It is now common for a single company, or subsidiaries of the same parent company, to offer local exchange and interexchange services.

This process is automatically performed by telephone companies' back office support systems. Those systems (Operating Support Systems or OSS) compare the calling party's number to the called party's number, look up the local calling area and, if applicable, the state or world zone to which the numbers are assigned. As we discussed above, LECs are dependent on the geographic pairing of particular numbers to particular places, because not only have the call-routing systems been designed that way, but also in part because billing systems have been configured to assess toll charges (or not) on the basis of the geographic rate center to which the telephone numbers have been assigned. Telephone companies rely on the originating and terminating telephone numbers and the rate centers to which they are assigned to rate and charge for calls.

Q. Is there any way for a phone company such as Qwest to determine the physical address of another company's customer, other than from the NPA and NXX that that company has assigned its customer?

A. No, the billing systems only record the originating and terminating telephone numbers, which are then used by the companies to rate and bill calls based on the physical location of the rate centers represented by calling and called telephone numbers.

III. INTERNET SERVICE PROVIDERS

Q. What is an Internet service provider?

A. "An Internet service provider (ISP) is a vendor who provides access for customers to the Internet, and the World Wide Web. The user typically reaches his ISP by either dialing-

up with his/her own computer, modem and phone line, or over a dedicated line."[18] A "dedicated line" is usually a DSL or cable-TV modem connection. At issue in this case is the dial-up modem connection, which is typically provided using telephone numbers local to the dial-up user, so that the ISP's customers can access the Internet without incurring long distance charges.

In the early 1990s, dial-up Internet service was provided in many instances by "mom and pop" ISPs that physically installed modems in basements and garages within each local calling area. The ISP would then lease a broadband connection from each of these sites to an Internet backbone provider, such as WorldCom or AT&T. The small ISPs commonly bought cheap message rate business lines from the local exchange carrier.[19]

By the mid 1990s, the ISPs offering dial-up service turned to CLECs' lower priced service for connectivity to the telephone network. CLECs could offer ISPs prices that were lower than what the ISPs paid for retail message rate business lines, because the CLECs were receiving terminating reciprocal compensation for every call delivered from the LECs. The ISPs located their modems in each local calling area where they wished to offer dial-up Internet service. Since the calls were "local," the ISP customers didn't incur long distance charges.

[18] Newton's Telecom Dictionary, 22nd edition.

[19] Message rate lines were inexpensive for the ISPs. Message Rate lines have low monthly rates because all outgoing calls are metered and incur a per-call charge. The modems only received incoming calls so no extra charges were ever incurred.

Q. Are calls to an ISP technically different from calls to non-ISP voice customers?

A. No. To the Public Switched Telephone Network (PSTN), there is no real technical difference in how a call is completed to an ISP versus a regular voice customer. Customers reach other local customers, ISP or otherwise, by dialing a local telephone number. The call is routed through the telephone network based on the dialed digits, which direct the call to the terminating customer. Answer supervision[20] is returned to all of the central office switches involved in the call. The switching, routing and receipt of answer supervision occurs for all calls, whether the called party is a modem or a telephone handset. When an ISP modem answers, it communicates with the originating caller's modem using analog tones to represent digital data (the familiar white noise heard on a modem call). The ISP's modem converts the analog tones into digital packets that are then transmitted to the Internet backbone provider and ultimately to the Internet.

There are two non-technical, but important, differences between calls to ISPs and calls to non-ISP voice customers. Calls to ISPs tend to last longer (long holding times), and the call pattern is asymmetric in that calls only flow in one direction, from the originating customer to the ISP (from the ILEC to the CLEC to the ISP).

Q. Are ISP and non-ISP calls regulated differently?

A. Yes. In the 1990s, dial-up access to the Internet became popular. As stated above, the call begins like any other call, except that the caller uses a computer and modem to dial another modem. For *jurisdictional* purposes, the FCC has long viewed this transaction as a single long distance call, from the end user to the website, rather than a local call to the

[20] Answer supervision is a signal sent between switching elements to indicate that the called party has answered the call. It is used to begin the billing cycle as well as to indicate that the call is in a stable state.

ISP. Even though the FCC regulates these calls as interstate, it has, for 20 years, exempted "Enhanced Service Providers" (of which ISPs are one type) from paying federal or state access charges. Instead, ISPs are treated as end-users of telecommunications services and are allowed to obtain their connection to the telephone network by buying local business lines like any other end-user of telecommunications services (as I have described above). This longstanding FCC policy is known as the "ESP access charge exemption." The exemption can be confusing because, for interstate/intrastate *jurisdictional* purposes, the FCC says the call goes from the customer's modem, to the ISP's modem and then continues on to a server that may be located in a different state. However, for purposes of "exempting" the ISP from access charges, the FCC considers the ISP to be just another end-user of telecommunications services, which implies that the telephone call ends at the ISP's modem in each local calling area. Thus, an ISP customer calling an ISP modem located in the customer's local calling area is not making a toll call, even though, jurisdictionally, it is considered to be interstate in nature (on the theory that the call continues past the ISP's local modem onto the Internet backbone to servers located in other states).

The ISP is considered an enhanced service provider, but a LEC that sells connectivity to an ISP is not.

Q. You mention above that CLECs could offer ISPs prices that were lower than what the ISPs paid ILECs for retail message rate business lines because the CLECs were receiving terminating reciprocal compensation for every call delivered from the LECs. Please explain this.

A. While the access charge regime applies to calls between customers located in different local calling areas, reciprocal compensation applies when carriers hand off telecommunication traffic between customers located in the same local calling area. Under reciprocal compensation rules, the carrier whose customer originates the call pays the carrier on whose network the call terminates (*i.e.*, calling party pays). Reciprocal compensation is paid on a minutes-of-use basis. Because customers of Internet dial-up service always dial the ISP modem (the ISP modem never calls a customer) and reciprocal compensation is based on minutes of use, the asymmetric nature and long holding times of Internet access calls created a distinct arbitrage opportunity for CLECs. Because of the reciprocal compensation revenue that CLECs could obtain from the ILECs (whose customers were making all those long calls to the CLEC's customer, the ISP), the CLECs could offer dial-up Internet service to ISPs at very low prices and still make a profit under the reciprocal compensation rules at the time.

The FCC recognized this form of regulatory arbitrage was distorting the market and sought to stem the flow of reciprocal compensation from ILECs to CLECs through its ISP Remand Order. Now, by engaging in the use of "VNXX" (which I will describe below), the CLECs are asserting the right to ignore number assignment standards, local calling area rules and ILEC tariffs in order to continue to gain reciprocal compensation

from the ILECs without locating modems in each of the local calling areas where their ISP customers wish to offer dial up service..

IV. VNXX

Q. What is Virtual NXX (VNXX), and how did it come about?

A. VNXX is term coined to describe a practice used by some CLECs that serve dial-up ISP customers. It means that, contrary to the COCAG rule discussed above, a CLEC provides service to its dial-up ISP customer using telephone numbers with an NXX that is not based on the actual physical location of the ISP's premise (*i.e.*, where its modem is actually located). This fools the LEC billing systems into rating calls to the ISP as local calls, even when the call is, in fact, between customers located in different local calling areas.

Q. Why is it that some CLECs can take advantage of VNXX?

A. The PSTN was built over many years using the existing copper technology available to the industry. AT&T and the independent phone companies located their switches as close to customers as possible, and most towns have at least one telephone switching "central office," where copper cables terminate at a local switch. The central office also contains the facilities used to connect to other switches in other cities. For example, Qwest has over 50 switch locations in Washington State.

CLEC's networks were not designed in the same manner as the legacy PSTN. Most commonly, CLECs began service by installing one switch in each LATA (Local Access and Transport Area). Washington has two LATAs – Western and Eastern

Washington. The CLEC was then able to reach different local calling areas within the LATA by building or leasing facilities to each of the areas in which it wanted to sell service. It is more efficient to install fewer expensive switches and obtain facilities to provide a physical presence in each local calling area than to have an expensive switch in every local calling area. In an area where the ILEC has many switches, a CLEC might install one and divide up its routing intelligence, thereby creating many "virtual switches" that match the ILEC-tariffed local calling areas. The creation of many "virtual switches" and the provision of facilities connecting each local calling area allowed the CLEC to provide the same calling plans for its subscribers as did the legacy LECs. Even though a local call to a CLEC customer might actually leave the local calling area to be switched in a different exchange (the location of the "virtual switch") before returning to the local calling area where it originated, this was still properly rated as a local call because it is the physical location of the calling and called parties that determines the rating of the call. The fact that it became commonplace for local traffic to be transported across local calling area boundaries set up an opportunity for the practice that is sometimes called "virtual NXX."

Q. How did VNXX come about?

A. As technology changed and competition between Internet service providers took its toll, the CLECs began providing service to a smaller number of larger ISP's by building (or leasing) higher-capacity facilities to connect to the ISP's modems still physically located in the correct local calling area. For the majority of dial-up modem calls, an ILEC customer would dial into an ISP modem using a CLEC telephone number. The ILEC

delivered calls to the CLEC switch over inter-carrier local trunking arrangements. The CLEC would then connect the call to facilities attached to the ISP modem, and the customer could search the web or check email. CLECs obtained telephone numbers in all the local calling areas they wanted to provide service in, built out or leased facilities to each local calling area, and the terminating modem continued to remain in the correct local calling area for the calls to properly be rated as local. Hence, the ISP customers weren't billed for toll charges that kept the cost of dial-up internet access low.

It was at this time that some CLECs began to offer a so-called "managed modem" service that included assigning customers NXX codes without regard to their physical location. With a "managed modem service," a CLEC provides modems in one geographic location, most often at the same location where its switch and Internet backbone access is located. The competitive LEC then sells that service to an ISP that resells the Internet access under its own name (*e.g.*, Earthlink, or AOL). The CLEC obtains telephone numbers in each local calling area from the NANPA and assigns local telephone numbers in each local calling area where it provides service, even though the modem is physically located elsewhere. This may seem like good business except that the terminating modem no longer lies within the correct local calling area. This violates the industry standards and state and federal regulations that require the originator and terminator to be physically located in the same geographic local calling area for a call to be rated as a local.

As an example, a Qwest customer in Olympia dials a local, seven-digit number to connect to the Internet. With the receipt of all digits, the call is routed from a Qwest switch in the Olympia central office to a CLEC point-of-presence and then answered by a

modem physically located in Seattle. Even though the seven-digit telephone number is assigned within the Olympia local calling area, it is actually connected to a modem physically located in Seattle (a different local calling area).

Q. How does VNXX affect rating and billing?

A. As I said above, VNXX fools billing systems into thinking that an inter-local (long distance) call is actually local. By using VNXX, CLECs allow their dial-up ISP customers' end-users to avoid toll charges. They do so simply by the expedient of assigning NXXs in every local calling area where the ISPs want to receive calls, with no regard to where the ISP modem is actually physically located. The geographic endpoint information that has always been represented by telephone numbers is not available in the billing records used by telephone companies with whom the CLECs interconnect, such as Qwest. However, a CLEC knows full well where its VNXX customers are located and is fully capable of identifying the amount of interexchange traffic that it terminates.

Q. Does VNXX violate the COCAG?

A. Yes. "A VNXX number is a telephone number that appears to be assigned to one exchange but is actually assigned to a customer in a different exchange."[21] The assignment of a VNXX number violates the COCAG assignment rules because the terminating modem to which the telephone number is assigned is not "physically located in the same rate center that the CO codes/blocks are assigned."[22]

[21] In The United States Court Of Appeals For The First Circuit, No. 05-2657 Global NAPS, INC. v. Verizon New England., pg 9

[22] Central Office Code Assignment Guidelines Final Document, ATIS-0300051, May 5, 2006, Para. 2.14.

VNXX is traffic that bypasses the required legacy standards/regulations and results in the ILEC transporting the call in the same manner as a toll call, without receiving the same compensation, and violates the state approved, and required, intrastate access tariffs. In essence, VNXX offers the equivalent of incoming 800 or FX service without any mechanism to compensate the ILEC for its lost access revenue.

Q. What is the difference between what an FX customer pays and a VNXX customer pays?

A. The FX customer pays a tariffed monthly facility fee to be physically connected to the local calling area of his choice. The VNXX customer pays nothing for the same incoming service.

Q. Is VNXX listed in the COCAG as an exception?

A. No, VNXX it is not listed in the COCAG as an exception. VNXX violates the COCAG guidelines by providing service to a customer premise that is not physically located in the same rate center/local calling area that the Central Office (NXX) codes are assigned in.[23]

Q. Does VNXX service follow definitions spelled out in this Commission's rules regarding local calling areas and extended area service that you mention above?

A. No. VNXX service does not follow the rules and definitions in the pertinent Washington Administrative Code sections mentioned above and, in fact, bypasses the intent behind those rules by originating and terminating traffic between two local calling areas without the application of toll charges.

[23] *Id.*

Q. Didn't the FCC's ISP Remand Order resolve this problem for the industry by deeming all ISP-bound calls to be interstate?

A. In my opinion, no, not entirely. The FCC has not given the industry sufficient guidance on this point. In an amicus curiae brief FCC staff stated that "… the ISP Remand Order deemed *all* ISP calls to be interstate calls subject to the jurisdiction of the FCC, and the language of the *ISP Remand Order* is sufficiently broad to encompass all such calls within the regime established by that Order. Nevertheless, the order also indicates that, in establishing the new compensation scheme for ISP-bound calls, the Commission was considering only calls placed to ISPs located in the same local calling area as the caller. The Commission itself has not addressed application of the *ISP Remand Order* to ISP-bound calls outside a local calling area."[24] "[H]owever, the administrative history that led up to the *ISP Remand Order* indicates that in addressing compensation, the Commission was focused on *calls between dial-up users and ISPs in a single local calling area* [emphasis added]."[25] It is important to note that, although the FCC does consider all calls to the Internet to be jurisdictionally interstate in nature, for compensation purposes it was addressing only ISP calls that originate and terminate within the same local calling area and to which reciprocal compensation applies.

[24] Brief of Amicus Curiae Federal Communications Commission, In The United States Court Of Appeals For The First Circuit, No. 05-2657, *Global NAPS v. Verizon New England*, p. 10.
[25] *Id.*, p. 12.

Q. What have other State Commissions had to say about whether VNXX traffic is local in nature?

A. In preparing this testimony, I reviewed the decisions of several other states, including Oregon, Massachusetts, California, and Vermont. The majority of State Commissions that have addressed VNXX traffic have concluded that it is not local traffic and, therefore, is not subject to reciprocal compensation.[26]

[26] *See e.g.*, **Ohio:** *Ohio Verizon/GNAPs Arbitration Order* at 10 (permitting use of virtual NXX assignments but affirming that the intercarrier compensation for such calls are based on the geographic end points of the call); *Ohio GNAPs/Ameritech Arbitration Order* at 11; **Illinois:** *Illinois Verizon/GNAPs Arbitration Order* at 16 (finding that the final destination of virtual FX traffic is by its very nature, beyond the caller's local calling area "with virtual NXX being simple a device to relieve the caller of toll charges"); *Illinois GNAPs/Ameritech Arbitration Order* at 15; *Level 3 Communications, Inc. Petition for Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Illinois Bell Telephone Company d/b/a Ameritech Illinois*, Arbitration Decision, Docket No. 00-0332, 2000 Ill PUC LEXIS 676 at *7 (Ill. Commerce Comm'n Aug. 30, 2001) ("FX traffic does not originate and terminate in the same local rate center and therefore, as a matter of law, cannot be subject to reciprocal compensation"); **California:** *California Verizon/GNAPs Arbitration Order* at 26-28 (finding that ILECs should be compensated for virtual FX calls because FX customers do not receive service at no charge and virtual FX calls are interexchange calls not subject to Rule 51.703(b)); **Florida:** *In re:Investigation Into Appropriate Methods to Compensate Carriers for Exchange of Traffic Subject to Section 251 of the Telecommunications Act of 1996*, Order on Reciprocal Compensation, Docket No. 000075-TP, Order No. PSC-02-1248-FOF-TP (Fl. PSC Sept. 10, 2002) ("*Florida Reciprocal Compensation Order*") (intercarrier compensation for calls to VFX numbers to be based on end points of call and are not subject to reciprocal compensation); **Pennsylvania:** *Application of MFS Intelenet of Pennsylvania, Inc.*, Docket No. A-310203F0002, *Application of TCG Pittsburgh*, Docket No. A-310213F0002, *Application of MCI Metro Access Transmission Services, Inc.*, Docket No. A-310236F0002, *Application of Eastern Telelogic Corp.*, Docket No. A-310258F0002, Opinion and Order (Pa. PUC July 18, 1996) at 19 (holding that CLECs must assign NXX codes to customers that conform to the same local calling area/rate centers where customers are actually located in order "to avoid customer confusion and to clearly and fairly prescribe the boundaries for the termination of a local call and the incurrence of a transport and termination charge, as opposed to termination of a toll call in which case an access charge would be assessed.") ("*MFS II Order*"). This was reaffirmed by the Commission in 2000. *Petition of Focal Communications Corporation of Pennsylvania For Arbitration Pursuant to Section 252(b) of the Telecommunications Act of 1996 to Establish an Interconnection Agreement with Bell-Atlantic-Pennsylvania, Inc.*, Docket No. A-310630F0002 (Pa.PUC Aug. 17, 2000) at 43 n.67 (*"Focal Order I")* ("[A]ny abuse by Focal in assigning telephone numbers to customers using NXX codes that do not correspond to the rate centers in which the customers' premises are physically located" . . . "will be deemed as a direct violation of this Order and our *MFS II Order* and will be subject to Civil Penalties for Violations under Section 3301 of the Public Utility Code, 66 Pa. C.S. § 3301."); **Connecticut***: DPUC Investigation of the Payment of Mutual Compensation for Local Calls Carried Over Foreign Exchange Service Facilities*, Decision, Docket No. 01-01-29 (Conn. PUC Jan. 30, 2002) (VFX calls not eligible for mutual compensation); **Texas:** *Proceeding to Section 252 of the Federal Telecommunications Act of 1996*, Revised Arbitration Award, Docket No. 21982 (Tex. PUC Aug. 31, 2000) at 18 (finding FX-type traffic "not eligible for reciprocal compensation" to the extent it does not terminate within a mandatory local calling scope); **South Carolina:** *South Carolina US LEC Arbitration Order*; *In re Petition of Adelphia Business Solutions of South Carolina, Inc. for Arbitration of an Interconnection Agreement with BellSouth Telecommunications, Inc. Pursuant to Section 252(b) of the Communications Act of 1934, as Amended by the Telecommunications Act of 1996*, Order on Arbitration, S.C. PSC Docket No. 2000-516-C (Jan. 16, 2001) at 7; **Tennessee:** *In re Petition for Arbitration of the Interconnection Agreement Between BellSouth Telecommunications, Inc. and Intermedia Communications, Inc.Pursuant to Section*

The Public Utility Commission of Oregon was one of the latest states to decide that VNXX traffic is not local and not subject to reciprocal compensation. It stated that "the *ISP Remand Order* does not contemplate that ISP-bound traffic will be provisioned through the VNXX arrangements, but rather that an ISP's modem must be located in the same local calling area as the customers originating the Internet-bound call in order for the traffic to be compensable."[27]

Q. How should VNXX Calls Be Rated?

A. VNXX traffic is inter-local calling area traffic. As such, it should be rated as intrastate toll service.

Q. How would this be enforced?

A. Recognizing that VNXX arrangements may adversely affect the reciprocal compensation and transport obligations of interconnected LECs, the FCC has sought comment on whether there are any circumstances under which VNXX should be allowed, and, if so, how the compensation scheme and transport obligations should be effected. The FCC

252(b) of the Telecommunications Act of 1996, Docket No. 99-00948 (Tenn. PSC June 25, 2001) at 42-44; **Georgia:** *Generic Proceeding of Point of* PSC Docket No. 13542-U (Ga. PSC July 23, 2001) at 10-12 ("The Commission finds that reciprocal compensation is not due for Virtual FX traffic.") (" *Georgia Generic Proceeding*"); **Maine:** Public Offices Investigation into Use of Central Office Codes (NXXs) by New England Fiber Communications, LLC d/b/a/ Brooks Fiber, Docket No. 98-758, Order Requiring Reclamation of NXX Codes and Special ISP Rates by ILECs, and Order Disapproving Proposed Service (Me. PUC June 30, 2000); **Missouri:** *Application of AT&T Communications of the Southwest, Inc., TCG St. Louis, Inc., and TCG Kansas City, Inc., for Compulsory Arbitration of Unresolved Issues With Southwestern Bell Telephone Company Pursuant to Section 252(b) of the Telecommunications Act of 1996,* Arbitration Order, Case No. TO-2001-455 (Mo. PSC June 7, 2001) at 31 (finding VFX traffic "not classified as a local call"); **Nevada:** *Re: Pac-West Telecomm, Inc.*, Docket Nos. 98-10015, 99-1007, Order Adopting Revised Arbitration Decision, Attach. 1, ¶ 64 (Nev. PUC Apr. 8, 1999) (finding that "a local call is based on the physical location of the originating and terminating parties . . . [t]o define a local call based on the rate center of the NXX codes as proposed by Pac-West and ATG would subvert industry custom and practice. It could allow them to avoid access charges for toll calls and interLATA calls as well").

[27]Before The Public Utility Commission of Oregon, ARB 671, Order NO. 06-190; Disposition: Arbitor's Decision Adopted AS Modified, Entered 04/19/06.

noted that it had already delegated some of its authority to state public utility commissions to deal with the problem; state commissions may order the NANPA to reclaim NXX codes that are not being used in accordance with the Central Office Assignment Guidelines (COCAG).[28] This commission also has general authority to regulate the practices of telecommunications companies or to declare that intrastate access charges apply to VNXX traffic.

Q. Does the rating of ISP calls based on the geographic origination and termination point limit competition or provide unfair advantage to incumbents?

A. No, it does not. It is important to recognize that rating calls upon origination and termination points does not limit competition or provide unfair advantage to the incumbent telephone carriers. All carriers are required to follow the same rules and standards and the costs that accompany them. VNXX does not in any way represent an innovation of the sort that competition is intended to encourage. Rather, VNXX is a practice that simply aims to avoid toll charges and is essentially a form of price arbitrage. From a pricing perspective, the originating LEC loses toll revenue (originating access), and must pay the terminating CLEC reciprocal compensation. Allowing one class of carriers to unilaterally bypass existing industry standards for number assignment, as well as state and federal rules dealing with inter-carrier compensation, would make the rate payers of Washington State who do not use dial-up Internet access, subsidize the low cost service for those that do. The proper venue to change the existing manner for the rating

[28] *In the Matter of Developing a Unified Intercarrier Compensation Regime*, Notice of Proposed Rule Making, CC docket 01-92, FCC 01-132,¶115, citing *Investigation into the Use of Central Office Codes (NXX) by New England Fiber Communications, LLC,d/b/a Brooks Fiber*, Docket No. 98-758, Order Requiring Reclamation of NXX Codes and Special Rates by ILECs, Order No 4, at 4 (Main PUC June 30, 2000).

of calls and compensation between carriers is the FCC's inter-carrier compensation docket or an appropriate state proceeding on the intrastate access charge system, and then the NANC.

V. UTC PAST ACTIONS REGARDING TOLL BYPASS

Q. Has this commission dealt with services that were created to avoid toll and access charges before?

A. Yes, this Commission has acted to prevent schemes to bypass intrastate access charges in the past. In dockets U-88-2370-J (U. S. Metrolink Corp., First Supplemental Order) and UT-971515 (United & Informed Citizen Advocates v. Pacific Northwest Bell Telephone Company), the Commission addressed services that provided toll bridging where calls are passed between overlapping extended area service regions thereby bypassing intrastate access charges. The Commission's decision in those two dockets was that bypassing intra-LATA toll charges by bridging between extended area service regions was unlawful.

In Docket No. UT-031472 (WITA v. LocalDial), the Commission's decision was that it was unlawful for LocalDial to bypass intrastate access charges by transporting a portion of the call over an IP link (a type of VoIP service known as IP-in-the-middle or phone-to-phone VoIP).

Q. Are toll bridging and "IP-in-the-middle VoIP" similar to the service provided by VNXX?

A. Yes. Although all three services differ in how they technically achieve their goal, they are similar in that they allow end users to call from one local calling area to another without incurring toll charges. Toll bridging and "IP-in-the-middle VoIP" have already been found by this Commission, as well as a number of other state commissions, to be unlawful.

Q. Does this complete your testimony?

A. Yes it does.