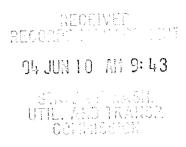
# Preston|Gates|Ellis & Rouvelas|Meeds LLP



June 9, 2004

## **VIA OVERNIGHT MAIL**

Ms. Carole J. Washburn
Executive Secretary
Washington Utilities & Transportation Commission
1300 Evergreen Park Drive S.W.
Olympia, Washington 98504-7250

Re: Docket No. UT-023003

Verizon Northwest Inc.'s Hearing Exhibits

Dear Ms. Washburn:

Enclosed herewith are ten copies of the following hearing exhibits, which are intended to replace the exhibits previously submitted by Verizon Northwest Inc.:

- Hearing Exhibit No. 884 (Joint Responses of AT&T and MCI to Verizon's Second Set of Data Requests, Response Nos. 2-1 through 2-6).
- Hearing Exhibit No. 886 (Joint Responses of AT&T and MCI to Verizon's Fourth Set of Data Requests).
- Hearing Exhibit No. 887 (Joint Responses of AT&T and MCI to Verizon's Fifth Set of Data Requests).

Also enclosed are ten copies of the following hearing exhibits, which were not available at the time the initial set of hearing exhibits was submitted:

- Hearing Exhibit No. 891 (AT&T's Responses to Verizon's Tenth Set of Data Requests).
- Hearing Exhibit No. 892 (AT&T's Responses to Verizon's Eleventh Set of Data Requests).

A LAW FIRM

A LIMITED LIABILITY PARTNERSHIP INCLUDING OTHER LIMITED LIABILITY ENTITIES

 Hearing Exhibit No. 899 (AT&T's Responses to Verizon's Twelfth Set of Data Requests).

Should you have any questions regarding the foregoing, please do not hesitate to contact me.

Sincerely,

Megan H. Troy

cc: Gregory J. Kopta (counsel for AT&T Communications of the Pacific Northwest, Inc.)

Michele Singer Nelson (counsel for WorldCom, Inc.)

Brooks Harlow (counsel for Covad Communications Company)

Arthur A. Butler (counsel for MCI/WorldCom, Inc.) Catherine Ronis (counsel for Verizon Northwest Inc.)

Lisa Anderl (counsel for Qwest Communications)

Shannon Smith (counsel for Commission Staff)

		•	

RECEIVED
RECORDS MAY STORM

94 JUN 10 AM 9: 43

WHATE OF MASSE
UTIL, AND TRANSP

# BEFORE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of:
Unbundled Loop and Switching Rates; the Deaveraged
Zone Rate Structure; and
Unbundled Network Elements, Transport,
And Termination

## JOINT RESPONSES OF AT&T & MCI TO VERIZON'S SECOND SET OF DATA REQUESTS

AT&T Communications of the Pacific Northwest, Inc. ("AT&T") and MCI hereby provide the following joint answers and objections to Verizon's Second Set of Data Requests to AT&T and MCI.

I.

#### **GENERAL OBJECTIONS**

AT&T and MCI object to Verizon's definitions and instructions to the extent that they seek to impose obligations exceeding those imposed by the Commission's Rules and by the Washington Rules of Civil Procedure. More specifically, AT&T and MCI object to the definitions of AT&T and MCI as overly broad. AT&T and MCI further object to the extent that the Data Requests appear to require it to provide information in the possession of third parties. AT&T and MCI are required only to provide information in response to these requests that is in their possession, custody or control.

II.

**SPECIFIC OBJECTIONS AND RESPONSES** 

## Data Request No. 2-1:

Referring to page 10 of the Direct Testimony of John C. Donovan:

- a. Describe the situations in which HM 5.3 produces multiple distribution areas served by the same DLC RT.
- b. Provide the frequency with which multiple distribution areas are served by the same DLC RT in HM 5.3 for Verizon NW, and the frequency with which a single distribution area is served by the a single DLC RT in HM 5.3 for Verizon NW.

#### Response:

a. HM 5.3 uses the term "clusters" rather than "distribution areas". In fact, it would be most correct to refer to HM 5.3 clusters as being equivalent to Allocation Areas or Serving Areas. HM 5.3 is not explicitly designed to serve multiple clusters by a single DLC RT. However, there are two conditions which may apply to clarify what AT&T and MCI believe is being asked in this request. The first is where the maximum copper distribution length in a cluster chosen by the model to be served by DLC exceeds the maximum copper distance threshold. In that case, the cluster is split into an appropriate number of parts, normally either two or four clusters to reduce the maximum copper distribution length. In that situation, HM 5.3 pushes fiber deeper into the cluster and creates one DLC RT site for each new cluster.

In the second situation, if the maximum SAI size is exceeded, then HM 5.3 will place multiple short sub-feeders and multiple SAIs.

Although HM 5.3, as filed in this proceeding, may split clusters or use multiple SAIs, in no cases are multiple distribution areas served by the same DLC RT; only one distribution area is served by one DLC RT.

b. The frequency of which multiple distribution areas (either a whole cluster or each part of a split cluster) are served by the same DLC RT in HM 5.3 for Verizon NW is zero percent. The frequency with which a single distribution area (either a whole cluster or each part of a split cluster) is served by a single DLC RT in HM 5.3 for Verizon NW is 100 percent. The following data is provided in an attempt to be most responsive to this question:

Clusters – main 1233, outliers 255;

Clusters without DLC RT - main 234, outliers 0;

DLC RTs 1090 in main clusters, plus one in each additional outlier cluster.

# Data Request No. 2-2:

Referring to page 15 of the Direct Testimony of John C. Donovan, provide all facts, data, and documents used to produce the cable structure types for the three highest density zones.

#### Response:

As Mr. Donovan explains in his Direct Testimony, the breakdowns between aerial, buried, and underground lines are based on the application of expert outside plant engineering opinion applied to sheath feet of cable by cable type (copper or fiber) by structure type (aerial, buried, or underground) ARMIS data obtained from the FCC for Verizon in the State of Washington. Distribution cable structure type reflects low amounts of underground cable, whereas copper and fiber feeder cable reflect high percentages of underground cable, as is the norm in the industry. Drop cable structure fractions reflect the fact that there is no such thing as an underground drop (cable in conduit pipe between two manholes) because there is no such thing as an underground block terminal. Although some distribution cable may be underground, that cable must transition to either aerial or buried plant to permit the cable to be terminated on an aerial or buried block terminal. Underground conduit systems may transition to aerial or buried plant (transitions to buried plant require a method of blocking silt from flowing back through the lateral conduit pipe into the serving manhole). HM 5.3 assumes that buried distribution cables will have buried pedestal block terminals and buried drops. HM 5.3 assumes that aerial distribution cables will have aerial or block/building block terminals and aerial or block/building drops.

There are no additional facts, data, documents, and workpapers used to produce the cable structure types for the three highest density zones than what has already been produced.

#### Data Request No. 2-3:

Referring to page 19 of the Direct Testimony of John C. Donovan, provide all facts, data, and documents Mr. Donovan relied on in producing the feeder cable structures types for each density zone.

#### Response:

As Mr. Donovan explains in his Direct Testimony, the breakdowns between aerial, buried, and underground lines are based on the application of expert outside plant engineering opinion applied to sheath feet of cable by cable type (copper or fiber) by structure type (aerial, buried, or underground) ARMIS data obtained from the FCC for Verizon in the State of Washington. Joint Applicants started with the percentage breakdown between aerial, buried and underground structure for copper and fiber cable found in ARMIS, and then made a conservative (i.e., more expensive) assumption that adjusted the percentage of underground copper and fiber feeder cable to reflect high percentages of underground cable, especially in higher density zones, as is typically observed in the industry.

There are no additional facts, data, documents, and workpapers used to produce the cable structure types for the three highest density zones than what has already been produced.

### Data Request No. 2-4:

Referring to page 46 of the Direct Testimony of John C. Donovan, provide all facts, data, and documents Mr. Donovan relied on to produce each value for OSP Engineering Labor Rate and Productivity for Copper Cable shown in the table.

#### Response:

The OSP Engineering Labor Rate shown in the table on page 46 of Mr. Donovan's Direct Testimony is based on Mr. Donovan's experience in reviewing dozens of loaded labor rates for outside plant engineers in many proceedings throughout the United States. Those data have been provided under protective order in each state, and the \$60.00 per hour figure does not represent exactly any one single proprietary number.

The Outside Plant Engineering Productivity numbers in that table are based, as stated in Mr. Donovan's Direct Testimony within that section, on Mr. Donovan's personal experience in performing the tasks involved, writing methods for engineers to do the appropriate tasks, from teaching engineers how to design such jobs, and from personally supervising hundreds of outside plant engineers in performing the required functions.

There are no additional facts, data, or documents available.

#### Data Request No. 2-5:

Referring to page 50 of the Direct Testimony of John C. Donovan, provide all facts, data, and documents Mr. Donovan relied on to produce each value for OSP Technician Labor Rate and Productivity for Copper Cable shown in the tables.

#### Response:

The Outside Plant Technician Labor Rate and Outside Plant Technician Productivity for Copper Cable shown in the table on page 50 of Mr. Donovan's Direct Testimony are based on expert opinion as additionally explained in the text associated with that table in the testimony, plus information provided in Attachment JCD-3 to Mr. Donovan's Direct Testimony.

There are no additional documents that have not already been provided.

#### Data Request No. 2-6:

Referring to page 52 of the Direct Testimony of John C. Donovan, provide all facts, data, and documents Mr. Donovan relied on to produce each value for OSP Engineering Labor Rate and Productivity for Fiber Cable shown in the table.

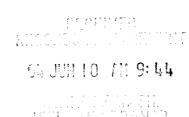
#### Response:

The OSP Engineering Labor Rate shown in the table on page 52 of Mr. Donovan's Direct Testimony is based on Mr. Donovan's experience in reviewing dozens of loaded labor rates for outside plant engineers in many proceedings throughout the United States. Those data have been provided under protective order in each state, and the \$60.00 per hour figure does not represent exactly any one single proprietary number.

The Outside Plant Engineering Productivity numbers in that table are based, as stated in Mr. Donovan's Direct Testimony within that section, on Mr. Donovan's personal experience in performing the tasks involved, writing methods for engineers to do the appropriate tasks, from teaching engineers how to design such jobs, and from personally supervising hundreds of outside plant engineers in performing the required functions.

There are no additional facts, data, or documents available.

			* 5



#### BEFORE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of:
Unbundled Loop and Switching Rates; the Deaveraged
Zone Rate Structure; and
Unbundled Network Elements, Transport,
and Termination

Docket No. UT-023003

#### AT&T'S RESPONSES TO VERIZON'S FOURTH SET OF DATA REQUESTS

AT&T Communications of the Pacific Northwest, Inc. ("AT&T") hereby provides the following answers and objections to Verizon's Fourth Set of Data Requests to AT&T.

I.

#### **GENERAL OBJECTIONS**

AT&T objects to Verizon's definitions and instructions to the extent that they seek to impose obligations exceeding those imposed by the Commission's Rules and by the Washington Rules of Civil Procedure. More specifically, AT&T objects to the definition of AT&T as overly broad. AT&T further objects to the extent that the Data Requests appear to require it to provide information in the possession of third parties. AT&T is required only to provide information in response to these requests that is in its possession, custody or control.

II.

#### **SPECIFIC OBJECTIONS AND RESPONSES**

## Data Request No. 4-1:

What cost of capital does AT&T use to evaluate local exchange projects? Please specify whether these costs of capital are after-tax or before tax costs. Please fully describe the cost of equity models that AT&T uses to develop the cost of capital and specify all model assumptions and inputs.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and its internal cost of capital is not relevant to a determination of the appropriate cost of capital in this proceeding.

#### Data Request No. 4-2:

Identify the average route-to-air ratio of AT&T's interoffice facility ("IOF") network in the continental U.S. (excluding Alaska) with at least one point of termination in Washington. Answer the same question with respect to that portion of AT&T's IOF network excluding any facility routes that do not terminate at both ends within the continental U.S., excluding Alaska.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its IOF network is not relevant to a determination of unbundled network element costs in this proceeding.

#### Data Request No. 4-3:

Identify the average route-to-air ratio of AT&T's outside plant network in the State of Washington. If this ratio differs by density zone, then state the ratio for each density zone. Should AT&T not have outside plant in each density zone in Washington, then provide the average route-to-air ratio, by density zone, for AT&T's national outside plant network.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its outside plant network is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request would require a special study and that the burden of response outweighs its relevance.

#### Data Request No. 4-4:

Identify AT&T's switch installation multiplier (i.e., the ratio of the total installed cost of a switch less the materials cost to the switch materials cost) to the for its network in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its switch installation multiplier is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request would require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-5:

Identify the average per square foot construction cost of buildings that AT&T has constructed to house switching equipment in the State of Washington for each of the following years: 2002, 2001, 2000, 1999, 1998, 1997 and 1996.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its construction costs is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request would require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response may require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

## Data Request No. 4-6:

Identify the average price that AT&T has paid for the land in the State of Washington upon which its switching equipment is located for each of the following years: 2002, 2001, 2000, 1999, 1998, 1997, and 1996.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its land purchases is not relevant to a determination of unbundled network element costs in this proceeding.

## Data Request No. 4-7:

Identify AT&T's average manhole investment for its network in the State of Washington for each of the following years: 2002, 2001, 2000, 1999, 1998, 1997, and 1996.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its manhole investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response may require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

Notwithstanding these objections, AT&T responds that most of its local outside plant network in the state of Washington is constructed through indefeasible rights of use agreements ("IRUs") with other carriers and that it has little or no manhole investment for local services in the state.

#### Data Request No. 4-8:

Identify AT&T's average pole investment for its network in the State of Washington for each of the following years: 2002, 2001, 2000, 1999, 1998, 1997, and 1996.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its pole investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response may require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

Notwithstanding these objections, AT&T responds that most of its local outside plant network in the state of Washington is constructed through IRUs with other carriers and that it has little or no pole investment for local services in the state.

#### Data Request No. 4-9:

Identify the fraction of pole, manhole, trenching and conduit investment made by AT&T in State of Washington for each of the following years: 2002, 2001, 2000, 1999, 1998, 1997, and 1996. Also, identify which portion is attributable to AT&T's plant and which portion is shared with other utilities.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request would require a special study and that the burden of response outweighs its relevance.

Notwithstanding these objections, AT&T responds that most of its local outside plant network in the state of Washington is constructed through IRUs with other carriers and that it has little or no pole, manhole, trenching or conduit investment for local services in the state.

#### Data Request No. 4-10:

Separately identify the average investment per foot of conduit and trenching of conduit in AT&T's network in the State of Washington for each of the following years: 2002, 2001, 2000, 1999, 1998, 1997, and 1996?

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its plant investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request would require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response may require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

Notwithstanding these objections, AT&T responds that most of its local outside plant network in the state of Washington is constructed through IRUs with other carriers and that it has little or no conduit investment for local services in the state.

#### Data Request No. 4-11:

Provide the most current AT&T engineering guidelines (electronic and hard copy) and any other documents used by AT&T personnel to engineer AT&T's local loop and/or outside plant network in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its engineering guidelines is not relevant to a determination of unbundled network element costs in this proceeding.

Notwithstanding these objections, AT&T responds that it engineers its local network to meet or exceed Bellcore standards.

#### Data Request No. 4-12:

Provide the most current AT&T engineering guidelines (electronic and hard copy) and any other documents used by AT&T personnel to engineer AT&T's long distance network.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding the engineering of its long distance network is not relevant to a determination of unbundled network element costs in this proceeding.

#### Data Request No. 4-13:

Identify by year and customer class (residence or business) the number of customers in Verizon NW's Washington serving area that AT&T has provided with basic exchange service for each year since 1996.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. Information regarding AT&T's customers is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

## Data Request No. 4-14:

Provide all documents concerning, referring or relating to any analysis performed by AT&T since 1996 to determine whether it should enter Verizon NW's Washington serving area for the purpose of providing basic exchange service.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T's analysis regarding entry of Verizon's serving areas in Washington, to the extent that any such analysis exists, is not relevant to a determination of unbundled network element costs.

Notwithstanding these objections, Attachment 4-14A is an affidavit filed with the Federal Communications Commission describing AT&T's process in analyzing proposed local network investment.

#### Data Request No. 4-15:

Provide any and all documents concerning, referring or relating to the engineering, furnishing, and installation of AT&T's most recent digital switch in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its switch investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-16:

Identify any and all expenses concerning, referring or relating to the installation of AT&T's most recent digital switch in the State of Washington, including riggers, transportation, and heavy equipment as well as all installation labor costs. Provide the total cost information and the number of lines and the number of trunks for which the switch was initially equipped. Identify how many of those lines and how many of those trunks were actually placed in service at the time the switch was initially placed in service.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its switch investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-17:

Provide any and all documents concerning, referring or relating to the engineering, furnishing, and installation of AT&T's most recent digital tandem switch in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its switch investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-18:

Provide any and all documents concerning, referring or relating to the engineering, furnishing, and installation of AT&T's most recently constructed power plant in the State of Washington, including the addition of rectifiers, batteries, fuse distribution bays, automatic breakers, microprocessor, and the standby emergency generator.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its power plant investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response may require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-19:

State whether AT&T, in doing its own network planning for the State of Washington, utilizes the same fill factors as HM 5.3's default fill factors. If not, explain why not, and identify the fill factors AT&T experiences in its own network planning for the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network planning is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

# Data Request 4-20:

Identify AT&T's service control points investments per transaction per second in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its service control point investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

## Data Request No. 4-21:

Identify AT&T's investments per installed DS-1 channel bank in the State of Washington.

## Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its channel bank investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

## Data Request No. 4-22:

Identify AT&T's per pair signal transfer point ("STP") investments in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its STP investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-23:

Identify how many STP pairs AT&T has in its Washington network and the average link termination fill percentage in those STP pairs.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

## Data Request No. 4-24:

For each of the past five years, identify the location(s) and price(s) per square foot that AT&T has paid for land on which switching or indoor transmission facilities are located in the State of Washington.

## Response:

See objection to Data Request 4-6.

### Data Request No. 4-25:

Identify AT&T's average investment per installed OC-48 add drop multiplexer in the State of Washington.

### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its multiplexer investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-26:

Identify AT&T's average investment per OC-48 optical regenerator in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its optical regenerator investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

### Data Request No. 4-27:

Identify AT&T's average investment per optical distribution panel (the physical fiber patch panel used to connect interoffice fibers to transmission equipment) in the State of Washington.

### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its optical distribution investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

## Data Request No. 4-28:

Identify AT&T's investment per foot for placing fiber optic cable in trenches in the State of Washington.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its placement costs is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

Notwithstanding these objections, AT&T responds that most of its local outside plant network in the state of Washington is constructed through IRUs with other carriers and that it has little or no trench investment for local services in the state.

#### Data Request No. 4-29:

Identify AT&T's investment per foot in underground conduit for fiber optic cable in the State of Washington.

### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its conduit investments is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

Notwithstanding these objections, AT&T responds that most of its local outside plant network in the state of Washington is constructed through IRUs with other carriers and that it has little or no trench investment for local services in the state.

#### Data Request No. 4-30:

Identify the following values used by AT&T in planning its network in the State of Washington:

- a) The actual number of minutes per month, per DS-0 level switched access trunk
- b) The investment per DS-0 level trunk port
- c) The investment per installed OC-48 ADM multiplexer (equipped with 48 DS-3s and equipped with 12 DS-3s)
- d) The investment per installed foot of fiber
- e) The tandem common equipment investment
- f) The power investment per switch
- g) The cost of construction per square foot of a wire center building
- h) The busy hour fraction of daily usage
- i) The annual to daily usage reduction factor
- j) The installed terminal multiplexer investment per OC-3
- k) The interoffice facility wire center EF&I fully loaded labor rate per hour in Washington
- 1) The installed cost of an OC-48 regenerator
- m) Interoffice facility fiber optic regeneration spacing
- n) Optical distribution panel cost to connect 24 fibers to the transmission equipment
- o) The number of hours required to install the equipment associated with the interoffice transmission systems.

#### Response:

AT&T objects to this request because it is duplicative and because seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network is not relevant to a

## Response to DR 4-30 (continued):

determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

## Data Request No. 4-31:

State whether AT&T is currently planning, or assessing the possibility of, integrating any new generations of switching technology into its network for the completion of voice calls in the State of Washington?

## Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network planning is not relevant to a determination of unbundled network element costs in this proceeding.

### Data Request No. 4-32:

State whether AT&T is currently planning, or assessing the possibility of, integrating any new generations of switching technology into its network for the completion of data calls in the State of Washington?

### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network planning is not relevant to a determination of unbundled network element costs in this proceeding.

### Data Request No. 4-33:

State whether AT&T has developed any projection(s) of the total number and/or percentage of UNE loops that AT&T will purchase (a) on standalone basis and (b) as part of a UNE-P arrangement in future years for its network in the State of Washington. If the answer is yes, provide such projection(s).

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. Information regarding AT&T's use of UNE loops is not relevant to a determination of unbundled network element costs in this proceeding.

### Data Request No. 4-34:

Describe what concentration ratio(s) AT&T plans to deploy for voice grade loops on new DLC systems in the State of Washington. If AT&T's response differs by DLC type, provide a separate response for each DLC type.

### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its plans for deployment of technology is not relevant to a determination of unbundled network element costs in this proceeding.

## Data Request No. 4-35:

For each of the following UNEs, provide the most complete definition available to AT&T (e.g., the level of detail that AT&T would provide to employees or its consultants who would be developing the cost of each UNE for regulators), including the specific beginning and ending point of each UNE facility type, the equipment typically included in the UNE, and any relevant technical specifications:

- a) DS-3 Entrance Facility Without Equipment
- b) Dedicated Transport
- c) SS7 Links

### Response:

AT&T objects that this data request appears to call for legal conclusions. AT&T has not developed any definition of the facilities at issue for use by its employees or consultants.

## Data Request No. 4-36:

At the lowest level of detail available down to the wire center specific level, provide the best available estimate in AT&T's possession of the average total length of DS-1 capacity loops in AT&T's network in the State of Washington

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

### Data Request No. 4-37:

At the lowest level of detail available down to the wire center specific level, provide the best available estimate in AT&T's possession of the average total length of DS-3 capacity loops in AT&T's network in the State of Washington.

### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

#### Data Request No. 4-38:

Identify all regulatory and internal studies (e.g., business cases) in which AT&T utilized an Expense to Investment ("E/I") methodology. This includes regression analysis or E/I ratios to develop costs for UNE-Loops, UNE-P and Total Service Resale ("TSR"), or for its own end-user residence, small business and medium and large business services. For each such study, identify the network and non-network-related (e.g., marketing) expenses that were developed and the investments associated with each expense factor. Provide the values of the expenses, investments and resultant expense to investment relationships (e.g., regression relationships, E/I ratios) for all such cases. Provide all associated documents concerning, referring or relating to thereto.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. Information regarding internal AT&T expense studies is not relevant to a determination of unbundled network element costs in this proceeding.

#### Data Request No. 4-39:

Provide the current value for each of the following costs related to AT&T's end office switching in the State of Washington.

- a) End office switching RTU fee per line
- b) End office switch Engineer, Furnish and Install ("EF&I") factor
- c) End office MDF cost per line

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its switching costs is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance. AT&T further objects that a response would require it to reveal confidential and proprietary information of third parties in violation of contractual agreements.

#### Data Request No. 4-40:

Provide a complete list of all formal methods, procedures and/or other guidelines that AT&T personnel who design or install interoffice facilities are expected to consider when designing or placing interoffice facilities in the State of Washington. Include the reference number, title and date of issue of each document.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its methods and procedures is not relevant to a determination of unbundled network element costs in this proceeding.

Notwithstanding these objections, AT&T responds that its local network is designed to meet or exceed Bellcore standards.

## Data Request No. 4-41:

Provide a complete list of all formal methods, procedures and/or other guidelines that AT&T personnel who design or install local or tandem switching facilities are expected to consider when designing or placing local or tandem switching facilities in the State of Washington. Include the reference number, title and date of issue of each document.

## Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its methods and procedures is not relevant to a determination of unbundled network element costs in this proceeding.

Notwithstanding these objections, AT&T responds that its local network is designed to meet or exceed Bellcore standards.

### Data Request No. 4-42:

Provide a complete list of all formal methods, procedures and/or other guidelines that AT&T personnel who design or install loop facilities are expected to consider when designing or placing loop facilities in the State of Washington. Include the reference number, title and date of issue of each document.

#### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its methods and procedures is not relevant to a determination of unbundled network element costs in this proceeding.

Notwithstanding these objections, AT&T responds that its local network is designed to meet or exceed Bellcore standards.

### Data Request No. 4-43:

Provide detailed maps of any and all distribution areas of AT&T's local network in the State of Washington. In each map, clearly display:

- a) the wire center boundary
- b) the distribution area
- c) distribution plant
- d) SAI
- e) Feeder plant

### Response:

AT&T objects to this request because it seeks information that is neither relevant nor calculated to lead to the discovery of relevant evidence. AT&T is not an incumbent local carrier and information regarding its network is not relevant to a determination of unbundled network element costs in this proceeding. In addition, AT&T objects that responding to this request may require a special study and that the burden of response outweighs its relevance.

Notwithstanding these objections, AT&T responds that most of its local network in the state of Washington is constructed through IRUs with other carriers.

Dated this 30<sup>th</sup> day of July, 2003.

## As to objections:

AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC. AND AT&T LOCAL SERVICES ON BEHALF OF TCG SEATTLE

By:

Mary E. Steele WSBA No. 14534 Davis Wright Tremaine LLP 2600 Century Square 1501 Fourth Avenue Seattle, WA 98101-1688

and

Mary B. Tribby Letty S.D. Friesen AT&T Law Department 1875 Lawrence Street, Suite 1575 Denver, Colorado 80202 (303) 298-6475 RECEIVED
RECORDADIA IN 1013
94 JUNI 10 AM S: 44
UTIL: AHO TRANSP.

. . . . 1

#### BEFORE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of:		
Unbundled Loop and Switching Rates; the Deaveraged	Docket No. UT-023003	
Zone Rate Structure; and		
Unbundled Network Elements, Transport,		
And Termination		

## JOINT RESPONSES OF AT&T & MCI TO VERIZON'S FIFTH SET OF DATA REQUESTS

AT&T Communications of the Pacific Northwest, Inc. ("AT&T") and MCI hereby provide the following joint answers and objections to Verizon's Fifth Set of Data Requests to AT&T and MCI.

I.

#### **GENERAL OBJECTIONS**

AT&T and MCI object to Verizon's definitions and instructions to the extent that they seek to impose obligations exceeding those imposed by the Commission's Rules and by the Washington Rules of Civil Procedure. More specifically, AT&T and MCI object to the definitions of AT&T and MCI as overly broad. AT&T and MCI further object to the extent that the Data Requests appear to require it to provide information in the possession of third parties. AT&T and MCI are required only to provide information in response to these requests that is in their possession, custody or control.

II.

## **SPECIFIC OBJECTIONS AND RESPONSES**

## Data Request No. 5-1

State whether there are any host/remote switch arrangements modeled by HM 5.3 for Verizon NW's network in the State of Washington. If the answer is yes, separately identify each host switch, and each host's subtending remote switches, by Common Language Location Identifier ("CLLI") code.

## Response No. 5-1

The default run filed with HM5.3 does not use the host/remote option.

## Data Request No. 5-2

Identify the assumptions HM 5.3 makes regarding line concentration ratios in end office switches. If an average is assumed, provide it and any supporting rationale and/or documents concerning, referring or relating thereto. If the line concentration ratios in end office switches are calculated on a per end office basis, provide a detailed description of how the calculation is performed.

## Response No. 5-2

HM5.3 makes no such assumption.

## Data Request No. 5-3

State whether HM 5.3 calculates an average CCS per residence and business access line. If the answer is yes, identify that average(s) and provide any supporting rationale and/or documents concerning, referring or relating thereto. If the average CCS per residence and business access line is calculated on a per-end office basis or otherwise, describe in detail the manner in which the calculation is performed.

#### Response No. 5-3

HM5.3 calculates an average offered load of 5.97 CCS per business line and 4.41 CCS per residential line for the entire study area. The calculations can be observed in the 'inputs' worksheet of the HM5.3 switching module, and the relevant inputs are described in the HAI Model Inputs Portfolio.

## Data Request No. 5-4

State whether HM 5.3 calculates an average number of lines per end office line module (Lucent 5ESS Line Unit, DMS Line Concentrating Module). If the answer is yes, identify that average and provide any supporting rationale, sources and/or documents concerning, referring or relating thereto. If the average number of lines per end office line module is calculated on a per-end office basis or otherwise, describe in detail the manner in which the calculation is performed.

### Response No. 5-4

HM5.3 does not calculate such an average.

## Data Request No. 5-5

With respect to the network modeled by HM 5.3 for Verizon NW in the State of Washington, state whether are there any end offices that contain fewer than two interoffice switch trunk facility routes between the end office and the other switching entities in the network. If the answer is yes, separately identify by CLLI code each such end office, as well as the other switching entity (if any) to which the end office has an interoffice switched trunking route, and provide any documents concerning, referring or relating thereto. If the answer is no, explain in detail why not.

### Response No. 5-5

AT&T and MCI object to this data request as it is vague and ambiguous. The phrase "interoffice switch trunk facility route" is unclear.

### Data Request No. 5-6

With respect to the network modeled by HM 5.3 for Verizon NW in the State of Washington, state whether HM 5.3 develops investments and/or costs for host and/or remote switches and/or the required associated switched interoffice facility and transmission investments and/or costs. If the answer is yes, describe in detail how HM 5.3 calculates these values and provide any documents concerning, referring or relating thereto. If the answer is no, explain in detail why not.

## Response No. 5-6

HM5.3 was filed for Verizon/Washington with the host/remote option disabled.

## Data Request No. 5-7

With respect to the network modeled by HM 5.3 for Verizon NW in the State of Washington, state whether HM 5.3 calculates any investments or costs associated with the umbilicals required between host and remote switches. If the answer is yes, describe in detail how HM 5.3 calculates these values and provide any documents concerning, referring or relating thereto. If the answer is no, explain in detail why not.

### Response No. 5-7

See response to DR 5-6.

## Data Request No. 5-8

Explain in detail the effect, if any, Internet access growth is expected to have on the average holding time per call in Washington for each of the next five years (2002-2007). Provide all studies and documents concerning, referring or relating to any analyses conducted by AT&T and/or MCI regarding the impact of the Internet on holding time. Also, identify how HM 5.3 captures any change in holding time.

### Response No. 5-8

AT&T and MCI have no way of estimating what, if any, effect Internet traffic will have on average holding times in the future in Washington. HM5.3 captures holding time changes by developing per-line usage according to ARMIS-reported DEM totals as described in the HAI Model Description.

## Data Request No. 5-9

Describe in detail the calculations performed by HM 5.3 to define the set of interoffice SONET rings that connect host, stand-alone and tandem switches to each other. Provide all documents concerning, referring or relating thereto.

## Response No. 5-9

These calculations are described in the HAI Model Description.

## Data Request No. 5-10

Explain in detail how HM 5.3 calculates the investment required for the redundant paths and associated transmission terminal equipment for the point-to-point rings that connect small offices to tandem switches. Provide any and all documents concerning, referring or relating thereto.

## Response No. 5-10

AT&T and MCI object to this data request as it is vague and ambiguous. The phrase "point-to-point rings that connect small offices to tandem switches" is unclear.

### Data Request No. 5-11

Explain in detail how HM 5.3 develops switch feature costs. Specify each switch feature included in the cost estimate and the cost associated with that feature. Provide all documents and studies concerning, referring or relating to the development of these feature costs.

## Response No. 5-11

All switch feature costs are assumed to be included in the end office switching maintenance factor. There is no breakdown by specific feature.

WUTC Docket No. UT-023003 AT&T and MCI Joint Compelled Supp. Responses to Verizon Fifth Set of Data Requests, November 21, 2003

#### Data Request No. 5-10:

Explain in detail how HM 5.3 calculates the investment required for the redundant paths and associated transmission terminal equipment for the point-to-point rings that connect small offices to tandem switches. Provide any and all documents concerning, referring or relating thereto.

## Response No. 5-10:

AT&T and MCI object to this data request as it is vague and ambiguous. The phrase "point-to-point rings that connect small offices to tandem switches" is unclear.

#### **SUPPLEMENTAL RESPONSE:**

All investment calculations pertaining to transport, including facilities that Verizon calls "redundant paths" and "point-to-point rings," are included in the HM5.3 switching/interoffice module, 'wire center investment' worksheet, cells AB2:BG2.

#### **Compelled Additional Supplemental Response:**

The HAI Model, including release 5.3 and its predecessors, was designed as a set of Excel workbooks specifically so that technically unsophisticated users with only a rudimentary working knowledge of computers could read the Model's formulas and understand their interrelationships using the set of Excel auditing tools. The cells within the modules contain formulas, not numbers, and all the relevant calculations are readily visible to anyone with the ability to open an Excel workbook and use a pointing device, such as a mouse, to examine the contents of the cells in the workbooks.

In the HM5.3 directory, usually installed in the 'Program Files' directory, there is a subdirectory entitled 'Modules.' In this subdirectory are several Excel workbooks, among them one named 'R53\_switching\_io.xls.' This workbook, like most of the others in the directory, contains several worksheets, each of which has a number of cells containing formulas (and not numbers). As noted in the supplemental response, the 'wire center investment' worksheet contains transport-related investment calculations in cells AB2:BG2.

The Model uses a simple point-to-point connection to connect small offices to tandems. There are no small offices in the Verizon-Washington model runs. A small office is defined by the Model as one serving fewer lines than the user-adjustable small office line limit parameter, whose default value is one line. Because Verizon has no wire centers in Washington containing fewer than one access line, there are no small offices in the Model run, and this Data Request is irrelevant.

			1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	•		
			٠

WUTC Docket No. UT-023003 AT&T and MCI Joint Compelled Supp. Responses to Verizon Fifth Set of Data Requests, November 21, 2003

# Compelled Additional Supplemental Response (con'd):

However, if there were "small offices" in a model run, as defined above, the Model would select a computed end-office-to-tandem distance found in the 'distance inputs' worksheet in column AN. The Model then would use this distance to calculate fiber cable investment and corresponding structure investment for that wire center (cells AT2:AZ2). The Model also would compute the transmission terminal investment, including SONET multiplexers, digital cross connect systems, and any required SONET regenerators, in cell BC2.

			3

# Data Request No. 5-12

Describe in detail how HM 5.3 calculates the investment required to engineer interoffice rings.

# Response No. 5-12

AT&T and MCI object to this data request as it is unreasonably broad. Subject to and without waiver of this objection, see Section 10.3.2 of the HAI Model Description.

### Data Request No. 5-13

Identify the number (including the percentage of the total) of end office switches modeled by HM 5.3 that have tandem functionality and perform tandem functions (i.e., the percentage of end offices that have tandem functionality). Provide the basis upon which this percentage was determined and produce all documents, data sources and calculations concerning, referring or relating thereto.

### Response No. 5-13

No end office switches are assumed to function as tandems.

# Data Request No. 5-14

Describe in detail how HM 5.3 calculates the investment required for switches that are designated as end office/tandem switches. Identify where in the workpapers, outputs, or documents associated with HM 5.3 this calculation is reflected, and provide all documents concerning, referring or relating thereto.

# Response No. 5-14

See response to 5-13.

# Data Request No. 5-15

Provide a complete copy in paper and electronic format of the "Special LERG Extract Data" ("SLED") is used as the basis for input(s) to HM 5.3.

# Response No. 5-15

AT&T and MCI are continuing to research the response to this data request and will provide it as soon as it becomes available.

### Data Request No. 5-16

Provide a list of switching entities, by CLLI code, used in HM 5.3. Also, list all entities that were part of the SLED, but not included in HM 5.3, and state the reason why each was excluded.

### Response No. 5-16

HM5.3 does not use a list of "switching entities," which are identified by eleven-character CLLI codes. It does contain eight-character CLLI designations for wire centers. Those used in the Model for Verizon-Washington are as follows:

ACMEWAXA	FRTNWAXX	NWPTWAXX
ALGRWAXX	GERGWAXX	OKDLWAXX
ANCRWAXX	GRFDWAXX	OKHRWAXX
ARTNWAXX	GRFLWAXX	PALSWAXX
BGLKWAXX	GRLDWAXX	PLMNWAXX
BLANWAXB	HLLKWAXX	QNCYWAXX
BNCYWAXX	<b>HMTNWAXA</b>	RCBHWAXX
BOTHWAXB	JUNTWAXA	RCFRWAXB
BRBAWAXA	KNWCWAXA	RCLDWAXA
BRPTWAXX	KNWCWAXB	RCLDWAXB
BRWSWAXA	KNWCWAXC	RDMDWAXA
BURLWAXX	KRLDWAXX	ROSLWAXA
CAMSWAXX	LACNWAXX	RPBLWAXA
CHLNWAXX	LARLWAXX	SKYKWAXX
CLVWWAXA	LATHWAXA	SLLKWAXA
CMISWAXA	LKGWWAXA	SMSHWAXA
CNCRWAXX	LKSTWAXA	SNHSWAXX
CNWYWAXX	LKWNWAXA	SOLKWAXX
CPVLWAXX	LOMSWAXA	STPSWAXA
CRLWWAXA	LVWOWAXX	STWDWAXX
CSHRWAXX	LYNDWAXX	SULTWAXX
CSTRWAXA	MLDNWAXA	SUMSWAXX
DMNGWAXA	MLSNWAXA	SWLYWAXX
DRTNWAXX	MNFDWAXX	TEKOWAXX
DVLLWAXX	MNSNWAXA	THTNWAXA
EDSNWAXX	MONRWAXX	TNSKWAXA
ENTTWAXX	MPFLWAXA	WDLDWAXA
EVRTWAXC	MRBLWAXX	WNTCWAXX
EVRTWAXF	MRWYWAXA	WRLDWAXA
EVSNWAXX	MTVRWAXX	WSHGWAXA
EWNCWAXA	MYVIWAXX	WSPTWAXA
FNDLWAXA	NCHSWAXX	WSRVWAXA
FRFDWAXA	NILEWAXX	WTVLWAXA

As to portion of this question that refers to the SLED, AT&T and MCI are continuing to research the response and will provide responsive information as soon as it becomes available.

# Data Request No. 5-17

HM 5.3's Model Description indicates that there are two methods for costing end office switching systems. Identify which method is used to develop the end office switching costs in HM 5.3. Indicate precisely where in HM 5.3 this method is "set" and what the user-adjustable inputs are for the "A" and "B" values. Provide all back-up data, vendor quotes and documents concerning, referring or relating to the development of the "A" and "B" values.

#### Response No. 5-17

HM5.3 uses the switching investments developed by the FCC as explained in the HAI Inputs Portfolio as the default values for its fixed and per-line end office switching investment inputs for host/standalone and remote switches. As the documentation clearly explains, if the user has an overall fixed investment value he or she would like the model to use, that value can be entered through the user input forms and will override the Model's use of the default values. It is thus the user who determines which approach will be taken by the Model, as the model documentation clearly explains. AT&T/MCI do not have the underlying information used by the FCC in its study.

# Data Request No. 5-18

Provide the vendor name and model of the 720-port capacity signal transfer point ("STP") used as the basis of the STP investments in HM 5.3. Provide all vendor quotes, calculations, contracts and documents concerning, referring or relating to the STP investment used in HM 5.3.

# Response No. 5-18

The STP investments assumed in HM5.3 are based on a Bell South FCC ex parte filing. AT&T/MCI do not have access to any such underlying documentation or to the identification of the STP vendor.

# Data Request No. 5-19

State whether HM 5.3 assumes that operator tandem functionality is performed by tandems dedicated solely for the purpose of providing operator services.

- a) If the answer is yes, provide the number of tandems used by HM 5.3 and the associated investments.
- b) If the answer is no, explain in detail how the operator services' tandem functionality is handled in HM 5.3, and provide the number of switches, types of switches and their associated investments that provide this functionality.

### Response No. 5-19

HM5.3 calculates that 7 OS tandems are needed with a total associated investment of \$12.1 million.

# Data Request No. 5-20

Provide a complete list of each type of equipment, along with its corresponding price, comprising the ring terminal equipment located in the wire center, as modeled by HM 5.3. Provide the source for the equipment configuration and all supporting documents, vendor information, quotes, and calculations concerning, referring or relating thereto.

### Response No. 5-20

All such equipment is listed in the HIP. Investments are obtained from the Bell South FCC ex parte, also as noted in the HIP.

### Data Request No. 5-21

Describe in detail the equipment configurations assumed in HM 5.3 to create high-capacity inter-office transport channels (e.g., DS-1s, DS-3s, and OC-3s) that extend across more than one IOF ring.

- a) Identify all costs estimated by HM 5.3 (investment and expense) to provide each such configuration.
- b) Explain in detail how HM 5.3 estimates the total number of ring interconnections of each type required by the network modeled by HM 5.3 for Verizon NW in the State of Washington.
- c) Explain in detail the manner in which the number of ring interconnections estimated by HM 5.3 for Verizon NW in the State of Washington.
- d) Identify where in HM 5.3's output reports this information can be located.

### Response No. 5-21

Responsive information is contained in the information previously provided to Verizon. The network configuration and investments and its ring and ring interconnection algorithms are explained in the model description and the HIP.

### Data Request No. 5-22

Verizon NW's IOF network must provide unbundled high-capacity IOF channels at all standard optical channel rates (e.g., OC-3, OC-12, OC-48).

- a) State whether HM 5.3 produces cost estimates for these unbundled elements? State whether an estimate for these elements be derived from HM 5.3's outputs.
- b) Describe in detail how HM 5.3 estimates demand for these elements.
- c) Describe in detail the specific algorithms, inputs and/or outputs involved in estimating the cost of these elements.

### Response No. 5-22

- a) HM5.3 does not produce cost estimates for these services.
- b) See response a).
- c) See response a).

# Data Request No. 5-23

Provide a list of each wire center, by CLLI code, where HM 5.3 estimates that more than one end office switch is required.

# Response No. 5-23

There are no such wire centers.

### Data Request No. 5-24

With respect to the calculation of end office switch fixed and per line investment described in HM 5.3's Inputs Portfolio:

- a) Identify what percentage of lines is modeled on GR-303 peripherals.
- b) Identify what percentage of lines is modeled on TR-008 peripherals.
- c) Identify what percentage of lines is modeled on analog line units.
- d) Identify what percentage of trunks is modeled to be digital trunks.
- e) Identify what percentage of trunks is modeled to be analog trunk.

### Response No. 5-24

AT&T and MCI object to this data request as it is vague and ambiguous. Does the requested information pertain to what is contained in the investment input assumptions or to how the Model computes total end office switching investment?

# Data Request No. 5-25

Provide all supporting information, data and documents concerning, referring or relating to the interoffice transport and 4-wire facility interface connection costs AT&T and MCI are proposing in this proceeding.

# Response No. 5-25

AT&T and MCI object to this data request as it is unreasonably broad.

### Data Request No. 5-26

Provide all supporting information, data and documents (including, but not limited to, any invoices or contracts) concerning, referring or relating to the equipment prices that were used to identify the cost estimates for interoffice transport and 4-wire facility interface connection rate elements AT&T and MCI are proposing in this proceeding.

### Response No. 5-26

AT&T and MCI object to this data request as it is unreasonably broad.

# Data Request No. 5-27

Identify specifically where the cost identified by HM 5.3 for DS-1 interoffice transport accounts for the investment necessary to purchase a DS-1 to DS-3 multiplexer. If the answer confirms that the investment for a DS-1 to DS-3 is used, identify the manufacturer and brand name of the multiplexer assumed by HM 5.3.

# Response No. 5-27

There is no such multiplexer assumed in the calculations.

# Data Request No. 5-28

State whether AT&T and MCI are proposing a per minute of use charge for dedicated transport interoffice facilities.

# Response No. 5-28

AT&T and MCI are proposing fixed and per mile charges for dedicated transport.

# Data Request No. 5-29

Identify and describe in detail the assumptions used to identify the interoffice facility costs proposed by AT&T and MCI in this proceeding.

# Response No. 5-29

AT&T and MCI object to this data request as it is unreasonably broad. Subject to and without waiver of this objection, responsive information is contained in the HAI model documentation and HAI Inputs Portfolio, previously produced to Verizon.

# Data Request No. 5-30

Identify the type of SONET equipment used by HM 5.3 to develop interoffice transport costs.

# Response No. 5-30

AT&T and MCI object to this data request as it is vague and ambiguous. The phrase "type of SONET equipment" is unclear.

# Data Request No. 5-31

Identify the SONET technology weightings used by HM 5.3 to identify interoffice costs (e.g., 15% OC-3, 25% OC-12, 35% OC-48, 25% OC-192).

# Response No. 5-31

No such weightings are used.

WUTC Docket No. UT-023003 AT&T and MCI Joint Supplemental Responses to Verizon Fifth Set of Data Requests, November 21, 2003

### Data Request No. 5-30:

Identify the type of SONET equipment used by HM 5.3 to develop interoffice transport costs.

### Response No. 5-30:

AT&T and MCI object to this data request as it is vague and ambiguous. The phrase "type of SONET equipment" is unclear.

#### **SUPPLEMENTAL RESPONSE:**

HM5.3 "assumes" that SONET add-drop multiplexers are used in the interoffice network. SONET regenerators are also employed as required.

### **Compelled Additional Supplemental Response:**

For the Verizon Washington runs, HM5.3 uses SONET OC-48 ADMs that are typified by, e.g., the Fujitsu FLM-2400, along with a generic OC-48 regenerator. The equipment investments used by the Model are those submitted by Bell South to the FCC in an ex parte presentation in August, 1998. Because these numbers are based on Bell South equipment contracts, the Model's sponsors have no way of knowing which vendors and equipment model numbers were used in the preparation of the input values.

			1

# Data Request No. 5-32

Provide the Local Exchange Routing Guide ("LERG") data used to estimate the number of shared-use switches in determining the tandem/EO wire center common factor input.

# Response No. 5-32

AT&T and MCI are continuing to research the response to this data request and will provide responsive information when it becomes available.

### Data Request No. 5-33

Provide copies of all invoices, contracts, catalogs, published estimates or other documents concerning, referring or relating to HM 5.3's tandem common equipment investment, including all factors upon which that determination is based. Provide a copy of all documents concerning, referring or relating to the establishment of the appropriate input for Verizon NW in the State of Washington, including all computations performed to generate these inputs.

### Response No. 5-33

The tandem investment data are based on AT&T's Capacity Cost Study, which is attached.

Dated this 30<sup>th</sup> day of July, 2003.

As to objections:

AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC. AND AT&T LOCAL SERVICES ON BEHALF OF TCG SEATTLE

Mary E. Steele WSBA No. 14534 Davis Wright Tremaine LLP 2600 Century Square 1501 Fourth Avenue Seattle, WA 98101-1688

and

Mary B. Tribby Letty S.D. Friesen AT&T Law Department 1875 Lawrence Street, Suite 1575 Denver, Colorado 80202 (303) 298-6475

and

**MCI** 

By:\_\_\_\_\_\_\_ Michel Singer Nelson 707 17th Street, Suite 4200 Denver, Colorado 80202 (303) 390-6206 michel.singer\_nelson@mci.com

		·	·
		,	

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of:
Unbundled Loop and Switching Rates; the Deaveraged
Zone Rate Structure; and
Unbundled Network Elements, Transport,
and Termination

Docket No. UT-023003

AT&T RESPONSES TO VERIZON'S ELEVENTH SET OF DATA REQUESTS

AT&T Communications of the Pacific Northwest, Inc. ("AT&T") provides the following responses to Verizon's Eleventh Set of Data Requests.

I.

#### **GENERAL OBJECTIONS**

AT&T objects to Verizon's definitions and instructions to the extent that they seek to impose obligations exceeding those imposed by the Commission's Rules, Washington Rules of Civil Procedure, or prior rulings in this proceeding. More specifically, AT&T further object to the definition of AT&T as overly broad and to the instruction to provide any information beyond the scope of this docket and not within AT&T's possession, custody and control. AT&T hereby incorporates these general objections into each of the specific objections and responses provided below.

II.

#### **SPECIFIC OBJECTIONS AND RESPONSES**

SECONDO TO AN 9: 44

STAND TRANSP.

#### Data Request No. 11-1:

With respect to Mr. Fassett's claim, on pages 6-7 of his May 12, 2004 testimony, that "In other cost dockets or comparable proceedings, whenever ILECs have produced their actual competitively bid contracts for engineering design work, those contracts have validated the reasonableness of the OSP engineering cost estimates in the HM 5.3 model":

Please specify every other "cost docket" and "comparable proceeding" referred to in the above statement, and produce all documents or other information showing that contracts produced in these proceedings have "validated the reasonableness of the OSP engineering cost estimates in the HM 5.3 model."

#### Response:

AT&T objects to this data request on the grounds that it is overbroad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. AT&T further objects on the grounds that the data request seeks the confidential data of third parties which is not in the possession, custody, or control of AT&T. Subject to, and without waiver of, these objections, see, e.g., response to Data Request No. 11-5. Mr. Fassett does not have a complete list of all cost dockets or other proceeding in which ILECs have produced their OSP engineering contracts. The other most recent cost docket of which Mr. Fassett is aware in which a major ILEC produced its actual OSP Engineering contract was Utah PSC Docket No. 00-049-105, in which Owest produced its OSP engineering contract. Mr. Fassett also understands that Owest produced comparable contracts in recent Arizona and Colorado cost proceedings. These and all other OSP engineering contracts produced by ILECs in the cost proceedings in which Mr. Fassett participated were classified as "confidential." In compliance with the protective orders or agreements under which those contracts were disclosed to Mr. Fassett, Mr. Fassett has destroyed or returned those contracts and all documents that included confidential information derived from those contracts. Mr. Fassett thus no longer has any ILEC OSP Engineering contracts, or any specific analysis that includes confidential information, in his possession, custody, or control.

### Data Request No. 11-2:

With respect to page 17 of Mr. Fassett's testimony, please identify and provide the "proprietary joint pole agreements that GTE Northwest had with Public Utility District No.1 of Snohomish County and some joint pole agreements that US West had executed in the State of Washington."

### Response:

AT&T objects to this data request on the grounds that Verizon already possesses the requested documents or has the same or better access to, or ability to obtain, those documents as AT&T. Verizon (formerly GTE Northwest) produced the proprietary joint pole agreement between GTE Northwest and Public Utility District No.1 of Snohomish County that Mr. Fassett referenced in his testimony in WUTC Docket Nos. UT-960369, UT-960370 & UT-960371. The U S WEST contracts to which Mr. Fassett referred were also produced as confidential documents in that proceeding, and in compliance with the protective order issued in that proceeding, Mr. Fassett destroyed or returned those documents to Qwest (formerly U S WEST). Verizon, as a party in that docket, thus had the same access to, and opportunity to review, these documents as AT&T, and Verizon, as a party in this docket, has the same ability as AT&T to re-obtain those agreements from Qwest.

#### Data Request No. 11-3:

Please identify the Verizon engineering guidelines (and relevant section of these guidelines) that Mr. Fassett is referring to on page 21 when he states that "Verizon's own Engineering Guidelines recognize the efficiency that can be achieved by blowing fiber cable."

#### Response:

The efficiency to which Mr. Fassett referred is discussed in at least the following sections of Verizon's Engineering Guidelines:

Innerduct-2001-00047-OSP.Pdf file on Verizon Proprietary Response to WA DR 3-007

Outside Plant Construction and Engineering Joint Letter Issue 1.0 Date 05/08/2001

Document Number 2001-00047-OSP

### 2.0 Overview: (Page 3 of 11)

"The goal of this document is to provide Guidelines that will aid the Outside Plant Engineering and Construction organizations in Verizon to design and construct fiber optic installations based on the most productive and efficient placing method available today, fiber jetting. To ensure that the jobs are built as designed, specially using the fiber jetting method."

#### 2.1 Executive Summary

"When analyzing fiber installation in this manner it has been determined that, in most cases, the most productive and efficient technique is to jet or air blow the fiber cable through innerduct for aerial, underground and buried applications versus the conventional pulling and lashing method."

"While the primary efficiency of this process is the elimination of costly splicing, several other benefits are realized in jetting fiber."

#### 6.0 Summary (Page 5 of 11)

"By adopting the cable jetting process for the vast majority of fiber placements, Verizon has taken a proactive approach to building an advanced high speed network based on productivity and efficiency."

Additional reference to fiber blowing or jetting efficiency is included in:

Document Number: Draft 2003-00235-OSP Engineering & Planning Support Method and Procedure Section 4.1 (Page 18 of 22)

"Where high-speed/high production fiber blowing placements are available."

### Data Request No. 11-4:

Please provide the "independent drop length study" that Mr. Fassett refers to on page 24 of his testimony.

### Response:

The "independent drop length study" that Mr. Fassett referred to in his testimony is attached. Alaska Map Science performed the study in 2003 and the sampling included 297 drops from 20 different census block groups in the Anchorage area. Summary results:

Length of straight line drops

Average 61.3 feet Standard Deviation 52.3 Standard Error 3.0

Length of Drops constrained to North, South, East, and West

Average 79.0 feet Standard Deviation 66.9 Standard Error 3.9

### **Data Request No. 11-5:**

With respect to pages 25-26 of Mr. Fassett's testimony, please provide all documents showing that the "actual fiber prices" for ACS were lower than "the fiber cost used in HM 5.3," and showing what these "actual fiber prices" were. Please also identify the year and docket number of the proceeding in which such prices were produced.

### Response:

AT&T objects to this data request on the grounds that it is overbroad and unduly burdensome in seeking "all documents," and on the grounds that Verizon improperly seeks the confidential information of third parties that is not in the possession, custody, or control of AT&T. Subject to, and without waiver of, these objections, the actual fiber prices for ACS that Mr. Fassett refers to were included in ACS's Cost Model and Support Documentation filed in Docket 96-089 on August 29, 2003 with the Regulatory Commission of Alaska. ACS's actual contract information with vendors is classified as "confidential," but ACS's fiber material cost input values were developed from those actual contracts. The following is a comparison of ACS's cost model fiber material costs and HM 5.3 fiber material costs:

Fiber Material Cost Comparison						
Input Unit HM 5.3 ACS						
Item						
2 fiber	ft.		\$0.21			
6 fiber	ft.	\$0.36	\$0.25			
12 fiber	ft.	\$0.59	\$0.31			
24 fiber	ft.	\$0.89	\$0.44			
36 fiber	ft.	\$1.12	\$0.57			
48 fiber	ft.	\$1.60	\$0.69			
72 fiber	ft.	\$2.30	\$0.94			
96 fiber	ft.	\$2.97	\$1.20			
144 fiber	ft.	\$4.30	\$1.70			
216 fiber	ft.	\$6.42	\$2.46			
288 fiber	ft.	\$8.51	\$3.22			

To validate the reasonableness of ACS's Cost Model fiber material cost inputs, Mr. Fassett and his associates requested fiber material quotations from various suppliers for Anchorage, Alaska. ACS's fiber cable material costs were deemed reasonable and

appropriate. The following illustrates a comparison of those fiber material price quotations to ACS's cost model fiber material costs and HM 5.3 fiber material costs:

Fiber Material Costs							
Input	Unit	Vendor	Vendor	Vendor	Vendor	HM 5.3	ACS
Item		"A"	"B"	"C"	"D" ***		
2 fiber	ft.				\$0.147		\$0.21
6 fiber	ft.				\$0.139	\$0.36	\$0.25
12 fiber	ft.		\$0.40	\$0.31	\$0.187	\$0.59	\$0.31
24 fiber	ft.	\$0.29	\$0.52	\$0.54	\$0.285	\$0.89	\$0.44
36 fiber	ft.		\$0.86	\$0.71	\$0.406	\$1.12	\$0.57
48 fiber	ft.	\$0.51	\$0.90	\$0.88	\$0.509	\$1.60	\$0.69
72 fiber	ft.		\$1.44	\$1.18	\$0.712	\$2.30	\$0.94
96 fiber	ft.	\$0.92	\$1.67	\$1.62	\$0.913	\$2.97	\$1.20
144 fiber	ft.		\$2.95	\$2.31	\$1.500	\$4.30	\$1.70
216 fiber	ft.		\$5.27	\$3.45	\$2.041	\$6.42	\$2.46
288 fiber	ft.		\$5.57	\$4.61	\$2.721	\$8.51	\$3.22
***Shippir	***Shipping FOB additional						

This comparison indicates that HM 5.3 fiber cable material costs are greatly overstated, even in the Anchorage, Alaska marketplace. Not a single vendor/supplier's fiber cable material cost or ACS's fiber cost even approach the fiber cable material cost inputs in HM 5.3.

# Data Request No. 11-6:

With respect to p. 28 of Mr. Fassett's testimony, please provide all documents showing that "In Alaska, ACS and GCI have successfully unbundled IDLC with multiple interface groups using Advance Fibre Communications DLC equipment."

#### Response:

AT&T objects to this data request on the grounds that it is overbroad and unduly burdensome in seeking "all documents," and on the grounds that Verizon improperly seeks the confidential information of third parties that is not in the possession, custody, or control of AT&T. Subject to, and without waiver of, these objections, Mr. Fassett's testimony is based upon information provided to him while working on a redesign project in Anchorage, Alaska in 2003. OSP engineers employed by GCI confirmed that they have unbundled IDLC by utilizing the multiple interface group functionality of GR-303 IDLC with Advance Fibre Communications equipment.

Sites to date: Ridgemont, Sahalee, Klatt, Keno Hills, Sylvan, & Laurel/Dowling Link to ACS Network Change Notifications: <a href="http://www.acsalaska.com/sitemap.stm">http://www.acsalaska.com/sitemap.stm</a>

#### Data Request No. 11-7:

Please state whether any of "the successful unbundl[ing]" of IDLC referred to in DR 11-6 involved provisioning a standalone loop to multiple CLECs over one IDLC connection. If the answer is anything but an unqualified "No," please specify every such sharing arrangement, every CLEC involved in each such arrangement, and describe how the unbundling addressed the "provisioning, alarm reporting, [and] sharing of test resources" issues referred to at page 12-55 of the Telcordia Notes on the Networks document provided with Mr. Donovan June 26, 2003 Direct Testimony and Mr. Turner's April 20, 2004 Rebuttal Testimony.

#### Response:

No, the successful unbundling of IDLC that Mr. Fassett referred to was not for multiple CLECs over one IDLC connection. It was only utilized by GCI for their unbundled loops. As Mr. Fassett states in his testimony, however, those types of shared interface groups are technically feasible and can be arranged.

#### **Data Request No. 11-8:**

Please provide the "Design Center Engineering (DECEN) 11/83 course materials" referred to at page 11, footnote 1 of Mr. Fassett's testimony.

#### Response:

AT&T objects to this data request on the grounds that the requested information is already in Verizon's possession. As part of Mr. Fassett's 1997 deposition in WUTC Docket Nos. UT-960369, UT-960370 & UT-960371, Verizon (then GTE) requested and was provided with all of Mr. Fassett's work materials, including "Design Center Engineering (DECEN) student work binder (labeled as #50 of the materials provided). Subject to, and without waiver of, this objection, a copy of Section 3 Page 12 of that document is attached.

#### Data Request No. 11-9:

Please provide "AT&T practices 901-350-250 & 915-251-300, -301 Copper Cable – Secondary (Distribution) Design – Urban and Suburban- Paired Cable" referred to at page 11 of Mr. Fassett's testimony.

#### Response:

Attached is a copy of section 3, pages 9 & 10, of "AT&T practices 901-350-250 & 915-251-300, -301 Copper Cable – Secondary (Distribution) Design – Urban and Suburban-Paired Cable," which is referenced on page 11 of Mr. Fassett's testimony.

# Dated this 25th day of May 2004.

# As to objections:

# AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC.

By:
Gregory J. Kopta
WSBA No. 20519
Davis Wright Tremaine LLP
2600 Century Square
1501 Fourth Avenue

Seattle, WA 98101-1688

and

Mary B. Tribby Letty S.D. Friesen AT&T Law Department 1875 Lawrence Street, Suite 1575 Denver, Colorado 80202 (303) 298-6475

95051MT9 RECOTTA DI LA SELLA 94 JUN 10 - MI 9: 44

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of:
Unbundled Loop and Switching Rates; the Deaveraged
Zone Rate Structure; and
Unbundled Network Elements, Transport,
and Termination

Docket No. UT-023003

# AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC.'S RESPONSES TO VERIZON NORTHWEST INC.'S TWELFTH SET OF DATA REQUESTS

AT&T Communications of the Pacific Northwest, Inc. ("AT&T") provides the following responses to Verizon's Twelfth Set of Data Requests.

I.

#### **GENERAL OBJECTIONS**

AT&T objects to Verizon's definitions and instructions to the extent that they seek to impose obligations exceeding those imposed by the Commission's Rules, Washington Rules of Civil Procedure, or prior rulings in this proceeding. More specifically, AT&T further object to the definition of AT&T as overly broad and to the instruction to provide any information beyond the scope of this docket and not within AT&T's possession, custody and control. AT&T hereby incorporates these general objections into each of the specific objections and responses provided below.

II.

# SPECIFIC OBJECTIONS AND RESPONSES

#### **DATA REQUESTS**

#### Data Request No. 12-1:

Provide a complete copy of the Design Center Engineering (DECN) 11/83 course materials cited to on page 11, footnote 1 of Mr. Fassett's Reply Testimony.

# **AT&T Response:**

Please see AT&T's Objections and Response to Verizon Data Request 11-8.

#### Data Request No. 12-2:

Referring to the statement on page 11 of Mr. Fassett's Reply Testimony that "Verizon witnesses have failed to recognize that those distribution areas in core or high-density areas have 'no maximum ultimate unit restriction," define the terms "core areas" and "high-density areas," as used by Mr. Fassett and explain in detail any and all differences between the two types of areas. Identify the appropriate sizing criteria that Mr. Fassett advocates should be applied for purposes of sizing distribution areas in both "core areas" and "high density areas," including any and all differences relative to business and/or residential environments. Provide copies of all documents concerning, referring or relating to the sizing criteria Mr. Fassett contends should be applied, including any and all engineering standards or practices that support Mr. Fassett's position.

#### **AT&T Response:**

Please see AT&T's Response to Verizon Data Request 11-9.. As stated in Mr. Fassett's Reply Testimony "Verizon witnesses have failed to recognize that those distribution areas in core or high-density areas have "no maximum ultimate unit restriction." The term "core" or "high densities" are interchangeable and relate typically to the same density areas. These may include high rise structures or multiple structures with a significant number of customer locations such as very large apartment or condo complexes.

#### Data Request No. 12-3:

Referring to the statement on page 15 of Mr. Fassett's Reply Testimony that "utilities are able to share the cost of the pole and associated structures such as anchors, etc.," specifically identify all support structure that would be classified as exempt material (i.e., guys, anchors, braces, etc). State whether utilities typically share the costs of each of these exempt material items, and, if so, whether the percentage of the total cost assigned to the ILEC is the same for each of the exempt material items.

#### **AT&T Response:**

Exempt materials include anchors, guy rods, adapters, guy strand, guy wraps or ties, guards, through bolts, nuts, washers and any other hardware that may be associated with attachments to or supporting the pole structure. Utilities commonly share the cost of anchors and guy rods as Mr. Fassett states on page 24 of the his reply testimony. Typically the costs of "joint" anchors are shared equally with the parties that will be attaching down guys to the anchor. These are considered "exempt material" and not capitalized in plant accounts. Push braces, (pole), if required or used are typically treated as part of the joint pole structure and their cost is shared the same as regular poles.

#### Data Request No. 12-4:

Referring to page 16 of Mr. Fassett's Reply Testimony, state all facts upon which Mr. Fassett relies for the statement "the communications or low voltage users pole structure cost should be divided between the ILEC and at least one other user. This results in the Telephone Company actually being responsible for 25% or less of the pole structure costs," and provide all documents concerning, referring or relating thereto. Also, explain in detail how attachment fees are applied or costs are allocated (e.g., based on number of users, number of attachments, amount of pole space occupied, etc) between the ILEC and other users.

#### **AT&T** Response:

Mr. Fassett's statement is based upon the numerous joint pole agreements that he has reviewed or actually administered throughout his 33-year career. Most joint agreements provide a detailed pole schematic that clearly defines joint use pole space allocations between the high voltage user or electric company and the low voltage users or communications space. These pole space allocations are based upon the safety requirements of the National Electric Code. The number of low voltage users or providers typically varies by density areas. For example in rural or low-density areas, cable-vision may not be attached on any or many poles, while in more dense areas such as suburban areas cable-vision will typically be attached to most joint pole structure. As density increases so does the potential for a greater number of low voltage users attaching their facilities to joint pole structure. If the low voltage users are responsible for 40% of the overall joint pole structure cost and those users include the ILEC and one other low voltage user, then each of those parties would be responsible for 20% of the overall joint pole cost. If the particular joint agreement required that the low voltage users were responsible for 50% of the overall joint pole structure cost, then each of those low voltage users should be assessed 25% of that overall pole cost. Attachment 12-4 (a) hereto is a diagram of the "space allocations" for a typical 40-foot joint pole.



#### Data Request No. 12-5:

Referring to pages 15-16 of Mr. Fassett's Reply Testimony, identify each and every instance in which AT&T/MCI have paid an ILEC an allocated cost of: (a) pole structure cost, (b) underground structure cost, and (c) buried structure cost and provide all documents concerning, referring or relating thereto. In each case, provide the percentage of the investment and/or cost for each of the previously referenced types of structure.

#### **AT&T Response:**

AT&T objects that this request is overly broad, extremely burdensome, and does not seek relevant information. Mr. Fassett's testimony does not reference payments by AT&T to any ILEC.

# Data Request No. 12-6:

Referring to pages 16-18 of Mr. Fassett's Reply Testimony, explain in detail the basis for HM 5.3's assumption that an efficient ILEC would bury multiple feeder cables, a distribution cable, and an IOF cable in one trench, and would do so in a coordinated effort with two other users placing their cable facilities in the same trench, and provide all documents concerning, referring or relating thereto.

#### **AT&T Response:**

AT&T objects that this data request mischaracterizes Mr. Fassett's testimony. Verizon has inappropriately assumed that there will always be "multiple" feeder cables, which is not the case. In sizing the feeder network, HAI 5.3 calculates the feeder requirements for each cluster or distribution area along the feeder route and those feeder requirements are accumulated back to the central office and will also determine if feeder will be copper or fiber fed IDLC. The model then applies the appropriate feeder fill factor and selects the next available cable size to meet those requirements. If more than one feeder cable were required, then the model would place another feeder cable.

In a TELRIC environment it would be appropriate to assume that any feeder, distribution and IOF cables would be able to be placed in a common trench in portions of the feeder, distribution and IOF routes and essentially share the trench cost accordingly. All of these plant facilities generally follow the same feeder routes as they extend outward from the central office. Likewise some structure sharing would be achievable with other utilities as assumed by HAI 5.3. The utilization of inner-duct and conduit has helped minimize any coordination issues with other utilities and inner-duct has greatly increased the efficient placement of fiber cables in trenches simultaneously with copper plant. Supporting documentation is also available in the HAI 5.3 Inputs Portfolio.

#### Data Request No. 12-7:

Referring to page 18 of Mr. Fassett's Reply Testimony, state all facts on which Mr. Fassett relies for the statement, "HM 5.3 appropriately assumes that feeder plant will be able to share structure with distribution 55% of the time," and provide all documents concerning, referring or relating thereto.

# **AT&T Response:**

Please refer to HIP 5.3, Section 4.1.8 Amount of Feeder Structure Common with Distribution

#### Data Request No. 12-8:

Referring to page 18 of Mr. Fassett's Reply Testimony, explain in detail the basis for HM 5.3's assumption that feeder facilities share structure with IOF facilities for 75% of the IOF route and provide all documents concerning, referring or relating thereto.

# **AT&T Response:**

Please refer to HIP 5.3, Section 5.5.22. Fraction of Interoffice Structure Common with Feeder and as discussed in Mr. Fassett's Reply Testimony.

#### Data Request No. 12-9:

Referring to page 20 of Mr. Fassett's Reply Testimony, state all facts on which Mr. Fassett relies for the statement "whenever buried or underground structure sharing takes place it is not necessary to provide wider or deeper trenches in most applications," and provide all documents concerning, referring or relating thereto. Explain in detail the basis of the assumption that the depth and width of trenches for underground facilities would not vary based on the number of cables or the number of other users placing conduit facilities in the same trench and provide all documents concerning, referring or relating thereto. Similarly, explain the basis of the assumption that the depth and width of trenches for buried facilities would not vary based on the number of cables or the number of other users placing conduit facilities in the same trench and provide all documents concerning, referring or relating thereto.

#### AT&T Response:

As stated in Mr. Fassett's Reply Testimony, for most applications it is not necessary to provide wider or deeper trenches to accommodate buried and underground structure sharing. His testimony also states that if greater depth is required, typically only minimal or no additional contractor cost is incurred. Mr. Fassett's statements are based upon his extensive experience in designing joint use trenches, administering joint use agreements, awarding and administering buried trenching contracts and adherence to OSHA and National Electric Code requirements.

#### Data Request No. 12-10:

Referring to page 20 of Mr. Fassett's Reply Testimony, explain in detail why Mr. Fassett contends it is appropriate for a geographically deaveraged UNE study to offset sharing saving[s] between density zones.

### **AT&T Response:**

On page 20 of his Reply Testimony Mr. Fassett states that in the lower density zones that if joint buried trenching is not utilized for buried placement, then direct plowing would be the typical method of placement.

"If for some reason joint buried trenches are not being utilized, the typical placement method in many density zones, especially the least dense zones, would be direct plowing placement. In the more dense zones, placement may involve trenching, plowing or boring or a combination of those placement methods. If the direct plow method is utilized, the cost is usually considerably less than trenching and would off set structure sharing saving in the lower density zones."

His testimony simply describes the most efficient means of buried cable placement if joint buried trenches are not going to be utilized.

#### Data Request No. 12-11:

Referring to the statement on page 21 of Mr. Fassett's Reply Testimony that "[t]here have been various technological improvements that have increased the efficiency of placing and installation work," describe in detail each and every technological improvement that has increased the efficiency of placing and installing:

- a. aerial copper and fiber cable;
- b. underground copper cable;
- c. for each technological improvement identified in response to subparts (a) and (b), explain in detail whether the use or application of the technology would vary by geographic area (i.e., urban, suburban, and rural)
- d. for each technological improvement identified in response to subparts (a) and (b), explain in detail whether the cable size would impact any increase(s) in efficiency;
- e. for each fiber cable size used in HM 5.3, state whether the use of blowing or "jetting" placing techniques are currently used. If the answer is anything but an unqualified no, specify the maximum distance that the blowing or "jetting" placing techniques can be used for each size fiber cable.

#### **AT&T Response:**

Please refer to AT&T's Responses to Data Requests 9-29 and 11

#### Data Request No. 12-12:

Referring to page 23 of Mr. Fassett's Reply Testimony, provide all engineering practices other documents upon which Mr. Fassett relied for the claim that engineers designing a forward-looking network would place block cable. Also, explain in detail:

- a. whether regulations such as fire laws and/or public safety would limit the placement of block cable presently or in the future;
- b. whether Mr. Fassett is aware of any ILEC currently placing block cable on any new construction, and if so, identify the ILEC;
- c. whether there would be any limitations on the number and size(s) of block cables attached to buildings;
- d. all other things being equal, whether the length of cable reels used would vary between placement of aerial block cable versus aerial cable on poles;
- e. all other things being equal, whether the amount of time would differ between placing block cable versus aerial cable on poles;
- f. all other things being equal, whether there would be higher maintenance and repair costs for block cable versus aerial cable on poles; and
- g. all other things being equal, whether the splicing set up time would differ for block cable versus aerial cable on poles.

#### **AT&T Response:**

- a. Yes, the use of block cable may be restricted or limited by aesthetics, codes, ordinances, tariffs and safety issues.
- b. Mr. Fassett does not have first hand knowledge of whether any ILECs are or are not currently placing any block cable. It is his opinion that there is a limited amount of block cable being placed especially where building owners have not provided the necessary conduit structure from the property line to the building.
- c. Aesthetics, attachment structure and public safety would naturally limit the size and number of block cables.
- d. Due to the limited distances that block cable is actually placed, the cable reels would typically be smaller than the "420" reels that may be used on a large aerial cable placement job.
- e. Placing time to attach a block cable to a building, may and probably in most cases would be longer on a per foot basis than regular "down the street" aerial placing operations. This is do the typical short distances, set up times, etc.
- f. There should be no difference in the maintenance costs and block cable may have less maintenance as a general rule.
- g. Splicing time may or may not differ depending upon the location of splices on the building.

Block and Building Cable Placing is covered under BSP 627-610-205.

#### Data Request No. 12-13:

State whether block cable extends from one building to another. Identify what type of cable support structure (e.g., a pole, a conduit system, a buried trench) is associated with block cable at the point in the loop network nearest to the serving area interface, but before the block cable is attached to a building(s).

#### **AT&T Response:**

Block cable may extend between buildings

All three structure types may be used in different situations.

Conduit structure would be used when the <u>building owner has provided conduit</u> from the property line to the building or into the building. This is the most common structure used to access a building or between buildings.

Buried trench structure may be used when provided by the building owner from the property line.

In some situations it is possible to have an aerial section of building or block cable from an aerial distribution cable. Typically this would only apply to a building with small pair requirements and small diameter cables would be utilized. In addition the span distance would typically be short, usually less than 100 feet.

# Data Request No. 12-14:

Referring to page 24 of Mr. Fassett's Reply Testimony, provide a complete copy of the General Communications Inc. drop length study referred to by Mr. Fassett.

# AT&T Response:

Please See AT&T's Response to Verizon Data Request No. 11-4

#### Data Request No. 12-15:

Referring to the discussion on page 25 of Mr. Fassett's Reply Testimony regarding the comparison of fiber cable material prices between Verizon NW's contract data and HM 5.3's material prices, state:

- a. whether the comparisons reflect the same loadings (e.g., transportation, warehousing, and sales tax);
- b. whether the comparisons are for the same type cable (e.g., air-core versus filled);
- c. whether the comparisons are for the same reel length;
- d. whether the comparisons are from prices from the same supplier; and
- e. whether the comparisons include the same vendor loadings (e.g., as for pulling eyes).

#### **AT&T Response:**

- a. Verizon's fiber cable cost used in the comparison was directly from Verizon's Network Planning Guideline NPG-99-001, Issue 3, September 2001, Page 13. This document states that these fiber costs are "The average Verizon cost" and also states that "All the above cable costs were developed form [stet] existing Verizon Corporate Sourcing contracts.
- b. See response to 12-15(a).
- c. See response to 12-15(a).
- d. See response to 12-15(a).
- e. See response to 12-15(a).

#### Data Request No. 12-16:

Referring to the discussion on pages 25-26 of Mr. Fassett's Reply Testimony regarding the claim that HM 5.3's fiber cable prices were higher than the fiber cable costs for Alaska Communications Systems (ACS), state:

- a. whether the comparisons reflect the same loadings (e.g., transportation, warehousing, and sales tax);
- b. whether the comparisons are for the same type cable (e.g., air-core versus filled);
- c. whether the comparisons are for the same reel length;
- d. whether the comparisons are from prices from the same supplier; and
- e. whether the comparisons include the same vendor loadings (e.g., pulling eyes).

Also, state whether Mr. Fassett's recommended prices for fiber and copper cable EF&I were adopted by the Regulatory Commission of Alaska.

#### **AT&T Response:**

- a. ACS fiber prices were for material with no warehousing or sales tax included.
- b. Yes.
- c. Not applicable.
- d. Not applicable.
- e. Not applicable.

The Regulatory Commission of Alaska has not issued an order as of this date. However the fiber cable material cost used in the order will be ACS's fiber cable material cost as detailed in Mr. Fassett's testimony. The parties in that case accepted ACS's fiber cable material cost as reasonable.

#### Data Request No. 12-17:

Provide all documents concerning, referring or relating to the statement on page 15 of Dr. Mercer's Reply Testimony that "Mr. Donovan and I have both explained on prior occasions that the result [of a change to the maximum cluster size] is what one would expect."

#### AT&T Response:

AT&T objects that this request is overbroad in its request for all documents that "relate: See response to 12-15(a)" to the testimony. Notwithstanding this objection, AT&T responds that testimony to this effect has been filed in the California UNE proceeding to which Verizon is a party as well as in this proceeding. Verizon has access to the testimony though its participation in the proceedings.

# Data Request No. 12-18:

Identify and provide the GTE NW/PUC District 1 of Snohomish County joint pole agreements referenced on page 17 of Mr. Fassett's Reply Testimony.

#### **AT&T Response:**

Please see AT&T's Response to Data Request No. 11-2

#### Data Request No. 12-19:

Referring to page 7 of Dr. Mercer's Reply Testimony, state all facts on which Dr. Mercer relies for the claim that "average loop length is likely to change, perhaps significantly, as a result of restructuring of distribution areas," and provide all documents concerning, referring or relating thereto.

#### AT&T Response:

This statement is based on the observation that providing connectivity to all parts of a distribution area of necessity involves a certain amount of "back hauling." That is, feeder cable may run through or past the parts of the distribution area that are closer to the wire center in order to reach the SAI, from which distribution cable runs back to the areas that were passed. Since the average loop length includes both feeder and distribution length, the distance over which backhaul occurs is essentially counted twice. If distribution areas are increased or decreased in size, or restructured in some other fashion, there is no reason to expect the average amount of backhaul distance to remain the same; said another way, there is no reason to assume the sum of the feeder and distribution distances would remain the same after the restructuring. There are no documents that show this; it is simply based on logic.

#### Data Request No. 12-20:

Referring to page 8 of Dr. Mercer's Reply Testimony, state all facts upon which Dr. Mercer relies for the claim that "HM 5.3 produces more route miles than currently exist in the incumbent's network," and provide all documents concerning, referring or relating thereto.

#### **AT&T Response:**

"The incumbent" in this case does not refer to Verizon Northwest. The only comparison that is discussed in Dr. Mercer's Reply Testimony is between the route miles produced by HM 5.3 for Verizon Northwest and the route miles produced by VzLoop, as reported by Mr. Dippon.

#### Data Request No. 12-21:

Referring to page 16, footnote 3, of Dr. Mercer's Reply Testimony, identify the specific page numbers on which Dr. Tardiff (in his Reply Testimony) "talks several times about clusters sized for 200-600 lines," and "admits the average cluster size in VzLoop is considerably larger than 600 lines."

# **AT&T Response:**

The reference should have been to Mr. Murphy's, not Dr. Tardiff's, testimony. Mr. Murphy mentions this guideline at pp. 40, 41, and 42. Mr. Dippon also mentions the limit at pp. 47 and 48, but does so by reference to Mr. Murphy's testimony. Incidentally, the guideline Mr. Murphy is citing is 200-600 living units, not lines. As for Dr. Mercer's claim that Dr. Tardiff "admits the average cluster size in VzLoop is considerably larger than 600 lines," this has reference to Dr. Tardiff's Reply Testimony at p. 26, lines 8-9, where Dr. Tardiff claims "VzLoop produces 3,300 SAIs averaging 1,400 lines,"

# Data Request No. 12-22:

Referring to page 20 of Mr. Fassett's Reply Testimony, state all facts and provide all studies, calculations, workpapers, and documents relied upon as a basis for the "judgment of the outside plant advisors to the HAI Model . . . that [per-density plant structure percentages] would contribute little to the overall accuracy of the results produced by the Model."

# **AT&T Response:**

Page 20 to Mr. Fassett's Reply Testimony does not include the statement quoted by this Data Request.

#### Data Request No. 12-23:

Provide all studies, calculations, workpapers, and other documents that support each figure in the table on pages 23-24 of Dr. Mercer's Reply Testimony.

#### **AT&T Response:**

See workpapers attached to this response, which are the results of two model runs with the feeder-interoffice sharing and feeder-distribution sharing, respectively, set to 0%. The calculations that lead to the figures shown in the table on pp. 23-24 of Dr. Mercer's Reply Testimony appear in Cells N145:Q147 of the Feeder worksheet of the runs. Note that the table in Dr. Mercer's Reply Testimony erroneously reported the effect of reducing feeder-interoffice sharing to 0%: rather than 14.2%, it should be 16.5%, which is the ratio of the investment change, \$11,301,642 to \$68,481,686.

Send ATT 12-23.zip

# Data Request No. 12-24:

Referring to page 33 of Dr. Mercer's Reply Testimony, state whether Dr. Mercer contends that Verizon NW currently pays more for new lines than growth lines. If the answer is anything but an unqualified no, provide all studies, calculations, workpapers, and documents concerning, referring or relating thereto.

# **AT&T Response:**

It is not Dr. Mercer's contention that Verizon NW currently pays more for new lines than for growth lines.

#### Data Request No. 12-25:

Referring to page 52 of Dr. Mercer's Reply Testimony, provide copies of all studies, calculations, workpapers, and documents concerning, referring or relating Dr. Mercer's claim that in a real network "when clusters are made smaller, the costs stay relatively fixed."

#### **AT&T Response:**

AT&T objects that this mischaracterizes Dr. Mercer's testimony. Page 52 of Dr. Mercer's testimony does not state that in a "real network, 'when clusters are made smaller, the costs stay relatively fixed." P. 52 is referring to an analysis performed by Mr. Dippon that showed that in HM 5.3, such a result occurs.

Notwithstanding this objection, AT&T responds that there is good reason why this result should be expected in a real network over a range of distribution area sizes. See pp. 50-53 of Mr. Donovan's Rebuttal Declaration in the SBC-California proceeding and pp. 22-25 of Dr. Mercer's Rebuttal Declaration in that proceeding, both of which are attached to this response.

Send ATT 12-25.zip

# Data Request No. 12-26:

Referring to page 42 of Dr. Mercer's Reply Testimony, explain in detail how the lots in HM 5.3 account for the "amount of dispersion between all the customers."

# **AT&T Response:**

Page 42 of Dr. Mercer's testimony makes no allusion to lot sizes whatsoever in connection with determining the actual amount of dispersion between customers. The statement cited in the data request has reference to a "connectivity measure determined from the original customer locations."

#### Data Request No. 12-27:

Referring to page 43 of Dr. Mercer's Reply Testimony, explain in detail the basis for the claim "[a]s the pictures demonstrate, this is not a case of a glass being half empty or full – it shows the glass is a fraction of a percent empty or well over 99% full," and provide all documents concerning, referring or relating thereto.

# **AT&T Response:**

The statement about a glass being perceived as half empty or half full, or as stated in Dr. Mercer's testimony, being "a fraction of a percent empty or well over 99% full," is a commonly-used metaphor for the different perceptions people can have of the same situation. As such, it is not intended to be an analytic statement, and there are no supporting documents; the testimony explains now the model is performing as it should, notwithstanding Mr. Dippon's representations to the contrary.

#### Data Request No. 12-28:

Referring to page 47 of Dr. Mercer's Reply Testimony, explain in detail the basis for the statement "[e]ither this is the most anomalous situations [sic] I have seen in any HM 5.3 database or Mr. Dippon is not portraying the full set of HM 5.3 clusters that cover this area," and provide all documents concerning, referring or relating thereto. Also, list each and every "situation" to which Dr. Mercer is referring, and provide all documents concerning, referring or relating thereto.

#### **AT&T Response:**

Dr. Mercer's testimony was referring to Map 1 on page 27 of Mr. Dippon's Reply Declaration, which ostensibly shows how HM 5.3 models the Richmond Beach wire center. It appears from the map there are large areas of the wire center excluded from the modeling, suggesting that there are not clusters covering those areas. The seeming holes in the coverage of the wire center represent the "anomalous situation" to which Dr. Mercer was referring. It turns out Mr. Dippon's map does not depict the location or extent of the clusters that comprise the Richmond Beach wire center. Instead, they are his representation of the layout of the Richmond Beach distribution network after the amount of distribution cable is adjusted to match the "strand distance" required to connect all customer to each other and the SAI. His representation is highly misleading, and does not appropriately represent the distribution modeling process that is actually taking place in HM 5.3. As for documentation of this "anomalous situation," attached to this response are 1) the Richmond Beach customer locations input to the TNS clustering process; 2) a color-coded representation of the clusters determined from these locations; and 3) the so-called "convex hull" of the clusters, showing that the clusters do not leave gaps in the coverage of Richmond Beach customer locations.



#### Data Request No. 12-29:

Referring to AT&T/MCI's response to Verizon NW's Ninth Set of Data Requests, Request No. 62, subpart (d):

- a. describe in detail, each and every adjustment, change, and edit that was done to TNS's "cluster data" table;
- b. identify the person(s) responsible for each and every adjustment, change and edit identified in response to subpart (a);
- c. identify where in AT&T/MCI's pre-filed testimony or errata filing each and every adjustment, change or edits identified in response to subpart (a) is referenced or located; and
- d. explain in detail how to conduct preprocessing sensitivity analyses that incorporate each and every adjustment, change and edit identified in response to subpart (a).

#### **AT&T Response:**

AT&T objects that data request is highly burdensome and improperly timed to interfere with the ability of AT&T's witnesses and counsel to prepare for hearing in this matter. This question is not directed at the recently filed reply testimony and there is no reason for Verizon's delay in making its request until the eve of the hearing.

#### Data Request No. 12-30:

For each value identified in the excel workbooks provided in response to Data Request Nos. 9-19, 9-22, and 9-24:

- a. Explain in detail how the value was derived, and identify the HM 5.3 workbook, tab, and cell where the value can be identified. To the extent a workbook tab and cell cannot be identified, explain in detail the manner in which specific cell(s) can be modified to produce each value such that Verizon NW can trace all values, calculations and adjustments back to their respective source(s) and provide all documents concerning, referring or relating thereto.
- b. State whether the values identified in the workbooks include the sheath feet of cable associated with outlier clusters and sub-clusters. If the answer is anything but an unqualified no, separately identify the amount of sheath feet associated with the main clusters, outlier clusters, and sub-clusters. Separately identify how much of this sheath feet is distribution versus feeder. Provide all documents concerning, referring or relating thereto.
- c. State whether the totals obtained by separately summing the distribution sheath feet and the feeder sheath feet for each cluster identified in response to sub-part (b) will equal the feeder and distribution distances for each wire center identified in the Investment Input tab (columns "AK" and "AL", respectively) filed on January 26, 2004 and provide all documents concerning, referring or relating thereto.
- d. If the sums of the distribution and feeder sheath distance for each wire center do not equal the feeder and distribution distances for each wire center identified in the Investment Input tab, explain in detail each and every adjustment made to the feeder and/or distribution distances for each cluster to produce the wire center values reported in the Investment Input tab, and provide all documents concerning, referring or relating thereto.
- e. State whether the feeder cable investment values in the Wire Center Inputs tab are determined using the feeder distance identified for each Verizon NW wire center in Washington. If the answer is anything but an unqualified yes, identify the feeder distance that is used to produce each feeder cable investment value, and provide all documents concerning, referring or relating thereto;
- f. State whether the distribution cable investment values in the Wire Center Inputs tab are determined using the exact distribution distance identified for each wire center. If the answer is anything but an unqualified yes, identify the distribution distance that is used to produce each distribution

- cable investment value and provide all documents concerning, referring or relating thereto; and
- g. For each cluster modeled by HM 5.3, separately identify the block cable sheath distance included in the aerial distribution backbone, branch, and fiber cable sheath distances and provide all documents concerning, referring or relating thereto.

#### **AT&T Response:**

# Data Request No. 12-31:

For each value identified in the excel workbook provided in response to Data Request No. 9-23, explain in detail how the value was derived and identify the HM 5.3 workbook, tab, and cell where the value can be identified. To the extent a workbook, tab and cell cannot be identified, explain in detail the manner in which specific cell(s) can be modified to produce each value such that Verizon NW can trace all values, calculations and adjustments back to their respective source(s).

# **AT&T Response:**

# Data Request No. 12-32:

For each value identified in the excel workbook provided in response to Data Request No. 9-25, explain in detail how the value was derived and identify the HM 5.3 workbook, tab, and cell where the value can be identified. To the extent a workbook, tab and cell cannot be identified, explain in detail the manner in which specific cell(s) can be modified to produce each value such that Verizon NW can trace all values, calculations and adjustments back to their respective source(s).

#### **AT&T Response:**

# Data Request No. 12-33:

For each value identified in the excel workbook provided in response to Data Request No. 9-26, explain in detail how the value was derived and identify the HM 5.3 workbook, tab, and cell where the value can be identified. To the extent a workbook, tab and cell cannot be identified, explain in detail the manner in which specific cell(s) can be modified to produce each value such that Verizon NW can trace all values, calculations and adjustments back to their respective source(s).

# **AT&T Response:**

#### Data Request No. 12-34:

For each value identified in the excel workbook provided in response to Data Request No. 9-27, explain in detail how the value was derived and identify the HM 5.3 workbook, tab, and cell where the value can be identified. To the extent a workbook, tab, and cell cannot be identified, explain in detail the manner in which specific cell(s) can be modified to produce each value such that Verizon NW can trace all values, calculations and adjustments back to their respective source(s).

# AT&T Response:

#### Data Request No. 12-35:

For each Verizon NW wire center in Washington, identify the aerial, underground, and buried route distance for each of the following segments of the outside plant network modeled by HM 5.3, and explain in detail the manner in which each distance was derived such that Verizon can trace all values, calculations and adjustments back to their respective source(s):

- a. Feeder;
- b. Distribution:
- c. Distribution Block;
- d. IOF;
- e. Common feeder and distribution; and
- f. Common feeder and IOF.

With respect to: (1) the route distances identified in response to subsection (e) above, and (2) the route distances identified in response to subsection (f) above, state whether the route distances identified are included in the route distances identified in response to subsections (a), (b), and (d) above.

# AT&T Response:

# **Data Request No. 12-36:**

Referring to the statement on page 37 of Mr. Turner's Rebuttal Testimony that "it substitutes distribution cable (which typically has a higher unit cost) for feeder cable," define "unit" (e.g., cable pair, working line, cable foot). Also, state whether the reference to "higher unit cost" means that the "unit" cost for structure and cable, separately and collectively, is higher for distribution than for feeder. If the answer is anything but an unqualified no, explain in detail the manner in which distribution cable "typically has a higher unit cost" than feeder cable.

#### Response:

AT&T is researching this request and will supplement its response.

# Data Request No. 12-37:

Identify and explain in detail any and all changes between the January 26, 2004 version of RAM-2 and the April 9, 2004 version of RAM-2.

#### **AT&T Response:**

AT&T objects that data request is improperly timed to interfere with the ability of AT&T's witnesses and counsel to prepare for hearing in this matter. This question is not directed at the recently filed reply testimony and could have been asked well before the hearing. Notwithstanding this objection, AT&T responds that it does not understand this request. Verizon NW can compare the version of RAM-2 filed on 1/26/04 with the version filed on 4/9/04 without assistance from AT&T. In doing so, it will find that each UNE rate proposal has changed between the two filings, with the exception of the signaling-STP UNE (where the magnitude of the change was too small to make a difference in the resulting proposal). As for the reason for the changes, there were a number of input changes identified in the revision filed on 4/9/04. Given those input changes, notably the use of 2003 ARMIS data in place of 2002 ARMIS data, it is inevitable that the results produced by the model, and thus the UNE rate proposals based on those results, changed.

# Data Request No. 12-38:

State whether the April 9, 2004 filing of HM 5.3 included an updated version of the Model Description. If the answer is anything but an unqualified no, provide a redlined version of the Model Description that specifically identifies any and all differences between the January 26, 2004 and the April 9, 2004 versions of the Model Description.

# **AT&T Response:**

No revision of the HM 5.3 Model Description was included in the filing of 4/9/04 because there were no changes to the model description.

# Data Request No. 12-39:

Referring to Mr. Fassett's comparison, on pages 25-26 of his Reply Testimony, between HM 5.3's fiber cable prices and the fiber cable costs for Alaska Communications Systems (ACS), provide copies of any and all contractor and/or vendor surveys conducted by, relied upon, or used by Mr. Fassett (and/or other members of the HAI engineering team) to make this comparison.

# Response:

AT&T is researching this request and will supplement its response.

Dated this 25th day of May 2004.

As to objections:

# AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC.

By:\_\_\_\_\_

Gregory J. Kopta WSBA No. 20519 Davis Wright Tremaine LLP 2600 Century Square 1501 Fourth Avenue Seattle, WA 98101-1688

and

Mary B. Tribby Letty S.D. Friesen AT&T Law Department 1875 Lawrence Street, Suite 1575 Denver, Colorado 80202 (303) 298-6475

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of:	
Unbundled Loop and Switching Rates; the Deaveraged	Docket No. UT-023003
Zone Rate Structure; and	
Unbundled Network Elements, Transport,	
and Termination	j

# AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC.'S SUPPLEMANTAL RESPONSES TO VERIZON NORTHWEST INC.'S TWELFTH SET OF DATA REQUESTS

AT&T Communications of the Pacific Northwest, Inc. ("AT&T") provides the following supplemental responses to Verizon's Twelfth Set of Data Requests.

I.

# **GENERAL OBJECTIONS**

AT&T incorporates by reference its general objections previously stated.

H.

# **RESPONSES**

# **DATA REQUESTS**

#### Data Request No. 12-12:

Referring to page 23 of Mr. Fassett's Reply Testimony, provide all engineering practices other documents upon which Mr. Fassett relied for the claim that engineers designing a forward-looking network would place block cable. Also, explain in detail:

- a. whether regulations such as fire laws and/or public safety would limit the placement of block cable presently or in the future;
- b. whether Mr. Fassett is aware of any ILEC currently placing block cable on any new construction, and if so, identify the ILEC;
- c. whether there would be any limitations on the number and size(s) of block cables attached to buildings;
- d. all other things being equal, whether the length of cable reels used would vary between placement of aerial block cable versus aerial cable on poles;
- e. all other things being equal, whether the amount of time would differ between placing block cable versus aerial cable on poles;
- f. all other things being equal, whether there would be higher maintenance and repair costs for block cable versus aerial cable on poles; and
- g. all other things being equal, whether the splicing set up time would differ for block cable versus aerial cable on poles.

#### **AT&T** Response:

- a. Yes, the use of block cable may be restricted or limited by aesthetics, codes, ordinances, tariffs and safety issues.
- b. Mr. Fassett does not have first hand knowledge of whether any ILECs are or are not currently placing <u>any</u> block cable. It is his opinion that there is a limited amount of block cable being placed especially where building owners have not provided the necessary conduit structure from the property line to the building.
- c. Aesthetics, attachment structure and public safety would naturally limit the size and number of block cables.
- d. Due to the limited distances that block cable is actually placed, the cable reels would typically be smaller than the "420" reels that may be used on a large aerial cable placement job.
- e. Placing time to attach a block cable to a building, may and probably in most cases would be longer on a per foot basis than regular "down the street" aerial placing operations. This is do the typical short distances, set up times, etc.
- f. There should be no difference in the maintenance costs and block cable may have less maintenance as a general rule.
- g. Splicing time may or may not differ depending upon the location of splices on the building.

Block and Building Cable Placing is covered under BSP 627-610-205.

# AT&T's Supplemental Response:

BSP 627-610-205 is referenced in AT&T's Outside Engineering Handbook previously produced. Mr. Fassett does not have possession of the referenced document.

# Data Request No. 12-15:

Referring to the discussion on page 25 of Mr. Fassett's Reply Testimony regarding the comparison of fiber cable material prices between Verizon NW's contract data and HM 5.3's material prices, state:

- a. whether the comparisons reflect the same loadings (e.g., transportation, warehousing, and sales tax);
- b. whether the comparisons are for the same type cable (e.g., air-core versus filled);
- c. whether the comparisons are for the same reel length;
- d. whether the comparisons are from prices from the same supplier; and
- e. whether the comparisons include the same vendor loadings (e.g., as for pulling eyes).

# AT&T Supplemental and Amended Response:

- a. Verizon's fiber cable cost used in the comparison was directly from Verizon's Network Planning Guideline NPG-99-001, Issue 3, September 2001, Page 13. This document states that these fiber costs are "The average Verizon cost" and also states that "All the above cable costs were developed form [stet] existing Verizon Corporate Sourcing contracts. HM 5.3 also uses average fiber costs, meaning that the costs should be comparable.
- b. See response to 12-15(a).
- c. See response to 12-15(a).
- d. See response to 12-15(a).
- e. See response to 12-15(a).

# Data Request No. 12-16:

Referring to the discussion on pages 25-26 of Mr. Fassett's Reply Testimony regarding the claim that HM 5.3's fiber cable prices were higher than the fiber cable costs for Alaska Communications Systems (ACS), state:

- a. whether the comparisons reflect the same loadings (e.g., transportation, warehousing, and sales tax);
- b. whether the comparisons are for the same type cable (e.g., air-core versus filled);
- c. whether the comparisons are for the same reel length;
- d. whether the comparisons are from prices from the same supplier; and
- e. whether the comparisons include the same vendor loadings (e.g., pulling eyes).

Also, state whether Mr. Fassett's recommended prices for fiber and copper cable EF&I were adopted by the Regulatory Commission of Alaska.

# AT&T Supplemental and Amended Response:

- a. The ACS fiber prices were for material with no ACS warehousing costs or sales tax included. These fiber cable material prices were delivered prices to Anchorage, Alaska.
- b. The comparisons used the same type of fiber.
- c. The reel lengths would be comparable. ACS's prices reflect the company's negotiated supplier contract pricing.
- d. Not applicable. ACS's prices reflect their negotiated supplier contract pricing delivered to Anchorage, Alaska
- e. Not applicable. ACS's prices reflect their negotiated supplier contract pricing delivered to Anchorage, Alaska

Dated this 4th day of June 2004.

As to objections:

# AT&T COMMUNICATIONS OF THE PACIFIC NORTHWEST, INC.

By:\_\_\_\_\_

Gregory J. Kopta WSBA No. 20519 Davis Wright Tremaine LLP 2600 Century Square 1501 Fourth Avenue Seattle, WA 98101-1688

and

Mary B. Tribby Letty S.D. Friesen AT&T Law Department 1875 Lawrence Street, Suite 1575 Denver, Colorado 80202 (303) 298-6475

# BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

In the Matter of the Review of:
Unbundled Loop and Switching Rates; the Deaveraged
Zone Rate Structure; and
Unbundled Network Elements, Transport,
and Termination

Docket No. UT-023003

AT&T RESPONSES TO VERIZON'S TENTH SET OF DATA REQUESTS

AT&T Communications of the Pacific Northwest, Inc. ("AT&T") provides the following responses to Verizon's Tenth Set of Data Requests.

I.

# **GENERAL OBJECTIONS**

AT&T objects to Verizon's definitions and instructions to the extent that they seek to impose obligations exceeding those imposed by the Commission's Rules, Washington Rules of Civil Procedure, or prior rulings in this proceeding. More specifically, AT&T further object to the definition of AT&T as overly broad and to the instruction to provide any information beyond the scope of this docket and not within AT&T's possession, custody and control. AT&T hereby incorporates these general objections into each of the specific objections and responses provided below.

II.

**SPECIFIC OBJECTIONS AND RESPONSES** 



#### Data Request No. 10-1:

With respect to page 13 of Mr. Turner's April 20, 2004 testimony, stating that he has 10 years of experience developing and reviewing cost models, please provide a list of all models developed by Mr. Turner and a list of all models reviewed by Mr. Turner. Please include the name of each model developed or reviewed, the dates on which it was developed or reviewed, and the role Mr. Turner played in the development or review of each such model. For each model, please also specify the types of programming code these models reviewed or developed were written in.

#### Response:

AT&T objects to this data request on the grounds that it is overbroad in seeking information beyond the scope of Mr. Turner's testimony and unduly burdensome in seeking "all models" developed or reviewed by Mr. Turner. Subject to, and without waiver of, that objection, as comprehensive a list as possible of all of the models that Mr. Turner has developed or reviewed is provided below. Please note that intermediate versions of models have not been identified although some do exist.

Model Name	Developed (D) / Reviewed (R)	Dates	Role	Model Language
Sub-Pixel Shading Model	D	01/1987 - 06/1987	Lead developer and programmer of engineering algorithms replicating logic on VLSI chip	С
4ESS Utilization Model	D	05/1988 - 03/1989	Lead developer and programmer of algorithms for evaluating nationwide utilization of 4ESS switching assets	C / UNIX Script
CPAM (CCS7 Performance Analysis Model)	D/R	04/1992 - 06/1994	Requirements developer/engineer for a system that monitored and predicted maintenance performance issues with AT&T's CCS7 Backbone	С
FPAS (Facility performance Analysis	D/R	04/1994 - 06/1994	Requirements developer/engineer for a system that monitored and	С

Model Name	Developed (D) / Reviewed (R)	Dates	Role	Model Language
System)			analyzed performance errors in specific signaling links within AT&T's signaling network	
LSO Analysis Model	D	12/1994 - 02/1996	Lead developer for model used to evaluate the economic tradeoffs for multiple market entry scenarios at the wire center level	EXCEL / ACCESS / Visual Basic
DS1 Building Entrance Tool	D/R	02/1996 - 12/1996	Requirements development for a tool to evaluate the economic tradeoffs for placing a particular customer location on a facility-based ring within a metropolitan area	EXCEL
CostProg	R	01/1997 - 06/1998	Reviewed algorithms, cost input data, and underlying demand data in this transport cost evaluation model developed by SBC	Unknown
SCIS	R	01/1997	Reviewed algorithms used in the development of switching costs	Unknown
CCSCIS	R	01/1997 - 12/2001	Reviewed algorithms, inputs, and provided alternative inputs consistent with efficient, forward-looking costs	Unknown
AT&T/MCI Nonrecurring Cost Model	R	04/1997  12/2001	Reviewed algorithms, cost input data, and provided feedback to the development team regarding TELRIC nonrecurring cost development	EXCEL / Visual Basic
AT&T/MCI Collocation Cost Model	D	04/1997 - Present	Developed costing algorithms, inputs, and overall approach as part of a team to develop TELRIC based costs for six forms of collocation	EXCEL / Visual Basic
Hatfield Model (HM Model)	R	04/1997 - Present	Provide algorithm review and input validation particularly in the area of the transport module	EXCEL and Others
LoopCAT	D/R	09/2001 -	Provided algorithm review, input review, demand review	EXCEL / ACCESS /

Model Name	Developed (D) / Reviewed (R)	Dates	Role	Model Language
		Present	and provided alternative approaches for developing the TELRIC cost for unbundled loops	Visual Basic / Others
Verizon Collocation Cost Model	R	12/1999  Present	Provided algorithm review, input review, and provided extensive restatements related to Verizon's development of collocation costs	EXCEL
Verizon Transport Cost Model	R	05/2000 - Present	Provided algorithm review, input review, and provided extensive restatements related to Verizon's development of transport costs	EXCEL
BellSouth Cost Calculator	R	10/2001 — Present	Provided algorithm review, input review, and provided extensive restatements related to BellSouth's development of a variety of costs. Also used this model to develop collocation costs for Sprint and Verizon	EXCEL / Unknown
Sprint Collocation Cost Model	R	04/1997  Present	Provided algorithm review and input review associated with the development of TELRIC collocation costs	EXCEL
Verizon Nonrecurring Cost Model	R	01/2002  Present	Provided algorithm review and input review associated with the development of TELRIC nonrecurring costs	EXCEL
AT&T Impairment Analysis Model	D	05/2003  Present	Provided algorithm development, input development, demand assessment associated with the development of impairment cost	EXCEL / ACCESS / Others
DS0 Cross- Over Analysis Tool	D	12/2003 - Present	Provided algorithm development and input development associated with the calculation of an economic cross-over point	EXCEL

Model Name	Developed (D) / Reviewed (R)	Dates	Role	Model Language
SBC DS0 Cross-Over Analysis Tool	R	12/2003 - Present	Provided algorithm assessment and input assessment associated with the calculation of an economic cross-over point including providing a comprehensive restatement	EXCEL
SBC Nonrecurring Cost Models	D/R	07/2001 - Present	Provided algorithm assessment and input assessment associated with the calculation of TELRIC based nonrecurring costs	EXCEL / Visual Basic
Market Entry Evaluation Models	D	01/1997 - 06/1997	Developed models for Citizens Telecom to evaluate its entry into new markets across the US	EXCEL
Market Entry Evaluation Models	D	04/2003	Developed models for Conference America to evaluate its entry into the local telecommunications market	EXCEL
Data Market Entry Evaluation Models	D	08/2002 - 12/2002	Developed models for CrossPoint Venture Partners to evaluate the funding of business plans related to the deployment of DSL and other related infrastructure	EXCEL
RTC Switching and Transport Model	R	02/2003	Reviewed algorithms and input costs associated with interconnection cost between wireless carriers and rural telephone companies	EXCEL
Verizon Batch Hot Cut Cost Study	R	11/2003 - 12/2003	Reviewed algorithms and input costs associated with Verizon's BHC filing	EXCEL
SBC Batch Hot Cut Cost Study	R	12/2003 - Present	Provided algorithm assessment and input assessment associated with the calculation of TELRIC based nonrecurring BHC costs	EXCEL

#### Data Request No. 10-2:

Please identify the total number of hours Mr. Turner logged into the VzCost system prior to April 20, 2004. Please identify the number of other AT&T experts with separate VzCost IDs whose analysis of Verizon's VzCost system contributed to Mr. Turner's April 20, 2004 testimony and identify the total number of hours each of these experts spent logged into the VzCost system. Please also provide all billing or other records sufficient to document these responses.

#### Response:

AT&T objects to this data request on the grounds that it is unduly burdensome in seeking an accounting of all hours logged into the VzCost system by AT&T experts. Subject to, and without waiver of, this objection, Mr. Turner has not maintained records sufficient to identify the total number of hours he logged into the VzCost system prior to April 20, 2004. The analysis of one other AT&T expert with a separate VzCost ID contributed to Mr. Turner's April 20, 2004 testimony, but that expert similarly did not document or otherwise account for the total number of hours he spent logged into the VzCost system.

# Data Request No. 10-3:

With respect to page 12 of Mr. Turner's April 20, 2004 testimony, where he states that "it virtually impossible to trace the logic of the model," please describe what steps by AT&T or by Mr. Turner would make it possible to trace the logic of the model. Please describe what steps AT&T and Mr. Turner took to trace the logic of the model.

#### Response:

The steps taken to trace logic included using the "View Dependents" and "Drill Down" capabilities within VzCost and manually following the logic within the VzLoop code. To trace the logic in the VzLoop code, one must manually search through the code listing to find where the element in question is calculated. Finally, in an effort to understand how the code was actually functioning, steps were taken to reproduce the calculations in EXCEL within VzLoop for the development of various investment calculations.

Regarding the steps that would make it theoretically possible to trace the model, there are two main problem areas that would need to be addressed to enable tracing the logic in the model. The first problem area is that of the lack of integration of VzLoop with VzCost. AT&T or Mr. Turner would have to integrate VzLoop with VzCost to allow the user to trace the logic from the cost resulting from the cost study down through to the individual inputs to VzLoop. Today, there is a separation between the VzLoop model and the BC runs and cost studies in VzCost. A user cannot trace logic across the two pieces.

The second problem area is that of the lack of any user-friendly capability to trace the logic within the VzLoop code. Specifically, one would like the capability to begin the processing of the VzLoop code and then freeze it when it reaches certain points such as the processing of a particular node in the loop network that might be converted to a digital loop carrier location. As Mr. Turner indicated in his testimony, it was clear that VzLoop was making errors in identifying locations for "modeled" digital loop carrier locations, but it was extremely difficult to trace the logic in the model that was causing such problems. Since Mr. Turner's filing in Washington on April 20, 2004, Mr. Turner has determined more about how this problem occurred and identified through AT&T counsel in California the logic problem in this area. A copy of the letter from AT&T counsel in California to Verizon counsel is attached as Exhibit 1. The point being, however, that the model is so difficult to trace the logic within that it makes it virtually impossible to identify these types of errors.

# Data Request No. 10-4:

With respect to page 14 of Mr. Turner's April 20, 2004 testimony, where he states that it is "extremely difficult if not impossible to understand the code," please describe what steps by AT&T or Mr. Turner would make it possible to understand the code. Please describe what steps AT&T or Mr. Turner took to understand the code.

# Response:

See Response to Verizon Data Request No. 10-3.

# Data Request No. 10-5:

Please provide a list of all formal training Mr. Turner has received in programming languages including any courses for which he has received college or other credits or vendor training in which he has received certification. For each course or other formal training, please specify the specific programming language Mr. Turner received training in and the date on which the training took place.

# Response:

Mr. Turner received a Bachelor of Science Degree in Electrical Engineering from Auburn University. While studying at Auburn, Mr. Turner took courses in the Pascal programming language, which happens to be the language that VzLoop is written in.

Subsequently, Mr. Turner was employed by General Electric as a Research Engineer. All Research Engineers at General Electric were required to have the ability to program in C programming language. The course work for this was provided on the job through seminars and training by expert programmers.

# Data Request No. 10-6:

With respect to page 14 of Mr. Turner's April 20, 2004 testimony, please state whether Mr. Turner has the "programming background to understand [the VzLoop source code] in the first instance."

#### Response:

Yes.

# Data Request No. 10-7:

With respect to page 12 of Mr. Turner's April 20, 2004 testimony, please state whether Mr. Turner has an understanding of the Pascal computer programming language sufficient for the purpose of reviewing code written by others. Please state if Mr. Turner ever consulted with any other individual who has such an understanding of Pascal during the analysis he undertook of Verizon's "complex programming code" in preparing his testimony. If the answer is anything but an unqualified "No," please identify any such individual.

#### Response:

Yes, Mr. Turner has an understanding of the Pascal computer programming language sufficient for the purpose of reviewing code written by others. No, Mr. Turner did not consult with any other individual who has such an understanding of Pascal during the analysis he undertook of Verizon's "complex programming code" in preparing his testimony.

#### Data Request No. 10-8:

With respect to page 12 of Mr. Turner's April 20, 2004 testimony, please state whether Mr. Turner has any knowledge of or experience with the Delphi programming environment and specify the date of all training that Mr. Turner has received on the use of a Delphi programming environment. Please state if Mr. Turner ever consulted with any other individual who is familiar with this environment when preparing his testimony. If the answer is anything but an unqualified "No," please identify any such individual.

#### Response:

Mr. Turner has no knowledge or experience with the Delphi programming environment. However, given the nature of what programming environments provide from experience designing and debugging code, Mr. Turner is generally familiar with the capabilities provided by the Delphi programming environment. Further, because of not having access to this native environment, Mr. Turner has been forced to trace the code manually and through reconstructing the calculations of the model in external EXCEL models to reproduce VzLoop calculations.

No, Mr. Turner did not consult with anyone that has knowledge or experience with the Delphi programming environment.

# Data Request No. 10-9:

With respect to page 12, footnote 6 of Mr. Turner's April 20, 2004 testimony, please describe how "it would be possible for AT&T to obtain this additional information," specifying the steps AT&T would take to obtain it. Please specify which of these steps AT&T took (and the date on which AT&T took each such step) or why it did not take any such steps.

#### Response:

AT&T's California affiliate attempted to obtain the referenced information from Verizon's California affiliate through multiple discovery requests and numerous conference calls and exchanges of correspondence but without success. Reasonably believing that duplicating these efforts in Washington would be equally fruitless, AT&T has not done so. Verizon should already be aware of, or could obtain from its California affiliate, the steps that AT&T's California affiliate took and the dates on which AT&T's California affiliate took those steps to obtain the information.

# **Data Request No. 10-10:**

With respect to page 18 of Mr. Turner's April 20, 2004 testimony, please provide all documents or other information supporting Mr. Turner's statement that the steps listed on pages 17-18 take "approximately 6 hours to complete." Please identify the approximate time each step in this list took for which Mr. Turner did not give an approximate time in his testimony.

# Response:

The referenced statement is based on Mr. Turner's experience working with the model. The approximate time each step in the list took is provided in the table below:

Step	Approx. Time (minutes)
1. Download the material file from VzCost.	5
2. Open the Material file in EXCEL and change the appropriate DLC material price.	2
3. Download the EXCEL template for the material table from VzCost	1
Data Management to verify the upload file format.	
4. Modify the Material file to match the EXCEL template.	1
5. Remove the header row and save as a .csv file. This step is not	1
noted anywhere in Verizon's documentation and was only	
discovered through trial and error.	
6. Upload the Material file to VzCost.	2
7. Download the Placement file from VzCost.	5
8. Manually modify the Placement file provided by Verizon to remove	1
the first set of records to create the input for the preliminary VzLoop	
run. This first run is performed to calculate the economic crossover	
point at which it is economical to install DLC equipment.	
9. Download the EXCEL template for the Placement table from	1
VzCost Data Management to verify the upload file format.	
10. Modify the Placement file to match the EXCEL template.	1
11. Remove the header row and save as a .csv file.	1
12. Upload the modified Placement data table into VzCost.	5
13. Create and execute the preliminary VzLoop run. This run of	90
VzLoop for Washington takes approximately 1.5 hours.	
14. Go to Data Management and download the Elements and Inventory	30
output tables produced by the preliminary run.	
15. Import the Elements file into ACCESS or similar database tool.	10

Step	Approx. Time (minutes)
16. Replicate the query noted in the "wA_ECF_ADJ_051203.xls" file to	10
query the Elements file for use in the placement file. This requires	
the ability to translate the structured query language used by Oracle	
to the structured query language used by ACCESS or similar	
database tool.	
17. Manually copy and paste the Elements query results into the "wA_ECF_ADJ_051203.xls" file	1
18. Import the Inventory file into ACCESS or similar database tool.	10
19. Replicate the query noted in the "wA_ECF_ADJ_051203.xls" file to query the Inventory file.	10
20. Manually copy and paste the Inventory query results into the "wA_ECF_ADJ_051203.xls" file.	1
21. Download the Loop SS Elements output from the preliminary VzLoop run from VzCost.	5
22. Manually copy and paste the "Loop SS Elements" data into the "wA_ECF_ADJ_051203.xls" file.	1
23. Create a new Placement file from the "wA_ECF_ADJ_051203.xls"	2
file for use as an input the second VzLoop run.	
24. Upload the new Placement file to VzCost.	5
25. Create and execute the second VzLoop run. This second run of	90
VzLoop for Washington also takes approximately 1.5 hours.	
26. Approve the VzLoop run.	1
27. Go to Data Management within VzCost and manually approve the	15
six output tables from the VzLoop run.	]
28. Create and run the Loop Element loading.	30
29. Approve the results of the Loop element loading.	1
30. Make any and all changes to the Miscellaneous Material Data Table.	5
31. Create and run the 2-Wire Analog Loop BC run.	5
32. Approve the results of the 2-Wrie Analog Loop BC run.	1
33. Create and run the 2-Wire Analog Loop cost study.	15
Total	364

#### **Data Request No. 10-11:**

With respect to the statement on page 6, footnote 2 of Mr. Turner's April 20, 2004 testimony that Mr. Turner has "not been able to make modifications to virtually any of these problems," please describe all the problems Mr. Turner was able to make modifications to and describe every step that Mr. Turner or AT&T took to make additional modifications (and please specify the date on which AT&T took each such step).

#### Response:

AT&T objects to this data request on the grounds that it is unduly burdensome in seeking a description of every step (and the date) that Mr. Turner or AT&T took to make modifications in addition to those described in Mr. Turner's testimony. Subject to, and without waiver of, that objection, Mr. Turner's testimony identifies the areas that modifications were made to within VzCost/VzLoop. All modified data files containing every change that was made is contained within Exhibit SET-3. Mr. Turner's testimony also identifies areas in which Mr. Turner was unable to make modifications. Mr. Turner created no additional documentation of any attempts to make such modifications.

# Data Request 10-12

With respect to the statement on page 21, line 18, of Mr. Turner's April 20, 2004 testimony, please identify every sensitivity analysis performed by Mr. Turner and provide all documents relating to each such analysis that AT&T has not provided with its April 20, 2004 filing

# Response:

AT&T objects to this data request on the grounds that it is unduly burdensome in seeking "every sensitivity analysis performed by Mr. Turner" and "all documents relating to each such analysis." Subject to, and without waiver of, this objection, one of the approaches that was used to determine sensitivity with regard to VzLoop was to perform runs on only a single wire center to lessen the waiting time between runs. These sensitivity runs were used, for example, to confirm whether particular input values were used or not used within the VzLoop code. Mr. Turner did not document this analysis.

# Data Request No. 10-13:

With respect to page 19 of Mr. Turner's April 20, 2004 testimony, please state whether Mr. Turner received prior notice of Verizon's plan to implement "the change to the VzCost tool" he describes on this page of the testimony. If the answer is anything other than an unqualified "No," please identify the date of every such notice. Please state whether Mr. Turner was also working as an expert for AT&T in the Verizon phase of the California UNE proceeding on March 16, 2004, when Verizon sent a letter to the California ALJ and all parties to that proceeding indicating that an update to VzCost would be made during the weekend of April 10-11.

#### Response:

Yes, Mr. Turner received notice of Verizon's plan to implement "the change to the VzCost tool" on Monday, April 5. Mr. Turner received a further notice at approximately 5:00 PM on Friday, April 9 that this would occur. Mr. Turner was working as an expert for AT&T in the Verizon phase of the California UNE proceeding on March 16, 2003. However, the fact that Verizon provided notice of the unavailability of the model was not the point in Mr. Turner's testimony nor is it the crux of the problem Mr. Turner identified with web-based models. The problem Mr. Turner was describing with the model being a web-based tool is that Verizon has the ability to control the parties' access to the model and to make the model unavailable at critical junctures during the proceeding, regardless of the sufficiency of the notice provided.