STATE OF NEW HAMPSHIRE

BEFORE THE

PUBLIC UTILITIES COMMISSION

DT 08-162

Comcast Phone of New Hampshire

Petition for Arbitration of Rates, Terms and Conditions of Interconnection with Kearsarge Telephone Company, Merrimack County Telephone and Wilton Telephone Company

First Set of Data Requests to Comcast Phone of New Hampshire, LLC By the TDS Companies

NOW COME Merrimack County Telephone Company, Wilton Telephone Company, Inc. and Kearsarge Telephone Company, and request the answers by Comcast Phone of New Hampshire, LLC ("Comcast Phone") in writing and under oath to the following requests:

A. <u>Definitions</u>.

As used herein:

- a) "Comcast", "Comcast Company" or "Comcast Companies" refers to Comcast Corporation and any subsidiary entity or affiliated entity, whether direct or indirect.
- b) "Commission" means the New Hampshire Public Utilities Commission.
- c) "Document" refers to any written, printed, recorded, taped, electronic, or graphic matter, including but not limited to, writings, agreements, licenses, contracts, books, pamphlets, periodicals, memoranda, correspondence, notes, diaries, calendars, appointment books, estimates, reports, intra-office communications, work papers, records, filings, cost sheets, estimating sheets, studies, analyses, evaluations, purchase orders, bills, invoices, confirmations, receipts, ledgers, accounts, charts, graphs, indices, computer printouts, data sheets, data processing cards, tapes or discs, and any other data compilation from which information can be obtained or translated, if necessary, through detection devices into reasonably usable form, records, transcriptions thereof, minutes of meetings, and all other materials relating to any conversations, meetings and/or conferences, by telephone or otherwise, and any other kind of writing or recording, however, produced or reproduced, of any kind or description, whether privileged or not privileged, including originals, non-identical copies (whether different from the

original because of notes made on or attached to such copy or otherwise), and drafts, regardless of origin, whether sent or received or made and/or used internal, in whatever form, and both sides thereof, that (a) are now or formerly in the possession, custody, or control of the answering parties or (b) are known or believed to be responsive to these interrogatories, regardless of who now has or formerly has had possession, custody, or control.

- d) "Identify" or "identity" when used in reference to a Document means to state the date or dates, author or originator, subject matter, all addresses and recipients, type of Document (e.g., letter, memorandum, telegram, chart, computer printout, disc or diskette, etc.), number or code number thereof or other means to identify it and its present location and custodian. If any such Document was, but is no longer, in the answering parties' possession or subject to its control, the responding party shall state what disposition was made of it.
- e) "Person" means without limiting the generality of its meaning, every natural person, corporation, partnership, association (whether formally organized or <u>ad hoc</u>), joint venture, unit operation, cooperative, municipality, commission, governmental body or agency, or any other group or other organization.

B. Instructions.

- 1) These requests call for all information, including information contained in Documents, which relate to the subject matter of the discovery requests and which is known or available to you.
- Where a data request has a number of separate subdivisions or related parts or portions, a complete response is required to each such subdivision, part, or portion. Any objection to a data request should clearly indicate the subdivision, part, or portion of the data request to which it is directed.
- 3) If an interrogatory specifically requests an answer in response rather than the production of Documents, an answer is required. The production of Documents will not suffice.
- 4) These data requests are continuing in nature and require supplemental responses when further or different information with respect to the same is obtained.
- 5) Each data request to "provide" Documents or similar phrases includes a request to "identify" all such Documents, as defined in the definitions above.
- For each Document produced or identified in a response which is computer generated, state separately: (a) what types of data, files, or diskettes are included in the input and the source thereof, (b) the form of the data which constitutes machine input (e.g., diskettes, punch cards, tapes), (c) a description of the recordation system employed (including program descriptions, flow charts, etc.),

- and (d) the identity of the person who was in charge of the collection of input materials, the processing of input materials, the data bases utilized, and the programming to obtain the output.
- 7) If a data request can be answered in whole or in part by reference to the response to another data request served in this proceeding, it is sufficient to so indicate by specifying the other data request by participant and number, by specifying the parts of the other response which are responsive, and by specifying whether the response to the other data request is a full or partial response to the instant data request. If it constitutes a partial response, the balance of the instant data request must be answered.
- If you cannot answer a data request in full, after exercising due diligence to secure the information necessary to do so, state the answer to the extent possible, state why you can not answer the data request in full, and state what information or knowledge you have concerning the unanswered portions.
- 9) If, in answering any of these data requests, you feel that any data request or definition or instruction applicable thereto is ambiguous, set forth the language you feel is ambiguous and the interpretation you are using in responding to the data request.
- 10) If a Document requested is unavailable, identify the Document, describe in detail the reasons the Document is unavailable, state where the Document can be obtained, and specify the number of pages it contains.
- If you assert that any Document has been destroyed, state when and why it was destroyed, identify the person who directed the destruction or the explanation. If the Document was destroyed pursuant to your Document destruction program, identify and produce a copy of the guideline, policy or company manual describing such Document destruction program.
- 12) Identify the person from whom the information and Documents supplied in response to each data request were obtained, the person who prepared each response, the person who reviewed each response, and the person who will bear ultimate responsibility for the truth of each response.
- 13) If no Document is responsive to a data request which calls for a Document, then so state. In each instance, the data request should be treated as an interrogatory.
- 14) If your response to any of these data requests includes confidential or proprietary information, please provide your response and/or Document(s) in a confidential manner, subject to a protective agreement in this docket.

DATA REQUESTS

- TDS 1-1: Please provide a corporate organizational chart that shows Comcast Corporation and its subsidiaries and affiliates, direct and indirect, with the identity of each entity's full and complete legal name.
- Please describe the corporate relationships (i.e., owner, affiliate, subsidiary, partner, manager, member, etc.), including all intermediate relationships, between Comcast Phone and the following entities: Comcast Corporation, Comcast IP Phone II, LLC ("Comcast IP"). For each entity, also identify 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, communications, telecommunications, voice or data services in New Hampshire. If the entity is not affiliated with Comcast Phone in any way, please state "none". If the entity is not involved directly or indirectly, in the provisioning, offering, or maintenance of retail or wholesale telephone, communications, telecommunications, voice or data service in the state of New Hampshire, simply indicate "N/A" for that entity.
- TDS 1-3: Please identify which Comcast Company(ies) is (are) registered to offer telecommunications with the State of New Hampshire. Please identify which Comcast Company(ies) are involved (in any way) in providing IP voice services to voice customers in New Hampshire. Please identify which Comcast Company(ies) are involved in provided purported telecommunications services to end user customers. Please identify which Comcast Company(ies) provides retail data services to customers in New Hampshire. Please list by entity all services provided, directly or indirectly, in the end-to-end provisioning of voice services of any nature to end user customers in New Hampshire.
- TDS 1-4: For each of the entities identified in TDS 1-3:
 - i. Does the entity own any physical network or customer premise equipment ("CPE") investments? If yes, please identify the investments.
 - ii. Does the entity have any employees? If yes, how many employees?
- TDS 1-5: For each entity identified in TDS 1-3 use, please state whether such entity plans to use any third party for:
 - i. Interconnection to the public switched telecommunications network ("PSTN")?
 - ii. For the provision of long distance service?
 - iii. Providing network facilities?

- iv. Provision of numbering resources?
- TDS 1-6: For each of the Comcast Company(ies) which provides, or is involved with providing, IP voice services in New Hampshire, please respond to the following for each voice or data service that is offered to customers in New Hampshire:
 - i. Identify the services offered by each Comcast Company.
 - ii. Identify whether the services are used in the provision or support of local exchange service?
 - iii. Identify whether the services are used in the provision or support of IP voice service?
 - iv. Identify whether the services are used in the provision or support of wholesale services?
 - v. Identify whether the services are used in the provision or support of any other voice or data service?
- TDS 1-7: Are there any remaining local exchange service customers (Comcast Digital Phone Service) of Comcast Phone in the State of New Hampshire? If so, how many are there? How many of these retail customers are located in the exchange service territories of the RTCs?
- TDS 1-8: Is any Comcast Company currently providing retail local exchange service or its equivalent within the service territory of TDS? If so, please respond to the following:
 - i. Please identify the Comcast Company or Companies currently providing the retail local exchange service.
 - ii. Please describe the retail local exchange service(s) that is being provided within the service territory.
 - iii. Is the retail local exchange service(s) provided via resale or facilities based?
 - iv. Is the retail local exchange service(s) included in tariffs or rate schedules filed with the Commission?
 - v. Is the retail local exchange service(s) provided in all of TDS' exchanges? If no, please list the exchanges where the retail local exchange(s) service is being provided.

- TDS 1-9: Is any Comcast Company seeking, planning or contemplating to provide retail local exchange service or its equivalent within the service territory of any TDS company? If so, please respond to the following:
 - i. Please identify the Comcast Company or Companies seeking, planning or contemplating to provide the retail local exchange service.
 - ii. Please describe the retail local exchange service(s) that will be provided within the service territory.
 - iii. For each such retail local exchange service(s), please state whether it will be provided via resale or facilities based?
 - iv. Will the retail local exchange service(s) be included in tariffs or rate schedules filed with the Commission?
 - v. Will the retail local exchange service(s) be provided in all of TDS' exchanges? If no, please list the exchanges where the retail local exchange(s) service will be provided.
- TDS 1-10: Is any Comcast Company or Companies seeking, planning or contemplating to provide a telecommunications service in TDS' service area that is not a local exchange service? If so, please respond to the following:
 - i. Identify and describe all telecommunications services that are not local exchange services that the Comcast Company or Companies is seeking, planning or contemplating to offer customers in the TDS service area.
 - ii. Are there any other Comcast Companies that are seeking to provide or will provide a telecommunications service in TDS' service area?
- TDS 1-11: Is any Comcast Company or Companies seeking, planning or contemplating to provide any wholesale interconnection services or wholesale telecommunications services (collectively, referred to as "Wholesale Services") within the exchange service territory of any of the TDS Companies? If yes, please identify which Comcast Company or Companies is seeking to provide the Wholesale Services, describe the Wholesale Services to be provided, and, for each Wholesale Service to be provided, please respond to the following:
 - i. Identify the TDS exchanges in which the Comcast Company or Companies seeks, plans or contemplates to provide the Wholesale Service.
 - ii. Identify all potential Wholesale Service customers each Comcast Company or Companies is seeking, planning or contemplating to provide Wholesale Services projects for itself in New Hampshire over the next five years.

- iii. Identify all Wholesale Service Customers each Comcast Company or Companies currently has in the state of New Hampshire.
- iv. Identify all Wholesale Service customers each Comcast Company or Companies currently has in TDS' service area.
- v. Identify which of the Wholesale Service Customers identified in response to sub-requests i-iv above, for each Comcast Company is an interconnected VoIP provider as this term is defined by the FCC in 47 C.F.R. § 54.5.
- vi. Identify each Comcast Company which provides access to telephone numbers for its Wholesale Service Customers in the state of New Hampshire.
- vii. Identify each Comcast Company which provide telephone numbers to its Wholesale Service customer(s) for that customer's VoIP service in the state of New Hampshire.
- viii. Identify how many telephone numbers each Comcast company has provided to its Wholesale Service Customers that are in use by end user customers in the state of New Hampshire.
- ix. Please identify all telecommunications services (as defined by 47 U.S.C. § 153(46)) that each Comcast Company provides to its Wholesale Service customers, by company.
- TDS 1-12: Please respond to the following questions on behalf of Comcast Phone and Comcast IP, as indicated. The following questions address which services Comcast Phone considers to be telecommunications services (as defined by 47 U.S.C. § 153(46)), as well as the delivery of such services by each Comcast Company, where applicable.
 - i. Does Comcast Phone consider the provisions of numbering resources a telecommunications service?
 - ii. If Comcast Phone has provided numbers to a Wholesale Service Customer, are the telephone numbers associated with the furnishing of local exchange telecommunications service?
 - iii. Does Comcast Phone consider the porting of telephone numbers a telecommunications service?

- iv. Does Comcast Phone consider the provision of 911 and telephone relay service (TRS) to its Wholesale Service customers a telecommunications service?
- v. Does Comcast Phone consider operator services and directory assistance telecommunications services?
- vi. In which service territories in New Hampshire are TRS, toll and directory listings available from Comcast Phone? Please describe how Comcast Phone delivers these services.
- vii. In which service territories in New Hampshire are TRS, toll and directory listings available from Comcast IP? Please describe how Comcast IP delivers these services.
- viii. Does Comcast Phone provide 911 services to Comcast IP or any other Comcast Company?
- ix. Does Comcast IP follow the FCC's VoIP 911 provisioning rules?
- x. Does the Comcast IP end user have the option of inputting his location in the 911 database directly?
- xi. Does Comcast Phone consider the calls originated by its Wholesale Service customers that provide interconnected VoIP services to be telecommunications service?
- TDS 1-13: Please describe the network configuration of each Comcast Company that provides Wholesale Service to Wholesale Service customers. The description should describe the network configuration of the company while providing the Wholesale Services to its Wholesale Service customers.
- TDS 1-14: Identify each Comcast Company's projected number of end users in TDS' service area that will interconnect through a Comcast Company's service in the next 5 years?
 - i. How many of these projected customers are business customers?
 - ii. How many of these projected customers are residential customers?
- TDS 1-15: Does any Comcast Company pay a regulatory fee or annual assessment to the New Hampshire Public utilities Commission (the "Commission")? What is the basis for the payment? Does Comcast IP pay a regulatory fee to the Commission? What is the basis for its payment? Please provide the amount of the regulatory fee paid by each Comcast Company (on a per entity basis) for the years 2005,

2006, 2007 and 2008, and specifically whether any portion of the payment is based on interconnected VoIP revenue.

- TDS 1-16: Does any Comcast Company contribute to the federal Universal Service Fund? If so, please identify each of the Comcast Companies, and provide the amount of contributions by company for the years 2005, 2006, 2007 and 2008. For each Comcast Company, please indicate whether the company bases its estimate of VoIP-based service revenues on the FCC proxy percentage of traffic in the interstate jurisdiction, or provides a traffic study to justify the interstate traffic amounts.
- TDS 1-17: In any areas nationwide, where any Comcast Company provides Wholesale Service, has any Comcast Company received a bill for intrastate and/or interstate switched access charges for traffic terminated to an incumbent local exchange carrier ("ILEC")? If so, please identify the Comcast Company or Companies, the ILECs involved and the retail service furnished through the use of such access service.
- TDS 1-18: For the Comcast Company or Companies identified in TDS 1-17, has the Comcast Company or Companies paid any access bill rendered concerning access service furnished or claimed to be furnished in the State of New Hampshire? If not, has the Comcast Company or Companies ever disputed payment of an ILEC access bill on the grounds that the service in question utilizes VoIP for any other reason? If yes, please provide a description of the dispute and resolution for each Comcast Company. For purposes of this question, "Comcast Company" includes any affiliate of Comcast or a business partner of an affiliate of Comcast that was, is or may be involved directly or indirectly in the provision of voice or data services to customers outside the state of New Hampshire.
- TDS 1-19: Please respond to the following on behalf of each Comcast Company:
 - i. What, if any, voice, telephone, communications, telecommunications or data retail services are any of the Comcast Companies providing to end user customers in the state of New Hampshire? Please specify which Comcast Company is offering which retail service(s).
 - ii. What, if any, voice, telephone, communications, telecommunications or data retail services are any of the Comcast Companies providing to end user customers nationwide?
 - iii. Have any of the Comcast Companies, at any time, obtained a certificate of public convenience and necessity or other authorization to provide local exchange telecommunications service? If yes, please list each state where certification has been granted.

- iv. Are any of the Comcast Companies currently providing a retail service called "Digital Phone" service? In the past five years, have any of the Comcast Companies provided a retail service called "Digital Phone" service? Identify each such Comcast Company separately.
- v. If any of the Comcast Companies have offered or are offering a retail service called "Digital Phone," has this service ever been offered pursuant to a certificate of public convenience and necessity or other authorization in any state? If so, please list the states. If not, under what type of authority was this service offered to end users?
- vi. If the "Digital Phone Service" was offered pursuant to a certificate of public convenience and necessity or other state authorization by any of the Comcast Companies, have any of these companies ever filed a letter with a state commission indicating that it would no longer provide the "Digital Phone" service pursuant to its state certification of public necessity and convenience or other authorization? If so, in which states has this occurred? Please provide copies of the filed letters and correspondence.
- vii. If any of the Comcast Companies has ever filed a letter with a state commission indicating that it would no longer provide the "Digital Phone" service pursuant to its state certification or authorization, what was the reason for withdrawing the provision of "Digital Phone" service from state certification or authorization?
- viii. Do any of the Comcast Companies believe that "Digital Phone" service is a telecommunications service? If yes, please explain the basis for this belief.
- TDS 1-20: Please state how each Comcast Company provides or plans to provide IP-based service to its residential and business customers in the State of New Hampshire. Specifically which Comcast Company provides dial tone, features, high speed data, IntraLATA long distance and interLATA long distance services? If any element is provided by a third party, please identify the third party and describe how/where the Comcast Company interconnects with the third party provider.
- TDS 1-21: Does Comcast Phone consider itself to be a telecommunications carrier as defined in 47 U.S.C. § 153(44)? Please explain the basis for your response.
- TDS 1-22: Does Comcast IP consider itself to be a telecommunications carrier as defined in 47 U.S.C. § 153(44)? Please explain the basis for your response.
- TDS 1-23: Does Comcast Phone consider itself to be a telephone utility as defined in NH RSA 362:2? If yes, list the specific services Comcast believes the Commission has the authority to regulate.

- TDS 1-24: Does Comcast IP consider itself to be a telephone utility as defined in NH RSA 362:2? If yes, list the specific services Comcast IP believes the Commission has the authority to regulate.
- TDS 1-25: Does Comcast IP believe it should be regulated differently than traditional telecommunications companies or competitive local exchange carriers? If yes, please explain why.
- TDS 1-26: Which of the following services should not be considered to meet the definition of "telecommunications service" in 47 U.S.C. § 153(46)? Please identify and provide a corresponding response for each Comcast Company providing directly or indirectly, wholesale or retail IP-based services in the state of New Hampshire.
 - i. Providing voice service to end users via a TDM based switch over traditional copper pair of wires to an analog phone.
 - ii. Reselling ILEC telephone services and using a Comcast Company owned (a) TDM based switch or (b) IP-based soft switch to provide voice service to end users with analog phones.
 - iii. Providing voice service to end users via a (a) TDM based switch or (b) IP-based soft switch over traditional copper pair of wires or fiber.
 - iv. Providing voice service to end users over Comcast Company owned facilities, using either a Comcast Company owned or third-party owned (a) TDM based switch or (b) IP-based soft switch.
 - v. Providing voice service to end users where the traffic originates on an IP basis through a soft switch and there is protocol conversion to TDM for transmission on the PSTN.
 - vi. Providing voice services to end users where the traffic originates as TDM based switched traffic and is converted for delivery from the PSTN to an IP-based soft switch for termination of traffic.
 - vii. Providing voice services to end users where the traffic originates in an IP format through a soft switch and is converted for transport on the PSTN and then is converted back to an IP basis for termination on an IP network through use of a soft switch.
 - viii. For provision of voice service to end users where the traffic originates through a TDM based switch on the PSTN and is converted to IP for a portion of the transport and then is converted back to TDM traffic for delivery on the PSTN.

- TDS 1-27: Does Comcast Phone believe that all "telecommunications service," as defined in 47 U.S.C. § 153(46) should be regulated equally, regardless of its technology (i.e., cable, fiber, copper wire, TDM, packet or VoIP)? If not, why not?
- TDS 1-28: Which of the following services should not be considered to meet the definition of "telecommunications services" pursuant to 47 U.S.C. § 153(46)? Please identify and provide a corresponding response for each Comcast Company that provides any service to residents of the State of New Hampshire.
 - i. Providing dial tone to end users via a TDM switch over traditional copper pair of wires.
 - ii. Reselling ILEC telephone wires and using its own TDM switch or VoIP switch to provide dial tone to end users.
 - iii. Providing dial tone to end users via a TDM switch or VoIP switch over traditional copper pair of wires or fiber.
 - iv. Providing dial tone to end users over Comcast Cable owned wires, using an owned or through third-party TDM switch or VoIP switch.
- TDS 1-29: Do the Comcast Companies believe that all "telephone utilities" as defined in New Hampshire RSA 362:2 should be regulated equally, regardless of the technology used (i.e., cable, fiber, copper, wire, TDM or VoIP)? If not, why not.
- TDS 1-30: Attached is a diagram (Diagram 1) depicting TDS' understanding of the Comcast network. Please refer to this diagram and answer the following:
 - i. Telephone Symbol
 - a. Are the telephones analog telephones?
 - b. Can a SIP phone be used?
 - c. Are there any restrictions on the types of telephones that can be used with the Comcast "CDV" service?
 - d. Who owns the telephone?
 - e. Please define "CDV".
 - ii. EMTA
 - a. Please define "EMTA".
 - b. What functions does the EMTA provide?
 - c. Where is the EMTA located?
 - d. Does Comcast consider the EMTA customer premise equipment or CPE?
 - e. Can a customer choose its own EMTA?
 - f. Who owns the EMTA?
 - A. If Comcast owns the EMTA, which Comcast Company owns the asset?

- B. If Comcast owns the EMTA, which Comcast Company controls the EMTA?
- g. Who installs the EMTA? If Comcast, which Comcast Company?
- h. Who maintains the EMTA? If Comcast, which Comcast Company?

iii. HFC Network

- a. Please define the term "HFC Network".
- b. What functions does the HFC facilities provide?
- c. Which Comcast Company owns the HFC facilities (coax, nodes, fiber)? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.
- d. Which Comcast Company controls the HFC facilities (coax, nodes, fiber)? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.
- e. Who installs the HFC facilities? If Comcast, which Comcast Company?
- f. Who maintains the HFC facilities? If Comcast, which Comcast Company?
- g. When a new CDV customer is added to the network, what Comcast Company makes the provisions to the HFC facilities to enable service provisioning to the end user customer?

iv. CMTS

- a. Please define "CMTS".
- b. What functions does the CMTS provide?
- c. Which Comcast Company owns the CMTS? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.
- d. Which Comcast Company controls the CMTS? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Company owns which asset.
- e. How many CMTS devices serve the state of New Hampshire?
- f. What city and state are the CMTS(s) that serve New Hampshire located?

v. Router 1

- a. What functions does the Router 1 provide?
- b. Which Comcast Company owns the Router 1? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.

- c. Which Comcast Company controls the Router 1? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.
- d. How many Router 1's serve the state of New Hampshire?
- e. Where are the Router 1's located that serve the state of New Hampshire?

vi. IP Data Transport

- a. What functions does the IP Data transport provide?
- b. What physical plant routes the IP Data from Router 1 to Router 2?
- c. Does this data transport use the same physical cables as the HFC network?
- d. Does the data transport use separate dedicated transport facilities?
- e. Does the data transport use leased facilities to connect the two routers?
- f. Which Comcast Company owns the transport if the answer to b or c is yes? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.
- g. Which Comcast Company controls the IP data transport? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.
- h. If a combination of transport types in b, c and d above are used in the state of New Hampshire, please identify the approximate split between the transport types used. A percentage or mileage can be used to answer this question.

vii. Router 2

- a. Does Router 2 provide the same functions as Router 1?
- b. Are the answers to v. a-e above the same for Router 2? If no, please respond to sub-requests v. a-e above, with respect to Router 2.

viii. Media Gateway

- a. 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?
- b. Which Comcast Company owns the Media Gateway? If more than one Comcast Company owns the physical facilities, please list all entities that have ownership and identify which Comcast Company owns which asset.
- c. Which Comcast Company controls the Media Gateway? If more than one Comcast Company owns the physical facilities, please list

- all entities that have ownership and identify which Comcast Company owns which asset.
- d. How many Media Gateways serve the state of New Hampshire?
- e. Where are the Media Gateways located that serve the state of New Hampshire?

ix. Soft Switch

- a. What functions does the soft switch provide?
- b. Which Comcast Company owns the soft switch? If more than one Comcast Company owns the physical soft switch, please list all entities that have ownership and identify which Comcast Company owns which asset.
- c. Which Comcast Company controls the soft switch? If more than one Comcast Company owns the physical soft switch, please list all entities have ownership and identify which Comcast Company owns which asset.
- d. How many soft switches serve the state of New Hampshire?
- e. Where are the soft switches located that serve the state of New Hampshire?

x. Connection to the PSTN

- a. In New Hampshire, does any Comcast Company own the physical facilities used to interconnect with the PSTN/
 - A. If yes, which Comcast Company owns the physical facility? If more than one Comcast Company owns the physical soft switch, please list all entities that have ownership and identify which Comcast Company owns which asset. Does the same entity control the facilities from a provisioning and engineering perspective? If not, please identify the Comcast Company that controls the facilities from a provisioning and engineering perspective.
 - B. If no, are the facilities lease?
 - 1. If yes, which Comcast Company leases the facilities?
- TDS 1-31: Where in the network does Comcast Phone claim that protocol conversion takes place? (In each case, if there is a conversion, please describe it.)
 - i. Is there protocol conversion between the telephone and the EMTA?
 - ii. Is there protocol conversion between the EMTA and the CMTS?
 - iii. Is there protocol conversion between the CMTS and Router 1?
 - iv. Is there protocol conversion between Router 1 and Router 2?

- v. Is there protocol conversion between Router 2 and the media gateway?
- vi. Is there protocol conversion between the media gateway and the soft switch?
- vii. Is there protocol conversion between the media gateway and PSTN?
- TDS 1-32: What is the technical interface for Comcast Phone and Comcast IP? (If a Comcast Company other than Comcast Phone or Comcast IP is involved in providing the Comcast Digital Voice service depicted on Diagram 1 in the state of New Hampshire, this question applies to that Comcast Company as well.)
 - i. Is it a T1 with standard TDM signaling?
 - ii. Is it an Ethernet transport facility?
 - iii. Is there proprietary signaling between the two entities?
 - iv. Is there a physical interface at all or do the two entities share the same Media Gateway?
- TDS 1-33: What services are provided between the Comcast Companies?
 - i. Does Comcast Phone provide any service to Comcast IP?
 - a. If yes, please list services provided.
 - b. Which services provided under contract?
 - c. Which services provided under tariff?
 - d. Is the provision of service between the entities document? If yes, please provide a copy of the documentation.
 - ii. Does Comcast IP provide any services to Comcast Phone?
 - a. If yes, please list services provided.
 - b. Which services provided under contract?
 - c. Which services provided under tariff?
 - d. Is the provision of service between the entities documented? If yes, please provide a copy of the documentation.
 - iii. Does any Comcast Company provide services to Comcast Phone?
 - a. If yes, please list services provided.
 - b. Which services provided under contract?
 - c. Which services provided under tariff?
 - d. Is the provision of service between the entities documented? If yes, please provide a copy of the documentation.
 - iv. Does any Comcast Company provide services to Comcast IP?

- a. If yes, please list services provided.
- b. Which services provided under contract?
- c. Which services provided under tariff?
- d. Is the provision of service between the entities documented? If yes, please provide a copy of the documentation.
- TDS 1-34: For this Data Request, and for Data Requests TDS 1-35 through TDS 1-43, the assumption is that Comcast IP provides the retail IP-based voice-related service to end users in the state of New Hampshire that are proposed for the TDS Companies' service area. If that assumption in incorrect, please identify the Comcast Company which is the retail provider of IP voice-related services and answer the questions accordingly. Please identify in detail how traffic from Comcast IP end user customers in a TDS Company exchange would be delivered to the TDS Company for termination to a TDS end user customer located in same exchange.
- TDS 1-35: Please identify in detail how traffic from a Comcast IP end user customer in a TDS Company exchange (the originating exchange) would be delivered to a TDS Company customer located in an exchange within the extended area service ("EAS") area of the originating exchange.
- TDS 1-36: Please identify in detail how traffic from a Comcast IP end user customer in Manchester, New Hampshire, would be delivered to TDS for termination to a TDS end user customer in Contoocook, New Hampshire.
- TDS 1-37: Please identify in detail how traffic originating from a Comcast IP end user customer in Boston or Philadelphia would be delivered to TDS for termination to a TDS end user customer in the Salisbury, New Hampshire exchange.
- TDS 1-38: Please identify which Comcast Company is responsible for payment of terminating access charges to Wilton Telephone Company, Inc. ("WTC") for access traffic that is delivered to WTC for termination to WTC end users in the Wilton, New Hampshire exchange.
- TDS 1-39: Please identify all Carrier Identification Codes assigned to each Comcast Company operating in the State of New Hampshire.
- TDS 1-40: Please identify in detail how Comcast IP expects traffic from a Merrimack County Telephone Company ("MCT") end user customer in the Bradford, New Hampshire exchange would be delivered to Comcast IP for termination to a Comcast IP end user located in the Manchester, New Hampshire exchange.
- TDS 1-41: Please identify in detail how Comcast IP expects traffic from a TDS Company end user customer would be delivered for termination to a Comcast IP customer located within the EAS area of the originating exchange.

- TDS 1-42: Please identify how Comcast IP expects traffic from a MCT end user customer in Contoocook would be delivered to Comcast IP for termination to a Comcast IP end user customer in Manchester, New Hampshire.
- TDS 1-43: Please identify how Comcast IP expects traffic from a MCT end user customer in Contoocook would be delivered to Comcast IP for termination to a Comcast IP end user customer in Boston, Massachusetts.
- TDS 1-44: Does Comcast IP operate solely in New Hampshire, does it operate in other states?
- TDS 1-45: Is Comcast IP a separate company from Comcast IP Phone of New Hampshire, LLC, and if so, what is the relationship between the companies?
- TDS 1-46: Is Vermont the only state in which Comcast and TDS have a state commission-approved interconnection agreement ("ICA") with the same type of arrangement at issue in New Hampshire?
- TDS 1-47: Is voice over Internet protocol ("VoIP") traffic discussed or referenced in any way in the ICAs between the various Comcast entities and TDS entities in the States of Vermont, Tennessee, and Indiana?
- TDS 1-48: Please identify the docket numbers of the ICAs between Comcast and other ILECs that the Commission has approved.
- TDS 1-49: Please provide a copy of any FCC filing in which any Comcast Company discontinued certain telecommunications services and/or a description and explanation of the services that were discontinued in the State of New Hampshire within the past five (5) years.
- TDS 1-50: What services does Comcast Phone of New Hampshire, LLC, currently provide in New Hampshire?
- TDS 1-51: In Comcast Phone's Petition for Arbitration, Comcast states that it "offers a Schools and Libraries Network Services." Please identify in detail what constitutes the "Schools and Libraries Network Service." Please identify whether there is any end use customer, such as a school or library, that is receiving that service in the state of New Hampshire. Please identify in detail in what way Comcast offers the "Schools and Libraries Network Service" in the state of New Hampshire. Please identify where the terms and conditions, including, but not limited to, prices, for "Schools and Libraries Network Service" can be found for service in the state of New Hampshire. Please provide a copy of the terms and conditions for "Schools and Libraries Network Service" that is offered in the state of New Hampshire.

- TDS 1-52: Please identify whether there is any end user customer, such as a school or library, that is receiving the "Schools and Libraries Network Service" in any service area in the state of New Hampshire.
- TDS 1-53: In Comcast Phone's Petition for Arbitration, Comcast states that it offers "exchange access service to interexchange carriers." Please identify in detail what constitutes "exchange access service to interexchange carriers." Please identify in detail where this service is offered in New Hampshire. Please identify in detail how this service is offered in New Hampshire. Please identify where the terms and conditions, including, but not limited to, prices, for "exchange access service to interexchange carriers" can be found for service in the state of New Hampshire. Please provide a copy of the terms and conditions for "exchange access service to interexchange carriers" that is offered in the state of New Hampshire.
- TDS 1-54: Please identify whether there is any interexchange carrier receiving "exchange access service" as provided by Comcast within the TDS service area in the state of New Hampshire.
- In Comcast Phone's Petition for Arbitration, Comcast stated that it offers "Local Interconnection Service to interconnected Voice over Internet Protocol ("VoIP") providers." Please identify in detail what constitutes "Local Interconnection Service." Please identify in detail where this service is offered in New Hampshire. Please identify in detail how this service is offered in New Hampshire. Please identify where the terms and conditions, including, but not limited to, prices, for the "Local Interconnection Service" can be found for service in the state of New Hampshire. Please provide a copy of the terms and conditions for "Local Interconnection Service" that is offered in the state of New Hampshire. Please identify in detail what is meant by "Local Interconnection Service."
- TDS 1-56: Please identify all interconnected Voice over Internet Protocol providers, other than Comcast IP to which Comcast offers "Local Interconnection Service" in the State of New Hampshire.
- TDS 1-57: Please identify all interconnected Voice over Internet Protocol providers, other than Comcast IP, to which Comcast now provides "Local Interconnection Service" within the State of New Hampshire.
- TDS 1-58: Please identify all interconnected voice over Internal Protocol providers, other than Comcast IP, to which Comcast now provides "Local Interconnection Service" anywhere within the United States in each case specifying the location of the customer.
- TDS 1-59 In Comcast Phone's Petition for Arbitration, Comcast states that it offers "Business Local Service." Please identify in detail what constitutes the "Business Local Service." Please identify whether there is any end user customer (unaffiliated with Comcast) that is receiving that service in the state of New

Hampshire. Please identify in detail in what way Comcast offers "Business Local Service" in the State of New Hampshire. Please identify where the terms and conditions, including, but not limited to, prices, for "Business Local Service" can be found for service in the State of New Hampshire. Please provide a copy of the terms and conditions for "Business Local Service" that is offered in the State of New Hampshire.

Diagram 1

Comcast Digital Voice IP to TDM call flow and IP to IP call flow

