## STATE OF NEW HAMPSHIRE BEFORE THE PUBLIC UTILITIES COMMISSION

Petition for Investigation into the Regulatory Status of IP Enabled Voice Telecommunications Service DT 09-044

## TWC DIGITAL PHONE LLC RESPONSES TO FIRST SET OF NHTA DATA REQUESTS APPROVED BY STAFF

TWC Digital Phone LLC ("TWCDP"), on behalf of itself and its affiliates, hereby submits its responses to the NHTA First Set of Data Requests approved by Staff in the abovecaptioned proceeding. TWCDP incorporates by reference the General Objections it submitted on August 10, 2009, pursuant to Admin. Rule Puc 203.09(g), and further specifies below additional objections to particular requests.

Data Request Received: 07/31/09 Request No. Staff 1-1 Date of Response: 08/21/09 Witness: Matt Cannon

## REQUEST:

Does the Cable VoIP Service that Comcast, Time Warner or Metrocast offer provide for the ability of customers to make telephone calls with content of their own choosing to any other person or entity that is assigned a telephone number (even if that number is translated to an Internet protocol (IP) address by the provider)?

## **RESPONSE:**

Subject to the caveat that TWCDP's Cable VoIP Services do not enable customers to make "telephone calls" over a traditional "telephone" network, TWCDP's Cable VoIP Services provide customers with the ability to engage in real-time, two-way voice communications with any other person or entity that is assigned a standard telephone number.

Data Request Received: 07/31/09 Request No. Staff 1-2 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Do customers using Cable VoIP Service utilize their own POTS compatible telephone devices, inside wiring and RJ-11/14/25/45 wall jacks? If not, specifically what equipment do customers use (identifying in each case whether such equipment is owned by the customer or the cable telephone service provider (or any affiliate thereof))? Can a Cable VoIP Service customer use an IP telephone device such as a session initiation protocol (SIP) telephone for access to Cable VoIP Service?

#### **RESPONSE:**

Customers can use virtually any conventional analog telephone that they own to make and receive calls using TWCDP's Cable VoIP Services. Customers can do so by connecting the telephone device to specialized IP-compatible customer premises equipment known as an embedded multimedia terminal adapter or "eMTA" that is installed by TWCDP at the customer's premises. The functionality of the eMTA is described below in response to Data Request 1-5. If the eMTA has been connected to the inside wiring at the premises, the customer can make and receive calls by connecting the telephone to any operational telephone jack. Currently, customers cannot use native SIP phones to access TWCDP's Cable VoIP Service.

Data Request Received: 07/31/09 Request No. Staff 1-3 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Does the Cable VoIP Service customer use the same cable company connection as that used to provide Internet access? If the cable connection is channelized, does the Cable VoIP Service call use the same channel(s) as the connection used to provide Internet access?

## **RESPONSE:**

TWCDP's Cable VoIP Services require a broadband connection with a minimum upload/download speed of 200 kilobits per second ("kbps"), and TWCDP relies on the same physical connection that TWCDP's affiliate uses to provide broadband Internet access. A customer of TWCDP's Cable VoIP Services need not separately subscribe to broadband Internet access service, however. If a Cable VoIP Service customer does choose to subscribe to a TWCDP affiliate's broadband Internet access service, then the customer's voice and data packets will be transmitted over that same broadband connection.

The cable broadband connection is not "channelized" in the way the term is commonly used. In particular, and in contrast to traditional telephone service, TWCDP's Cable VoIP Service does not require the customer to maintain a dedicated communications channel during the course of a communications session.

Data Request Received: 07/31/09 Request No. Staff 1-4 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Does the Cable VoIP Service enable customers to engage in real time, two-way voice communications?

## **RESPONSE:**

Yes.

Data Request Received: 07/31/09 Request No. Staff 1-5 Date of Response: 08/21/09 Witness: Matt Cannon

### **REQUEST:**

Does the Cable VoIP Service use customer premises equipment (CPE) capable of generating and receiving IP packets/datagrams? If so, specifically identify and describe the CPE used. Is this device the same as the device that provides Internet access? Are there two separate Cable VoIP Service and Cable Internet access devices? Are the functions separate but use the same device? For each item of equipment, please state whether the customer or the service provider (or any affiliate thereof) owns the equipment. If a lease or other ownership arrangement is used, please describe that arrangement.

## **RESPONSE:**

TWCDP's Cable VoIP Service requires that a customer have IP-compatible customer premises equipment known as an embedded multimedia terminal adapter ("eMTA"), which is installed by a TWCDP technician at the customer premises. The eMTA is a voice-enabled cable modem that contains RJ-11 and coaxial cable outlets, and a USB port. The eMTA is typically located as close as possible to the customer's computer or telephone, depending on the services required. TWCDP uses eMTAs manufactured by a variety of vendors. Because these manufacturers and associated model numbers represent confidential business information, TWCDP will provide this information once a proper protective order is in place.

The eMTA is used to convert the customer's voice communications from analog to IP format in order to then transmit those communications over Time Warner Cable's broadband network. Typically, only one eMTA is needed at each customer premises. A customer need not provide his/her own eMTA because TWCDP owns the eMTA and makes it available to the customer at no additional charge. If the eMTA needs to be replaced, TWCDP will do so.

A customer will be provided with an eMTA only if he or she subscribes to TWCDP's Cable VoIP Service, whether on a standalone basis or bundled with the broadband Internet access service provided by another Time Warner Cable company. Where a customer subscribes to TWCDP's Cable VoIP Service and broadband Internet access, his/her voice and data communications will both be transmitted through the eMTA and the same broadband connection en route to Time Warner Cable's broadband network. An eMTA is not required for the provision of the broadband Internet access service provided by a TWCDP affiliate; rather, a customer purchasing that service without a Cable VoIP Service would use a distinct cable modem.

Data Request Received: 07/31/09 Request No. Staff 1-6 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

To provide Cable VoIP Service, does the service provider or any affiliate of the service provider own or operate any property or equipment within or attached to the building where the customer's premises is located? If so, describe this equipment in detail and the specifics of such ownership or operation. Please also specify the exact location of the equipment, e.g. on the outside of the building, inside the building, adjacent to the TV or computer, etc.

## **RESPONSE:**

TWCDP owns the eMTAs located within the customer premises, as described in response to Data Request 1-5. The typical location of the eMTA is also discussed above in response to Data Request 1-5. With respect to other equipment required to provide TWCDP's Cable VoIP Services and encompassed by this request, see the response below to Data Request 1-10.

Data Request Received: 07/31/09 Request No. Staff 1-7 Date of Response: 08/21/09 Witness: Matt Cannon

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## **REQUEST:**

To provide Cable VoIP Service, does the service provider or any affiliate of the service provider own or operate any plant or equipment between the nearest public street and the building where the customer's premises is located? If so, please describe this equipment in detail. If such equipment is owned or operated by any person other than the customer, please identify the owner and describe the ownership arrangement.

## **RESPONSE:**

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Typically, the only equipment or plant between the building where the customer's premises is located and the nearest public street is the coaxial cable that runs from the node serving the relevant area to the customer premises. In some cases, the node itself may be located within that area. The franchised Time Warner Cable operator for the franchise area in question— specifically, in New Hampshire, Time Warner Cable LLC, Time Warner NY Cable LLC, or Time Warner Entertainment Company, L.P.—owns this plant and is responsible for operating and maintaining it.

Data Request Received: 07/31/09 Request No. Staff 1-8 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Does the provider of Cable VoIP Service use or rely on a device known as an embedded multimedia terminal adapter (eMTA) to provide voice service? If so, where is this equipment typically located? Who manufactures this equipment, and what is a typical model name/number? Can customers retain the use of their telephones, inside wire and jacks? Does the eMTA format the analog electrical signal from the customer's telephone into IP packets for the transmission of calls over the cable service provider's IP voice network? Who owns the eMTA? Can the customer provide his/her own eMTA? Who maintains the eMTA? If the eMTA needs to be replaced, who replaces it? What physical connections can be accommodated by the eMTA (i.e., coaxial F connector, RJ 11 connector, USB connector, etc.)? What communications protocols can be accommodated by the eMTA? Does the eMTA perform a Protocol Conversion? Would the customer be provided with an eMTA if the customer took other services (such as cable Internet access service or video service) but not Cable VoIP Service?

### **RESPONSE:**

The ability of customers to retain use of their telephones, inside wire, and jacks is discussed above in response Data Request 1-1. Responses to the remaining portions of this data request are provided above in response to Data Request 1-5.

Data Request Received: 07/31/09 Request No. Staff 1-9 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST**:

Please identify and describe all equipment that would be located between the eMTA and the demarcation point referenced in Data Request 10, below. Who owns this equipment? Who supplies it? Who maintains it? If it needs replacement, who replaces it?

## **RESPONSE**:

Information responsive to this question is provided below in response to Data Request 1-10.

Data Request Received: 07/31/09 Request No. Staff 1-10 Date of Response: 08/21/09 Witness: Matt Cannon

#### **REQUEST:**

Please identify and describe specifically the demarcation point between the customer's premises and the Cable VoIP Service provider's network. What equipment comprises the demarcation? Where physically is the demarcation point located? If the demarcation point location varies from customer to customer, please describe the possible locations and types of equipment. Does the equipment used to provide the demarcation point for Cable VoIP Service also provide the demarcation for other services (Internet access, cable video or other)?

#### **RESPONSE:**

TWCDP objects to the request for information concerning the demarcation point for services other than Cable VoIP Service (Internet access, cable video, or other), because such information is not relevant to this proceeding and the use of the term "demarcation point" is vague and ambiguous. Subject to and without waiving these objections, TWCDP states the following.

Regarding TWCDP's Cable VoIP Service, as a practical matter, the location of the demarcation point between the customer's premises and the cable network varies depending on the type of customer premises at issue. For single-family residences, the demarcation point is the network interface device (or "NID"). TWCDP's procedure is to install the NID on the outside of the home, as close as possible to the NID that is owned and maintained by the telephone company. TWCDP owns and operates its NID, while the customer owns the inside wiring connecting the NID to the eMTA. For multiple dwelling units, the demarcation point is determined in accordance with the Federal Communications Commission's rules and varies widely depending on the age and configuration of the building, among other factors.

Data Request Received: 07/31/09 Request No. Staff 1-11 Date of Response: 08/21/09 Witness: Matt Cannon

### **REQUEST:**

If a customer purchases both Internet access and voice service from the cable telephone service provider, do the Internet and voice communications travel over the same communications path? If not, how do the transmission paths differ? Do the Internet access and voice service share the same bandwidth or channel? If not, on which bandwidth/channel are they carried, respectively, and what are the characteristics of each bandwidth/channel that make it most appropriate for the assigned service? Is the Internet used for transmitting voice communications, or are private/dedicated networks used? If the Internet is used and the Internet pathway happens to experience congestion, will the voice signal become degraded? If not, why not? Can the Cable VoIP Service use any commercial broadband connection? Is the broadband connection required to be supplied by the Cable VoIP Service provider (or its affiliate)?

#### **RESPONSE**:

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Where a TWCDP Cable VoIP Service customer also subscribes to a Time Warner Cable broadband Internet access service, his or her voice communications and data communications travel through the same broadband connection from the eMTA at the customer's premises to the node serving the relevant geographic area. The number and location of nodes in a particular geographic area depends on a variety of factors, such as the number of premises in the area and the amount of traffic generated by customers in that area. From the node, both voice and data communications are transmitted on the same fiber cable to the relevant Time Warner Cable headend. The plant between the customer premises and the headend is typically referred to in the industry as a hybrid fiber-coaxial ("HFC") network.

Cable modem termination system ("CMTS") equipment located at the headend distinguishes and separates the voice and data traffic based on information contained in the header of each packet. The CMTS provides the interface between the cable modem systems and servers/equipment at the headend and the radiofrequency path between the customer's premises and the cable headend. Data packets are then routed by the CMTS to the public Internet, while voice packets are routed either to a Media Gateway Device for conversion into traditional TDM/circuit-switched voice signals for delivery to a wholesale carrier for transmittal over the public switched telephone network, or to another TWCDP Cable VoIP Service customer. Voice and data packets use segregated bandwidth.

Voice communications are not routed over the public Internet; as a result, Internet congestion does not degrade voice signals carried by a TWCDP Cable VoIP Service. As noted above in response to Data Request 1-3, TWCDP's Cable VoIP Service does not require a "commercial broadband connection" to the extent that term is intended to refer to a broadband Internet access service. Rather, as noted in response to Data Request 1-3, while broadband Internet access service need not be purchased, TWCDP relies on the same physical broadband connection that its affiliate uses to provide broadband Internet access.

Data Request Received: 07/31/09 Request No. Staff 1-12 Date of Response: 08/21/09 Witness: Matt Cannon

### **REQUEST:**

If a Cable VoIP Service customer initiates a call, please describe in full detail the steps to complete the call, including all equipment involved and the signaling used, for a call (i) to a customer of the Cable VoIP Service provider served by the same soft switch; (ii) to a customer of that same Cable VoIP Service provider served by a different soft switch; (iii) to a customer of a different Cable VoIP Service provider; (iv) to an ILEC customer physically located in the same exchange; (v) to an ILEC customer physically located outside of the local exchange area but within the same LATA (describing fully the exchange access service utilized); and (vi) to an ILEC customer physically located in a different LATA (describing fully the exchange access service utilized).

#### **RESPONSE**:

TWCDP describes the routing of calls under each scenario identified above:

(i) TWCDP relies on Call Management Servers that are often referred to as soft switches. The soft switch provides signaling and routing functions (based on the SS7 protocol), and features such as call waiting. Where two TWCDP customers are served by the same soft switch, the TWCDP Cable VoIP Service customer places the call, and that customer's eMTA converts the voice communication into IP packets, which are transmitted over Time Warner Cable's hybrid fiber-coaxial ("HFC") network (including not only coaxial and fiber transmission facilities, and managed IP transport facilities, but also nodes and headend equipment) and delivered to the called party's eMTA, which then converts the IP packets into the voice communications delivered to the called party's telephone device.

(ii) Because TWCDP utilizes soft switches deployed on a regional basis, as discussed below in response to Data Request 1-23, two TWCDP Cable VoIP Service customers that are served by different soft switches presumably reside in different states. Where the calling party is in New Hampshire and the called party is in another state (for example, California), the TWCDP Cable VoIP Service customer places the call, and the customer's eMTA converts the voice communication into IP packets, which are transmitted over Time Warner Cable's HFC network to a Time Warner Cable Media Gateway Device, which converts the packetized voice signals into TDM/circuit-switched voice signals. In order to transmit Cable VoIP Service communications to the public switched telephone network ("PSTN"), TWCDP must obtain wholesale telecommunications from a telecommunications carrier. In New Hampshire, TWCDP obtains those wholesale telecommunications from its affiliate, TWC Communications LLC, which in turn purchases wholesale telecommunications service from CRC Communications of Maine, Inc. ("CRC"). At the location of the Media Gateway Device, CRC picks up the call, transports the call in TDM/circuit-switched format, and delivers the call via interexchange facilities to the carrier associated with the telephone number of the called

party. TWCDP uses its Media Gateway Device to convert the TDM/circuit-switched voice signals into IP packets and transmits those packets over Time Warner Cable's HFC network to the called party's eMTA, which then converts the IP packets into the voice communications delivered to the called party's telephone device.

(iii) In this scenario, the TWCDP Cable VoIP Service customer places the call, and the customer's eMTA converts the voice communication into IP packets, which are transmitted over Time Warner Cable's HFC network to a Time Warner Cable Media Gateway Device, which converts the packetized voice signals into TDM/circuit-switched voice signals. At the location of the Media Gateway Device, CRC picks up the call, transports the call in TDM/circuit-switched format, and delivers the call to the telecommunications carrier associated with the telephone number of the other Cable VoIP Service provider.

(iv) In this scenario, the TWCDP Cable VoIP Service customer places the call, and the customer's eMTA converts the voice communication into IP packets, which are transmitted over Time Warner Cable's HFC network to a Time Warner Cable Media Gateway Device, which converts the packetized voice signals into TDM/circuit-switched voice signals. At the location of the Media Gateway Device, CRC picks up the call, transports the call in TDM/circuit-switched format, and delivers the call to the called party's carrier.

(v) In this scenario, the TWCDP Cable VoIP Service customer places the call, and the customer's eMTA converts the voice communication into IP packets, which are transmitted over Time Warner Cable's HFC network to a Time Warner Cable Media Gateway Device, which converts the packetized voice signals into TDM/circuit-switched voice signals. At the location of the Media Gateway Device, CRC picks up the call, transports the call in TDM/circuit-switched format, and delivers the call to the called party's carrier.

(vi) In this scenario, the TWCDP Cable VoIP Service customer places the call, and the customer's eMTA converts the voice communication into IP packets, which are transmitted over Time Warner Cable's HFC network to a Time Warner Cable Media Gateway Device, which converts the packetized voice signals into TDM/circuit-switched voice signals. At the location of the Media Gateway Device, CRC picks up the call, transports the call in TDM/circuit-switched format, and delivers the call to the called party's carrier.

Data Request Received: 07/31/09 Request No. Staff 1-13 Date of Response: 08/21/09 Witness: Matt Cannon

### **REQUEST:**

When an end user initiates a Cable VoIP Service call, how is the call initiated? Does the customer dial a telephone number? How does the customer know the network is ready to initiate a call? Does the Cable VoIP Service customer receive notification prior to making a call that the called party is available to receive calls? How does the customer know if the network has completed the processing or routing of the call and is waiting for the terminating party to answer? How does the customer know a call is waiting? How does the customer know if the called party is busy? Is there an automated process for Cable VoIP Service customers to access or modify their account information? If so, how is access provided, e.g. computer interface, telephone connected to the Cable VoIP Service, etc? Does the end user customer know the IP address of his/her eMTA? Can customers share the IP address with other users? Does the end user Cable VoIP Service? Does the Cable VoIP Service call route through the Cable VoIP Service provider's equipment each time there is information passed between the cable VoIP Service?

## **RESPONSE:**

A TWCDP Cable VoIP Service customer using a conventional telephone initiates a call by dialing the telephone number of the called party. The customer hears a dial tone when lifting the receiver on his or her telephone. However, in contrast to the dial tone provided by traditional telephone companies, which is generated by the telephone company switch in the central office, the dial tone provided to TWCDP Cable VoIP Service customers is generated by the eMTA. TWCDP has designed its Cable VoIP Service to ensure its customers' calling experience is in many respects comparable to what they are accustomed to with traditional voice services. Thus, the customer hears a ring while waiting for a call to be answered by the called party, and a tone indicating that a call is waiting.

Customers can access TWCDP's Cable VoIP Service using a conventional telephone without need for an identifying number or password. A TWCDP Cable VoIP Service customer's call is always routed through the eMTA and the customer's broadband connection.

TWCDP Cable VoIP Service customers can access or modify their account information online, through TWCDP's secure website; they may also do so by calling an account representative. The customer may be able to ascertain the IP address of his or her eMTA, and share it with others if so inclined. In the normal course, a customer would not have occasion to see the IP address of the called party to the extent the called party is using a device with an IP address, just as end-users communicating by other means that employ IP—such as e-mail—would not typically see (or have the opportunity to see) the IP address associated with each other's equipment. TWCDP notes, for purposes of clarification, that a customer may not have a single IP address associated with his/her communications, because multiple IP addresses may be involved in a communication. In particular, the enhanced features and capabilities listed below

in response to Data Request 1-38 that are or soon may be available typically would involve multiple IP addresses, specific to each device involved in the communication. For example, accessing a voicemail online would implicate a customer's personal computer and the server to which he or she connects to obtain the stored voicemail, in addition to the eMTA used for a Cable VoIP Service call, each of which has a separate IP address.

Data Request Received: 07/31/09 Request No. Staff 1-14

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Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Does a call originated by a Cable VoIP Service customer travel over coaxial cable from the customer's premises to a node? If so, what equipment comprises the node, and where is the node typically located? If not, how does the call travel? Does the call then travel over fiber to a cable modem termination system (CMTS) located at the Cable VoIP Service provider's head end? Is the plant between the customer premises and the head end known as a hybrid fiber-coaxial (HFC) network? Is the CMTS the interface between the cable VoIP provider's HFC network and its IP backbone network? Does the CMTS separate voice traffic from Internet traffic? Does the call then traverse the IP backbone network to the Cable VoIP Service provider's soft switch? If not, how does the call travel?

## **RESPONSE:**

Information responsive to these questions is provided above in response to Data Request 1-11.

Data Request Received: 07/31/09 Request No. Staff 1-15 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Regarding the CMTS: What functions does the CMTS provide? Do the Cable VoIP Service calls route through the CMTS? Do Internet communications route through the CMTS? Do cable video transmissions route through the CMTS? How many CMTS devices serve the state of New Hampshire? Where are they located? What communication protocol(s) can the CMTS accept on the HFC side of the equipment? What communication protocol(s) can the CMTS deliver on the trunk side of the equipment?

#### **RESPONSE:**

There are thirteen CMTS devices serving TWCDP's customers in the state of New Hampshire. Three of these CMTS devices are located in Keene, New Hampshire, and there is one CMTS device located in each of the following: Conway, Ossipee, Wakefield, Moultonborough, Plymouth, Campton, Woodstock, Littleton, Lancaster, and Berlin. The CMTS can receive and transmit communications in IP format as well as Border Gateway Protocol ("BGP"), Open Shortest Path First ("OSPF"), and, in connection with high-speed data services, Data Over Cable Service Interface Specification ("DOCSIS"). Information describing CMTS functions in routing voice calls and Internet traffic is provided above in response to Data Request 1-11. Time Warner Cable's cable television traffic is not routed through the CMTS.

Data Request Received: 07/31/09 Request No. Staff 1-16\_\_\_\_\_ Date of Response: 08/21/09 Witness: Matt Cannon

### **REQUEST:**

In your company group, which entity owns: the coaxial cable to the node? the node? the fiber to the CMTS? the CMTS? the IP backbone? the soft switch? other equipment used by the Cable VoIP Service provider or any of its affiliates for the call? If different, which entity operates each such equipment component? If different, which entity manages each such equipment company installs such equipment component? Which company replaces such equipment component if it needs replacement?

#### **RESPONSE**:

The franchised Time Warner Cable operator for the franchise area in question specifically, in New Hampshire, Time Warner Cable LLC, Time Warner NY Cable LLC, or Time Warner Entertainment Company, L.P.—owns and operates the coaxial cable to the node, the node itself, the fiber to the CMTS, and the CMTS equipment. Other equipment, such as the soft switch, any intermediate routers, and the Media Gateway Device, is owned and operated by TWC Communications, LLC. TWCDP does not transmit Cable VoIP Service calls on an "IP backbone," to the extent the term is intended to refer to the public Internet. To the extent the term is intended to refer to IP transport facilities managed by Time Warner Cable, such calls may traverse an IP backbone.

The owner of the equipment or plant generally has responsibility for its operation, management, installation, maintenance, and replacement. However, TWCDP has an agreement in place with each franchised cable entity to conduct installation and maintenance at the customer premises as necessary for the Cable VoIP Service to function properly. As stated in response to Data Request 1-5, TWCDP owns the eMTA and is responsible for its operation, management, installation, maintenance, and replacement. As stated in response to Data Request 1-1, the telephone device used with TWCDP's Cable VoIP Service is owned by the customer.

Data Request Received: 07/31/09 Request No. Staff 1-17 Date of Response: 08/21/09 Witness: Matt Cannon

## REQUEST:

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Please describe fully the difference in routing between a call that remains on the Cable VoIP Service provider's network from one that originates or terminates on the public switched telephone network.

## **RESPONSE**:

Information responsive to this request is set forth above in the response to Data Request 1-12.

Data Request Received: 07/31/09 Request No. Staff 1-18 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Is there a Protocol Conversion in the HFC network between the coax interface and the fiber termination? Does the signal change between an electric signal and an optical signal (or vice versa) during the processing of a Cable VoIP Service call within the HFC network? If yes, does the Cable VoIP service provider consider this to be a Protocol Conversion?

### **RESPONSE:**

There is no "protocol conversion" as the term is generally understood. The radio frequency electrical signals on the cable carrying the IP traffic are converted into light wave signals on the fiber, and vice versa on the other end.

Data Request Received: 07/31/09 Request No. Staff 1-19 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST**:

How are the voice, Internet and video signals carried on the HFC network? Is there capacity allocated to each service? If so, how is capacity allocated? Do voice, Internet and video services have different quality of service priorities?

#### **RESPONSE:**

TWCDP objects to the request for information concerning the transmission of cable television signals, which is not relevant to this proceeding. Subject to and without waiving that objection, Time Warner Cable's cable television signal is not packetized, unlike its VoIP and data traffic. The transmission of VoIP and data traffic on the HFC network is discussed above in response to Data Request 1-11. Voice and high-speed data normally share one or two 6 MHz channels; channel allocation depends on local demand patterns and other factors. All other channels are allocated to video services. TWCDP provides QoS to Cable VoIP Service traffic through dynamic bandwidth management.

Data Request Received: 07/31/09 Request No. Staff 1-20 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

From the CMTS, does the Cable VoIP Service call travel to a router? If so: What functions does the router provide? Do the Cable VoIP Service calls route through the router? Do the Internet communications route through the router? Do cable video transmissions route through the router? How many routers serve Cable VoIP Service customers located in New Hampshire? What communication protocols are accommodated by the router?

#### **RESPONSE:**

TWCDP objects to the request for information concerning the transmission of cable television signals and non-voice Internet communications, which is not relevant to this proceeding. Subject to and without waiving that objection, TWCDP responds that Cable VoIP Service calls may travel through one or more IP routers depending on factors such as the physical locations of the calling and called parties. Such routers are separate from the CMTS and the Media Gateway Device, which also route traffic in addition to having other important functions.

Data Request Received: 07/31/09 Request No. Staff 1-21 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST**:

With regard to the IP transport facilities used to transport Cable VoIP Service traffic: Specifically what functions does the IP transport provide? Do the IP transport facilities carry other traffic, such as video or Internet traffic? If so, are there separate quality of service criteria for the Cable VoIP Service traffic? Do the IP transport facilities use the same physical cables as the HFC network? Do IP transport facilities use separate dedicated transport facilities? What are the communication protocols that are supported by the transport? Is more than one communication protocol used for the transport of Cable VoIP Service traffic?

### **RESPONSE**:

TWCDP objects to the use of "IP transport facilities" on the ground that it is vague and ambiguous, as several portions of TWC's network can be described as "IP transport facilities," as explained in response to Data Request 1-11. TWCDP also objects to the request for information concerning the transmission of cable television signals and non-voice Internet communications, which is not relevant to this proceeding.

Subject to and without waiving these objections, the quality of service treatment of Cable VoIP Service traffic is discussed above in response to Data Request 1-19. Other information responsive to this request is set forth above in response to Data Request 1-16.

Data Request Received: 07/31/09 Request No. Staff 1-22 Date of Response: 08/21/09 Witness: Matt Cannon

#### **REQUEST:**

With regard to the media gateway: What functions does the media gateway provide? Is the media gateway part of the soft switch? Are the vendors of the media gateway and the soft switch the same? Do the Cable VoIP Service calls route through the media gateway? Do Internet communications route through the media gateway? Do cable video transmissions route through the media gateway? How many media gateways serve Cable VoIP Service customers within the state of New Hampshire? Where are the media gateways located that serve the state of New Hampshire? What communication protocols are accommodated by media gateways?

## **RESPONSE**:

TWCDP objects to the request for information concerning the transmission of cable television signals and non-voice Internet communications, which is not relevant to this proceeding. Subject to and without waiving this objection, as discussed in response to Data Requests 1-11 and 1-12, Cable VoIP Service calls may travel to a Media Gateway Device to the extent necessary to route the call to the PSTN. The Media Gateway Device is not part of the soft switch. Data and cable video traffic do not travel to a Media Gateway Device. TWCDP relies on two Media Gateway Devices to serve customers in New Hampshire, which are located at 118 Johnson Road, Portland, Maine 04102. Specifically, TWCDP utilizes Cisco MGX 8800 Series Gateway Devices; the vendor of the soft switch may or may not be the same. The functions of the Media Gateway Devices are described above in response to Data Requests 1-11 and 1-12.

Data Request Received: 07/31/09 Request No. Staff 1-23 Date of Response: 08/21/09 Witness: Matt Cannon

### **REQUEST:**

Regarding the soft switch: What functions does the soft switch provide? Do Cable VoIP Service calls route through the soft switch? Do Internet communications route through the soft switch? Do cable video transmissions route through the soft switch? How many soft switches serve Cable VoIP Service customers within the state of New Hampshire? Where are the soft switches located that serve Cable VoIP Service customers within the state of New Hampshire? What communication protocols are accommodated by the soft switches?

#### **RESPONSE:**

TWCDP objects to the request for information concerning the transmission of cable television signals and non-voice Internet communications, which is not relevant to this proceeding. Subject to and without waiving this objection, TWCDP states that as opposed to the Media Gateway Devices, which are deployed on a more local basis, the soft switches on which it relies operate on a more regional level. TWCDP Cable VoIP Service customers in New Hampshire typically are served by a soft switch located in Syracuse, New York. A soft switch typically can support a wide range of protocols, including but not limited to MGCP, SS7, TCAP, and ISUP. Information regarding the functions provided by the soft switch is provided above in response to Data Request 1-12.

Data Request Received: 07/31/09 Request No. Staff 1-24 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Does the Cable VoIP Service provider or any affiliate thereof own any physical facilities in New Hampshire used to interconnect with the PSTN? If so, which Comcast Entity, Metrocast Entity or Time Warner Entity (as the case may be) owns the physical facility (listing each entity if more than one owns the soft switch)? Does the same entity control the facilities from a provisioning and engineering perspective? If not, please identify the Company that controls the facilities from a provisioning and engineering perspective. Is the soft switch leased? If so, please identify the lessor and lessee.

## **RESPONSE:**

TWCDP does not own any facilities in New Hampshire that are used to interconnect with the PSTN. As described in response to Data Request 1-12, TWC relies on unaffiliated carriers for such interconnection. The ownership of equipment involved in the provision of TWCDP's Cable VoIP Services are described above in response to Data Request 1-16.

Data Request Received: 07/31/09 Request No. <u>Staff 1-25</u> Date of Response: 08/21/09 Witness: Matt Cannon

## REQUEST:

Where in the network does the Cable VoIP Service provider claim that a Protocol Conversion or conversions take place?

a. Is there Protocol Conversion between the telephone and the eMTA?

b. Is there Protocol Conversion between the eMTA and the CMTS?

c. Is there Protocol Conversion between the CMTS and any router?

d. Is there Protocol Conversion between the router and the media gateway?

e. Is there Protocol Conversion between the media gateway and the soft switch?

f. Is there Protocol Conversion between the media gateway and the PSTN?

If any of the answers to a - f are "Yes," please list the respective communication protocols and provide reference to the standards and/or guidelines document(s) that describes each communication protocol.

## **RESPONSE**:

TWCDP addresses each scenario listed above as follows:

a. At the eMTA, the analog signal from a conventional telephone device is converted to IP format.

b. A Cable VoIP Service call remains in IP format during its transmission through the eMTA and the CMTS equipment at the headend.

c. A Cable VoIP Service call remains in IP format during its transmission through the CMTS equipment at the headend and through any routers.

d. A Cable VoIP Service call remains in IP format until it reaches the Media Gateway Device.

e. There is no protocol conversion between the Media Gateway Device and the soft switch.

f. As discussed above in response to Data Requests 1-11, and 1-12, a Cable VoIP Service call is converted from IP format to traditional TDM/circuit-switched format for transmission on the PSTN at the Media Gateway Device.

The protocols involved in the conversions discussed above are industry standard and defined by publicly available documentation.

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Data Request Received: 07/31/09 Request No. Staff 1-26 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

For a call that remains on the Cable VoIP Service provider's network end to end, is there any net change in communication protocol? If so, please describe fully each protocol change, identify the location of the change and the equipment effecting the change.

## **RESPONSE:**

While such a call may undergo multiple protocol conversions as described in response to Data Request 1-12, a call that remains on TWCDP's network end to end will not undergo a net protocol change.

Data Request Received: 07/31/09 Request No. Staff 1-27 Date of Response: 08/21/09 Witness: [not applicable]

REQUEST:

[Missing]

Data Request Received: 07/31/09 Request No. Staff 1-28 Date of Response: 08/21/09 Witness: Matt <u>Cannon</u>

## **REQUEST:**

For a call that originates on Cable VoIP Service provider's network and terminates on the PSTN, is there any net change in protocol? If so, please describe fully each protocol change, identifying the location of the change and the equipment effecting the change.

#### **RESPONSE**:

Yes. The location and type of change and the equipment effecting the change are described above in response to Data Requests 1-11 and 1-12.

Data Request Received: 07/31/09 Request No. Staff 1-29 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST**:

Does the Cable VoIP Service provider provide Lifeline service?

**RESPONSE:** 

No, assuming the reference to "Lifeline service" is intended to refer to Lifeline assistance pursuant to the federal Universal Service Fund program.

Data Request Received: 07/31/09 Request No. Staff 1-30 Date of Response: 08/21/09 Witness: Julie Laine

**REQUEST:** 

Does the Cable VoIP Service provider provide Telephone Relay Service?

**RESPONSE**:

Yes.

Data Request Received: 07/31/09 Request No. Staff 1-31 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST:**

Does the Cable VoIP Service provider collect and remit the communications services tax under New Hampshire RSA 82-A? If so, exactly what entity or affiliate pays such tax and identify which type of "communications services" are provided under RSA 82-A:2(III).

#### **RESPONSE**:

TWCDP considers its Digital Phone and Business Class Phone services as "forms" of "2-way communications" and thus collects and remits this tax. *See* R.S.A. 82-A:2(III) (defining "communications services" subject to this tax to include "any . . . form, whether stationary, portable or mobile, of 2-way communications").

Data Request Received: 07/31/09 Request No. Staff 1-32 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST:**

Does the Cable VoIP Service provider pay the utility assessment under New Hampshire RSA 363-A? If so, exactly what entity or affiliate pays such tax, and what revenues are used as the basis to calculate the payment?

## **RESPONSE**:

Yes. The tax is paid by Time Warner Cable Information Services (New Hampshire), LLC ("TWCIS") based on the retail revenue of TWCDP and on any revenues that TWCIS itself may have.

Data Request Received: 07/31/09 Request No. Staff 1-33 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST:**

If customers of the Cable VoIP Service provider decide to move to another carrier, are they able to port their telephone numbers to the new carrier? Are standard NPAC interfaces used for the transition? For the purposes of number porting, does the Cable VoIP Service provider characterize the service from its porting partner as a resold telecommunications service?

#### **RESPONSE**:

Customers who leave TWCDP for another provider may port the telephone number(s) assigned by TWCDP. The number port is completed by CRC, and TWCDP understands that CRC uses standard NPAC interfaces to complete the port. TWCDP does not characterize this number porting functionality as a "resold" telecommunications service; rather, TWC (through its affiliate, TWC Communications LLC) purchases CRC's wholesale telecommunications service, including telephone number portability capability, as an input into its interconnected VoIP services.

Data Request Received: 07/31/09 Request No. Staff 1-34 Date of Response: 08/21/09 Witness: Julie Laine

**REQUEST:** 

In assigning telephone numbers, does the Cable VoIP Service provider make such assignments so that the assigned numbers conform to geographic area where the customer is physically located?

**RESPONSE**:

Yes.

Data Request Received: 07/31/09 Request No. Staff 1-35 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST**:

Are operator service and directory assistance provided to Cable VoIP Service customers? If yes, how are they provided?

## **RESPONSE**:

Yes. Operator service and directory assistance are provided by CRC, through its contracted operator service and directory assistance operators. Because CRC is responsible for the provision of these services, TWCDP lacks sufficient knowledge to provide additional information.

Data Request Received: 07/31/09 Request No. Staff 1-36 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST:**

Are the telephone numbers of Cable VoIP Service customers listed in telephone directories?

**RESPONSE**:

Yes, unless the customer elects otherwise.

Data Request Received: 07/31/09 Request No. Staff 1-37 Date of Response: 08/21/09 Witness: Julie Laine

### **REQUEST:**

Can end users purchase voice as a stand alone service without buying Internet access or video? In addition to voice communications, what other services are provided or offered to Cable VoIP Service customers? Please describe such services in full detail with the associated pricing.

### **RESPONSE:**

TWCDP objects to this request to the extent it seeks information about all other services, including non-voice services, that are offered and available to customers. Such services are not relevant to this proceeding, the stated purpose of which is to assess the regulatory treatment of Cable VoIP Service. Moreover, TWCDP and its affiliates offer a wide range of services (and combinations of services) pursuant to a variety of pricing options. To the extent this request would require TWCDP to provide all of that information, TWCDP objects to it as being unduly burdensome, in addition to having no possible relevance.

Subject to and without waiving these objections, TWCDP responds as follows. End users can purchase TWCDP's Cable VoIP Service without also purchasing broadband Internet access or video service from a TWCDP affiliate. However, as described in response to Data Request 1-11, a customer of TWCDP's Cable VoIP Service can rely on the same physical broadband connection that is used to access the Internet or video services.

Data Request Received: 07/31/09 Request No. Staff 1-38 Date of Response: 08/21/09 Witness: Julie Laine

### **REQUEST:**

To the extent that the Cable VoIP Service provider asserts that the combination of any additional services with voice service makes its service an information service, please describe each such additional service, how it is integrated with the voice service, the terms under which it is offered and the pricing.

#### **RESPONSE:**

TWCDP objects to this request to the extent it calls for a legal conclusion concerning the regulatory classification of Cable VoIP Service. The Federal Communications Commission has not yet classified interconnected VoIP service under the Communications Act. Subject to and without waiving that objection, TWCDP states that Cable VoIP Service customers can or soon will be able to access and use certain calling features and capabilities that could affect the classification of the service. These features and capabilities, which can be invoked sequentially or simultaneously so that customers can manage their personal communications dynamically, include: (i) accessing voicemail and forwarding digitized voice messages to any e-mail, (ii) routing Caller ID information through their personal computer or television, and receiving notifications of incoming calls through Instant Messages or on television screens, (iii) enabling, disabling, and customizing voice and video features over the Internet, (iv) enabling distinctive rings for different callers, and (v) establishing "rules" for the selective handling of incoming calls. Moreover, as noted in response to Data Request 1-37 above, TWCDP and its affiliates offer a wide range of services (and combinations of services) pursuant to a variety of pricing options. To the extent this request would require TWCDP to provide all of that information, TWCDP objects to it as being unduly burdensome.

Data Request Received: 07/31/09 Request No. Staff 1-39 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST:**

What intercarrier compensation arrangements does the Cable VoIP Service provider (or any affiliate thereof) have with any other carriers?

## **RESPONSE:**

Neither TWCDP itself nor any affiliate operating in New Hampshire has any intercarrier arrangements with carriers. In New Hampshire, CRC enters into agreements with other carriers that address intercarrier compensation obligations in connection with the traffic that CRC carries for TWCDP.

Data Request Received: 07/31/09 Request No. Staff 1-40 Date of Response: 08/21/09 Witness: [not applicable]

## **REQUEST:**

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Please provide a corporate organizational chart that shows the entities within the Comcast corporate group, including the parent entity and all subsidiaries and affiliates, direct and indirect.

**RESPONSE**:

Data Request Received: 07/31/09 Request No. Staff 1-41 Date of Response: 08/21/09 Witness: [not applicable]

## **REQUEST:**

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For all of the entities listed in the response to Item 40 that engage in any business activity in New Hampshire, please describe the corporate relationships (i.e., parent, shareholder, owner, affiliate, subsidiary, partner, etc.), including all intermediate relationships. For each entity also identify its legal name and all d/b/ad's, assumed names, trade marks, service marks, and brands, and describe the existing and planned or contemplated roles of the entity in the providing of telephone, telecommunications, voice, Internet, or cable television services in New Hampshire, including, without limitation, whether the entity provides retail or wholesale voice, Internet or video services.

**RESPONSE:** 

Data Request Received: 07/31/09 Request No. Staff 1-42 Date of Response: 08/21/09 Witness: [not applicable]

## **REQUEST:**

Which Comcast entities are authorized to provide telecommunications within the State of New Hampshire? Which Comcast entities are involved in providing Cable VoIP Service to customers in New Hampshire? Which Comcast entities are involved in providing telecommunications services to end user customers? Which Comcast entities provide retail Internet services to customers in New Hampshire? In the response to each of the questions in this Item 42, please list in each case all services provided by each entity in the end to end provisioning of voice services to end user customers.

**RESPONSE**:

Data Request Received: 07/31/09 Request No. Staff 1-43 Date of Response: 08/21/09 Witness: [not applicable]

## **REQUEST**:

Please provide a corporate organizational chart that shows the entities within the Metrocast corporate group, including the parent entity and all subsidiaries and affiliates, direct and indirect.

**RESPONSE**:

Not applicable.

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Data Request Received: 07/31/09 Request No. Staff 1-44 Date of Response: 08/21/09 Witness: [not applicable]

## **REQUEST:**

For all of the entities listed in the response to Item 43 that engage in any business activity in New Hampshire, please describe the corporate relationships (i.e., parent, shareholder, owner, affiliate, subsidiary, partner, etc.), including all intermediate relationships. For each entity also identify its legal name and all d/b/ad's, assumed names, trade marks, service marks, and brands, and describe the existing and planned or contemplated roles of the entity in the providing of telephone, telecommunications, voice, Internet, or cable television services in New Hampshire, including, without limitation, whether the entity provides retail or wholesale voice, Internet or video services.

**RESPONSE:** 

Data Request Received: 07/31/09 Request No. Staff 1-45 Date of Response: 08/21/09 Witness: [not applicable]

## **REQUEST:**

Which Metrocast entities are authorized to provide telecommunications within the State of New Hampshire? Which Metrocast entities are involved in providing Cable VoIP Service to customers in New Hampshire? Which Metrocast entities are involved in providing telecommunications services to end user customers? Which Metrocast entities provide retail Internet services to customers in New Hampshire? In the response to each of the questions in this Item 45, please list in each case all services provided by entity in the end to end provisioning of voice services to end user customers.

**RESPONSE**:

Data Request Received: 07/31/09 Request No. Staff 1-46 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST:**

Please provide a corporate organizational chart that shows the entities within the Time Warner corporate group, including the parent entity and all subsidiaries and affiliates, direct and indirect.

## **RESPONSE:**

TWCDP objects to this request as overbroad, as it seeks information regarding TWCDP affiliates and other companies that have no involvement in the provision of any service in New Hampshire or in the provision of Cable VoIP Service in any jurisdiction. Subject to and without waiving that objection, corporate organizational charts showing the corporate structure of various Time Warner Cable entities are attached to this response.

Data Request Received: 07/31/09 Request No. Staff 1-47 Date of Response: 08/21/09 Witness: Julie Laine

## **REQUEST:**

For all of the entities listed in the response to Item 46 that engage in any business activity in New Hampshire, please describe the corporate relationships (i.e., parent, shareholder, owner, affiliate, subsidiary, partner, etc.), including all intermediate relationships. For each entity also identify its legal name and all d/b/a's, assumed names, trade marks, service marks, and brands, and describe the existing and planned or contemplated roles of the entity in the providing of telephone, telecommunications, voice, Internet, or cable television services in New Hampshire, including, without limitation, whether the entity provides retail or wholesale voice, Internet or video services.

## **RESPONSE:**

TWCDP objects to this request as overbroad, as it seeks a wide range of information regarding the identities and roles of TWCDP affiliates and other companies that have no involvement in the provision of Cable VoIP Service and thus encompasses subjects that are well beyond the stated purpose of this proceeding. Subject to and without waiving that objection, TWCDP describes the roles of various of its affiliated companies as follows:

- Time Warner Cable Information Services (New Hampshire), LLC ("TWCIS"): TWCIS is a certificated telecommunications carrier in New Hampshire, but it does not offer any services in the state that relate to TWCDP's Cable VoIP Services.
- TWC Communications LLC: As noted above, TWC Communications LLC purchases wholesale telecommunications from CRC, which it then resells to TWCDP for the provision of its Cable VoIP Services. TWC Communications LLC also owns the Media Gateway Devices and soft switch equipment used in connection with TWCDP's Cable VoIP Services.
- TWC Digital Phone LLC ("TWCDP"): TWCDP offers Digital Phone and Business Class Phone interconnected VoIP services to residential and enterprise customers, respectively, in New Hampshire.
- Time Warner Cable Inc.: Time Warner Cable Inc. does not own any assets or provide any services in the state.
- Time Warner Cable LLC: Time Warner Cable LLC is a franchised cable operator in certain parts of the state of New Hampshire; it owns and operates certain facilities leased by TWCDP to provide its Cable VoIP Services.
- Time Warner NY Cable LLC: Time Warner NY Cable LLC is a franchised cable operator in certain parts of the state of New Hampshire; it owns and operates certain facilities leased by TWCDP to provide its Cable VoIP Services.
- Time Warner Entertainment Company, L.P. ("TWE"): TWE is a franchised cable operator in certain parts of the state of New Hampshire; it owns and operates certain facilities leased by TWCDP to provide its Cable VoIP Services.

Data Request Received: 07/31/09 Request No. Staff 1-48 Date of Response: 08/21/09 Witness: Julie Laine

### **REQUEST:**

Which Time Warner entities are authorized to provide telecommunications within the State of New Hampshire? Which Time Warner entities are involved in providing IP voice services to voice customers in New Hampshire? Which Time Warner entities are involved in providing purported telecommunications services to end user customers? Which Time Warner entities provide retail Internet services to customers in New Hampshire? In the response to each of the questions in this Item 48, please list in each case all services provided by [the] entity in the end to end provisioning of voice services to end user customers.

### **RESPONSE:**

TWCDP objects to this request to the extent it seeks information concerning the provision of services other than Cable VoIP Service or the provision of any services outside the State of New Hampshire. Such information is outside the scope of this proceeding and/or the Commission's jurisdiction. TWCDP also objects to the extent the request calls for a legal conclusion concerning which services have been or may be deemed "telecommunications services" for regulatory purposes.

Subject to and without waiving these objections, TWCDP responds as follows. TWCIS is authorized to provide telecommunications services and offers such services within the State of New Hampshire. TWCDP provides retail and enterprise Cable VoIP Services within the State of New Hampshire. The franchised Time Warner Cable operator provides broadband Internet access services within its franchise area. The roles of other Time Warner Cable entities in connection with the provision of TWCDP's Cable VoIP Services are set forth above in response to Data Requests 1-5 through 1-10 and 1-47 (describing other entities that own, operate, or have maintenance/installation/replacement responsibilities in connection with equipment used in the provision of TWCDP's Cable VoIP Services.

Data Request Received: 07/31/09 Request No. Staff 1-49 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Please describe in detail how traffic from a Comcast, Metrocast or Time Warner Cable VoIP Service end user customer would be delivered to a customer of one of the other Cable VoIP Service end user customers physically located in the same ILEC local exchange area. Would there be a net protocol conversion between the two ends of the call?

## **RESPONSE:**

Information responsive to these questions is set forth above in response to Data Requests 1-12 and 1-26.

Data Request Received: 07/31/09 Request No. Staff 1-50 Date of Response: 08/21/09 Witness: Matt Cannon

## REQUEST:

Please describe in detail how traffic from a Cable VoIP Service end user customer in Manchester, New Hampshire would be delivered to a customer of Granite State Telephone, Inc. ("GST") in [the] Weare, New Hampshire exchange (which has extended areas service ("EAS") to Manchester).

## **RESPONSE:**

Information responsive to this question is set forth above in response to Data Request 1-12.

Data Request Received: 07/31/09 Request No. Staff 1-51 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST**:

Please describe in detail how an interLATA call from a Comcast, Metrocast or Time Warner Cable VoIP Service end user customer in Maine would be delivered for termination to a GST end user customer in Weare, New Hampshire.

## **RESPONSE:**

Information responsive to this question is set forth above in response to Data Request 1-12.

Data Request Received: 07/31/09 Request No. Staff 1-52 Date of Response: 08/21/09 Witness: Matt Cannon

## **REQUEST:**

Please describe in detail how an intraLATA call from a Comcast Cable VoIP Service end user customer in Manchester, New Hampshire, a Metrocast Cable VoIP Service end user customer in Meredith, New Hampshire or a Time Warner Cable VoIP Service end user customer in Campton, New Hampshire would be delivered for termination to a Merrimack County Telephone Company ("MCT") end user customer in Contoocook, New Hampshire.

## **RESPONSE:**

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Information responsive to this question is set forth above in response to Data Request 1-12.

Respectfully submitted,

## TWC DIGITAL PHONE LLC

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Dated: August 21, 2009

## **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing data request responses on this 21st day of August, 2009, been sent by electronic mail to persons listed on the Service List.

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Brian W. Murray

## TWC DIGITAL PHONE LLC RESPONSES TO FIRST SET OF NHTA DATA REQUESTS APPROVED BY STAFF (DT 09-044)

## **RESPONSE TO STAFF DATA REQUEST 1-46**

## Time Warner Cable Corporate Structure as of 3/12/09



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## Time Warner Cable Ownership Structure of Franchise-Owning Entities as of 3/31/09

(franchise-owning entities are shaded in gray; solid line indicates direct ownership, dashed line indicates indirect ownership through wholly-owned subsidiaries not listed on this chart)



# **TWC Communications, LLC**



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## Time Warner Cable Information Services (New Hampshire), LLC

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