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1501 K STREET, N.W.
WASHINGTON, D.C. 20005
TELEPHONE 202 736 8000
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www.sidley.com

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WRITER'S DIRECT NUMBER
(202) 736-8250

WRITER'S E-MAIL ADDRESS
ageolot@sidley.com

November 20, 2001

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

By Hand Delivery

Magalie R. Salas, Esq.
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

00-249

Re: CC Docket No. 00-251
In the Matter of the Petition of AT&T Communications of Virginia, Inc., TCG Virginia, Inc., ACC National Telecom Corp., MediaOne of Virginia and MediaOne Telecommunications of Virginia, Inc. for Arbitration of an Interconnection Agreement With Verizon Virginia Inc. Pursuant to Section 252(e)(5) of the Telecommunications Act of 1996

Dear Ms. Salas:

Enclosed please find an original and three (3) copies of the public version of the Supplemental Surrebuttal Testimony of Catherine E. Pitts on Behalf of AT&T and WorldCom for filing in the above-captioned matter. Proprietary versions are being provided to the Staff, along with a computer disk containing supporting workpapers. An extra copy to be stamped and returned is also included.

Thank you for your consideration in this matter.

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Respectfully submitted,

Alan C. Geolot

cc: Dorothy Attwood (8 copies w/computer disk)
John Stanley
Jeffrey Dygert
Katherine Farroba
Counsel of Record

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NOV 20 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Petition of WorldCom, Inc. Pursuant To Section 252 (e)(5) of the Communications Act for Expedited Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes With Verizon Virginia, Inc., and for Expedited Arbitration	)	CC Docket No. 00-218
In the Matter of Petition of Cox Virginia Telecom, Inc. Pursuant to Section 252 (e)(5) of the Communications Act for Preemption Of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia, Inc. and for Arbitration	)	CC Docket No. 00-249
In the Matter of Petition of AT&T Communications Virginia Inc., Pursuant to Section 252 (e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia Corporate Commission Regarding Interconnection Disputes with Verizon Virginia, Inc.	)	CC Docket No. 00-251

SUPPLEMENTAL SURREBUTTAL TESTIMONY OF
CATHERINE E. PITTS
ON BEHALF OF AT&T AND WORLDCOM, INC.

NOVEMBER 20, 2001

PUBLIC VERSION

1 **I. INTRODUCTION**

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

3 A. My name is Catherine E. Pitts. I am a contractor working on behalf of AT&T.
4 My address is 810 Long Drive Road, Summerville, South Carolina.
5

6 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

7 A. Yes. I filed direct testimony on behalf of AT&T and WorldCom on July 31,
8 2001, rebuttal testimony as part of the AT&T/WorldCom Cost Panel on August
9 27, 2001 ("AT&T/WorldCom Cost Panel Rebuttal"), and surrebuttal testimony on
10 September 21, 2001. My background and qualifications are set forth in my direct
11 testimony.

12 **II. PURPOSE AND SUMMARY OF TESTIMONY**

13 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL SURREBUTTAL**
14 **TESTIMONY?**

15 A. My supplemental surrebuttal testimony reviews Ms. Matt's supplemental
16 surrebuttal and second supplemental surrebuttal testimony[1] that present new
17 switch cost studies and discusses certain Verizon discovery responses provided in
18 the past two weeks.

19 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

20 A. My supplemental surrebuttal testimony makes the following points regarding Ms.
21 Matt's two sets of testimony and revised cost studies:

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[1] See Supplemental Surrebuttal Testimony of Nancy Matt, dated October 18, 2001 ("Matt Supplemental") and the Second Supplemental Surrebuttal Testimony of Nancy Matt, dated November 2, 2001 ("Matt Second Supplemental").

- With its new Siemens switch discount, Verizon continues its defective approach to determining appropriate switch discounts and prices. The result is a discount that is too low and switch prices that are too high.
- Verizon's work-around to force SCIS to compute TR008 cost estimates in its revised end office switch cost study is incorrect and results in cost overstatements of nine percent. This work-around is necessary because SCIS does not regard TR008 to be forward-looking technology for use with the Lucent 5ESS SM 2000 switch module.
- Verizon's conversion of some of its end offices to combination local/tandem switches (Class 4/5 switches) in the Matt Second Supplemental testimony does not assign costs accurately to the end office or tandem rate elements and results in a four percent overstatement of switching costs.
- Verizon's SCIS model cannot reflect the assumptions Verizon makes about its network configurations for TR008 lines and the size of DMS tandem switches.
- Verizon's revised cost study continues to suffer from the deficiencies outlined in my prior testimony listed above; namely, incorrect discount inputs to SCIS, overstated engineering and installation factors, misallocation of costs to the minute of use rate element, understated amounts of GR303 IDLC, inappropriate line and trunk port utilization factors, unsubstantiated feature input data, incorrect right-to-use costs and inappropriate methodology to determine reciprocal compensation costs.
- Late-received discovery responses from Verizon have confirmed that the right to use fee questioned in prior testimony is based on inappropriate costs that severely inflate the right to use costs.
- Verizon's new feature input data are still unsupported and are inconsistent from feature to feature.

III. VERIZON'S NEW STUDY PROVIDES FURTHER EVIDENCE THAT ITS STARTING SWITCH PRICES ARE WRONG.

Q. WHAT ADDITIONAL EVIDENCE DOES THE NEW STUDY PROVIDE SHOWING THAT VERIZON'S SWITCH PRICES ARE INCORRECT?

A. Now that Verizon's study purportedly has the correct number of switches and lines, there is a huge disparity in switch prices among the various manufacturers. Verizon's Revised Attachment D shows total switch investment by switch manufacturer on one page, and total lines by switch manufacturer on another page.[2] A simple switch price measure is total investment divided by total lines to derive the "switch price per line." Reviewing Verizon's revised study shows the following huge differences in switch price per line:

*****Begin Confidential*****

*****End Confidential*****

More than *****Begin Confidential***** *****End Confidential***** of the lines in Virginia are on 5ESS switches. The high price per line for 5ESS switches combined with the high percentage of 5ESS lines dramatically inflates switch rates.

In my experience, the switch manufacturers' products are virtually the same in functionality, leading to highly competitive pricing practices among the vendors. Verizon's limited one-year sampling of switch purchases to derive its switch discount inputs results in highly distorted switch prices.

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[2] See Proprietary Exhibit CEP 1.

Q. DOES VERIZON'S INCLUSION OF THE SIEMENS EWSD SWITCH LEAD TO APPROPRIATE SWITCH DISCOUNT INPUTS?

A. No. Verizon added one new Siemens switch in Falls Church, Virginia that was purchased at a *****Begin Confidential*** ***End Confidential***** discount, but Verizon also added purchases of Siemens growth equipment in other states at a *****Begin Confidential*** **End Confidential***** growth discount. The result was a diluted switch discount of *****Begin Confidential*** ***End Confidential***** used by Verizon in its latest study.

Verizon's new Siemens switch purchase is only *****Begin Confidential*** ***End Confidential***** of its total year 2000 Siemens purchases. Even this percentage is markedly higher than the percentage of new switch pricing (versus growth pricing) of *****Begin Confidential*** ***End Confidential***** that Verizon used for its Lucent purchases.[3] The impact of this tiny percentage of new switching purchases (and higher new switch purchase discounts) is significant because Lucent switches comprise more than *****Begin Confidential*** ***End Confidential***** of the switch costs.

As stated in prior testimony, AT&T/WorldCom believe that new switches (and new switch discounts) should be used to develop TELRIC switching costs. Even if the Commission determines that prices for growth equipment should be included, the percentage of growth equipment should be small. If a new switch were purchased to serve all current demand and future line growth was assumed to be 3% annually over five years, the weighting of new switch prices would be at least 90%.

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[3] See Verizon Proprietary Response to ATT/WCOM Data Request Set 11, Request 73 (attached as Proprietary Exh. CEP-6).

IV. VERIZON'S MODEL DOES NOT REFLECT VERIZON'S ASSUMPTIONS ABOUT ITS FORWARD-LOOKING NETWORK.

Q. WHAT ASSUMPTIONS DOES VERIZON MAKE THAT ARE INCOMPATIBLE WITH SCIS?

A. Verizon makes incompatible assumptions about its network that cannot be modeled in SCIS. First, Verizon assumes the use of the Lucent switch module 2000 (SM 2000). Having made that assumption, Verizon also assumes that the switch serves TR008 integrated digital loop carrier (IDLC) lines. SCIS, however, includes only GR303 and not TR008 as the forward-looking, currently available technology that is used in conjunction with the SM 2000 switch module. Telcordia, when developing SCIS, models only current forward-looking technology, and constantly reviews and deletes those digital switch component that are no longer forward-looking.[4] When Telcordia modeled the new SM2000, it determined that GR303 was the forward-looking IDLC technology to model on this equipment. Telcordia did not simply forget to include TR008 on SM2000 equipment, but rather affirmatively decided to exclude TR008 and to model only GR303. Verizon acknowledged this point in its discovery responses -- "Telcordia *decided* to only model TR303 on the SM2000 switch modules."[5] – but nonetheless in its cost study Verizon tried to model the SM 2000 with TR008 lines. This is one of the reasons Verizon "lost" one million lines in its initial cost study. When Verizon uploaded its SCIS input data from a Telcordia-developed data input spreadsheet into SCIS, SCIS simply "dropped" all the TR008 lines from the database – and the million lines disappeared from the model.

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[4] This is the reason SCIS cannot dynamically model a switch that changes over time -- SCIS drops older technology and does not compute the cost of upgrading from old to new technology but instead always assumes new technology. SCIS is a "static" model because it captures the cost at one moment in time.

[5] See Verizon Response to AT&T/WCOM Data Request Set 12, Request 7 (emphasis added) (attached as Exh. CEP-6).

Q. IF SCIS DOES NOT MODEL TR008 LINES ON THE 5ESS SWITCH CONFIGURATION VERIZON HAS CHOSEN AS FORWARD-LOOKING, WHAT DID VERIZON DO ABOUT ITS TR008 LINES?

A. Verizon proposes as "forward-looking" a switch network that consists of only ten percent IDLC lines terminated as GR303 with the remaining ninety percent terminated as TR008. SCIS requires input data for GR303 lines that are not required for the older TR008 lines. Given that the SCIS does not model the SM 2000 switch using TR008, Verizon had to develop a "work-around" to develop cost estimates for the TR008 lines. To do this, Verizon simply "developed their GR303 input data that maintained the characteristics (i.e., remote terminal capacity, concentration ratio, etc.) of its TR008 remote terminals deployed in Virginia."[6] Verizon developed and performed a series of out-of-model calculations to meld its purported TR008 characteristic-line data with its 10% GR303 line data to derive SCIS data inputs.

Q. WILL VERIZON'S WORK-AROUND METHODOLOGY MAKE SCIS PRODUCE AN ACCURATE ESTIMATE OF TR008 LINE COSTS?

A. No. Different equipment is required to terminate GR303 lines in a switch that is not needed for TR008. Verizon noted the existence of this different equipment and the associated costs in its discovery responses: "In the case of GR303 lines, additional packet equipment is required to support operations and maintenance functions for each GR303 remote terminal. These operations and maintenance capabilities are not available with TR008. The investment for this packet equipment is included in the line termination investment results for GR303 lines."[7]

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[6] See Verizon Response to AT&T/WCOM Data Request Set 12, Request 11 (attached as Exh. CEP-6).

[7] See Verizon Response to AT&T/WCOM Data Request Set 12, Request 41 (attached as Exh. CEP-6).

Two critical SCIS user inputs are required when estimating costs of lines on GR303 equipment: (1) the number of remote terminals on the switch; and (2) the number of DS1 trunk terminations between the remote terminals and the switch.[8] GR303 allows engineers to provision the number of DS1 trunk terminations based on the total traffic from the lines on the remote terminal (as opposed to the older TR008 technology that assumed a set number of DS1 trunks regardless of the traffic). Traditional analog lines are "concentrated" with fewer paths through the switch than the number of lines. This concentration recognizes that not everyone uses the phone at the same time and avoids the need to provide everyone with a dedicated path through the switch all the time.[9] GR303 technology works on the same concentration principle, conserving DS1 trunk costs and termination costs at the switch, and resulting in more line sharing and lower unit costs.[10]

If, however, the characteristics of older TR008 are entered as data inputs into SCIS, as Verizon has done, SCIS will calculate a higher unit cost because it is estimating the costs of an older, inefficient configuration (based on Verizon's data inputs) on more expensive, higher-capacity equipment. Verizon's assumes that remote terminals can terminate only 96 lines (this is truly ancient technology called SLC96) and that every line requires a dedicated path through the switch

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8 More than two inputs are required, but some have Telcordia default values available, while these two inputs must be populated by the user before the program will run.

9 The line concentration ratio (lines to network paths) in a switch is typically between 4:1 and 10:1 with a switch that has higher busy hour traffic requiring lower (e.g., 4:1) concentration.

10 A fundamental difference between analog lines and GR303 lines is that analog line concentration is engineered within the switch itself whereas GR303 line concentration is engineered at the remote terminal when determining the number of DS1 trunks to carry the traffic back to the switch.

(1:1 concentration). These assumptions ensure that expensive high-capacity equipment is inefficiently utilized and results in inflated costs.[11]

Q. IS THERE A WAY TO ESTIMATE THE COST OF TR008 LINES ON GR303 EQUIPMENT?

A. No. When asked in discovery if Verizon attempted to minimize the cost of its work-around, Verizon made clear that it had not attempted to minimize costs: "No 'cost minimization' was taken into account in developing the work-around solution."[12] Verizon also did no study comparing the cost of TR008 and GR303 using a 1:1 concentration. When asked in discovery to provide any documents used or prepared by VZ-VA or Telcordia comparing the cost of GR303 lines at 1:1 concentration with the cost of a TR008 line, Verizon responded, "There are none."[13]

Q. HAVE YOU BEEN ABLE TO ESTIMATE THE COST OF TR008 LINES USING VERIZON'S SCIS MODEL IN AT&T/WORLDCOM'S RESTATEMENT?

A. No. Telcordia does not offer a choice – SCIS cannot model TR008 lines on SM2000 switch modules. Consequently, AT&T/WorldCom have entered data into SCIS that reflect efficient and appropriate engineering of these lines as GR303 lines being terminated on GR303 equipment. Specifically, AT&T/WorldCom have used the same figure of 1039 lines per remote terminal used by Verizon in its loop study to determine the number of remote terminals and assumed a 4:1 line concentration ratio as discussed in AT&T/WorldCom's

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11 Verizon's own loop study assumes the smallest remote terminal has a 224 line capacity. See Verizon response to ATT/WCOM Data Request 12, Request 15 (attached as Exh. CEP-6).

12 See Verizon Response to AT&T/WCOM Data Request Set 12, Request 11 (attached as Exh. CEP-6).

13 See Verizon Response to AT&T/WCOM Data Request Set 12, Request 43 (attached as Exh. CEP-6).

Cost Panel Rebuttal. Correcting the data inputs results in an almost nine percent decrease in 5ESS switch investments.[14]

V. VERIZON'S CONVERSION OF SOME OF ITS END OFFICES TO COMBINATION LOCAL/TANDEM SWITCHES (CLASS 4/5 SWITCHES) IN THE MATT SECOND SUPPLEMENTAL TESTIMONY DOES NOT ASSIGN COSTS ACCURATELY TO THE END OFFICE OR TANDEM RATE ELEMENTS.

Q. WHAT IS A COMBINATION LOCAL/TANDEM SWITCH AND WHY IS IT AN ISSUE IN VERIZON'S STUDY?

A. A combination local/tandem switch (called a Class 4/5 switch prior to divestiture in 1984) serves both subscriber lines and performs trunk-to-trunk tandem switching. Combination local/tandem switches are common in ILEC switch networks.

These switches have large amounts of fixed "common" costs, and the larger the number of lines and trunks, the more cost-effective the switch becomes as the fixed cost is spread over a greater number of terminations (or minutes as assigned in Verizon's study).[15]

Verizon's initial study modeled only local offices and "pure" tandem offices that act solely as tandem switches. Recognizing that some switches appeared to be underutilized and observing no combination switches in Verizon's SCIS database, AT&T/WorldCom asked Verizon in July if it had any combination switches in its network. In response, Verizon identified twelve

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[14] See Proprietary Exhibit CEP 2. The nine percent decline is solely due to the GR303 input corrections. AT&T/WorldCom's cost restatement's significantly higher decline in investments and costs is the result of all the proposed changes in this testimony and Cost Panel Rebuttal Testimony.

[15] Verizon stated in the Maryland UNE Proceeding (Case 8879) in response to Staff Data Request No. 22 that "Some elements of the switch, particularly the shared central processing resources, are designed for long term capacity and to be able to accommodate extreme peak demand. They are provided at the initial design of the switch and are largely unchanged as the switch grows."

1 particular switches.[16] Notwithstanding the specific discovery question, the Matt
2 Second Supplemental testimony indicates Verizon did not discover the tandem
3 switch error until after October19, 2001 when it realized that the total tandem
4 trunk count was wrong. Matt Second Supplemental testimony at 3. Verizon
5 changed the SCIS database by entering the combination local/tandem switches
6 and correcting the tandem trunk counts.

7 **Q. HOW DID VERIZON APPORTION THE COSTS OF COMBINATION**
8 **LOCAL/TANDEM SWITCH COSTS BETWEEN THE END OFFICE AND**
9 **TANDEM OFFICE COST ELEMENTS?**

10 A. Verizon ran one study with its original switch configuration assuming no
11 combination local/tandem switches and then ran a second study substituting the
12 combination local/tandem switches for the previous local-only switches. Verizon
13 then simply subtracted the difference in investments between the two runs to
14 derive the tandem-related investments in the combination switches. These
15 combination switch tandem investments were added to the pure tandem switch
16 investments to develop the tandem UNE port and MOU cost elements.

17 **Q. WHY IS VERIZON'S APPROACH INAPPROPRIATE FOR**
18 **DETERMINING BOTH END OFFICE AND TANDEM SWITCH COSTS?**

19 A. In Verizon's study, the local trunk costs and line termination costs actually
20 increased slightly when Verizon added the tandem trunk functionality due to
21 Verizon's underutilization of tandem trunks.[17] SCIS averages all utilizations
22 across all line and trunk terminations to determine a switch's excess capacity and
23 then allocates this excess capacity back onto each line and trunk termination.
24 Because the added tandem trunks are underutilized, they raised the average excess

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16 See Verizon Response to AT&T/WCOM Data Request Set 9, Request 47 (attached as Exh. CEP-6).

17 Verizon's underutilization of trunks is discussed further in a subsequent section.

capacity for all the line and trunk terminations in the switch and increased the trunk and line termination costs.

Of more consequence, Verizon also ignored the savings that should be credited to the end office investments to reflect the common costs shared between end office and tandem functions. For example, the getting started cost, the EPHC investments (a cost category in SCIS that identifies the common switch module costs that was described in the AT&T/WorldCom Cost Panel Rebuttal at 114-15), and SS7 investments are common to both end office and tandem functions. The getting started cost and the EPHC investments should be allocated to the end office and tandem cost studies based on the relative number of local line and trunk ports and tandem ports.[18] The SS7 investments (which are limited to trunks) should be allocated based on the relative number of end office trunk ports and tandem trunk ports. To correct this error, in recalculating Verizon's switching costs, AT&T/WorldCom have modified Verizon's Attachment J to allocate these costs in an appropriate manner.[19] These adjustments then flow into Verizon's Attachment D, which serves as the basis for computing the inputs to VCOST for local end office costs. The resulting decrease in 5ESS total local end office costs is approximately four percent.

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[18] Line ports are converted to equivalent trunk ports because line ports utilize less switch resources than trunk ports and because lines are concentrated (typically ranging between 4:1 and 10:1) and trunks have dedicated paths through the switch (1:1 concentration).

[19] See Proprietary Exhibit CEP 3 for AT&T/WorldCom's revision of Verizon's Attachment J. Proprietary Exhibit CEP 3 also provides appropriate switch discounts and assumes the use of GR303. Proprietary Exhibit CEP 3 has four worksheets in the workbook. The last two are all the outputs from the AT&T/WorldCom revised SCIS runs. They are voluminous and are therefore not being provided in hard copy.

Q. CAN VERIZON USE SCIS TO ACCURATELY ESTIMATE ITS COST OF DMS TANDEM SWITCHES?

A. No. Verizon explains it had to make a "slight" adjustment because SCIS will not allow the user to enter more than 57,000 trunks at 95% administrative fill, and Verizon has two tandems with trunks forecasted to exceed the SCIS maximum.[20] This "slight" adjustment made by Verizon was to model three DMS switches with 57,000 trunks each, for a total of 171,000 trunks rather Verizon's assumed 211,891 trunks. AT&T/WorldCom does not know if Verizon is actually exceeding the Nortel trunk size limitation or whether this is an SCIS input error.

Q. VERIZON MODIFIED ITS METHODOLOGY TO COMPUTE ITS UTILIZATION FACTORS. IS IT DONE CORRECTLY?

A. No. Verizon develops its complicated utilization factor to account for the breakage that SCIS automatically computes and adds to the getting started cost. Verizon already enters the SCIS-defined administrative fill into the SCIS inputs, but Verizon applies a second utilization factor in Vcost that does nothing more than reflect Verizon's actual embedded utilizations. To avoid double counting the breakage already included in the SCIS-defined administrative fill factor, Verizon goes through a complicated process of estimating the amount of breakage that SCIS is calculating. This calculation is incorrect because it uses trunk data on a per "node" basis. A node in SCIS is any type of switch: host, standalone or remote, but trunks are provisioned only at a host or standalone switch.[21] Consequently, Verizon's assumption that breakage is being calculated at each remote distorts the utilization calculation.

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[20] See Matt Second Supplemental testimony at 6-7. These are trunks forecasted over three years at a 5% annual growth.

[21] Although some remote switch types can accommodate trunks, I am not aware of any ILEC provisioning interoffice trunks on remote switches. (SCIS separately accounts for umbilical trunks between the host and remote.)

1 **Q. DOES THIS AFFECT AT&T/WORLDCOM'S RESTATEMENT?**

2 A. No. As explained in the AT&T/WorldCom Cost Panel Rebuttal at 107-08,
3 AT&T/WorldCom believes that Verizon's utilization factors in VCOST are
4 inappropriate because they are attempting to replicate Verizon's embedded
5 utilization, not its forward-looking utilization. Verizon confirmed its
6 underutilization of trunks in discovery, stating that traffic on almost 10,000 trunks
7 previously excluded from its cost study could be absorbed by existing network
8 trunks.[22] SCIS assumes a maximum reasonable usable utilization of 32 CCS per
9 trunk; all Verizon's trunk CCS data are substantially below this capacity,
10 averaging *****Begin Confidential***** *****End Confidential***** for local
11 trunks and only *****Begin Confidential***** *****End Confidential***** for
12 tandem trunks. In addition to the administrative fill factor entered into SCIS data
13 inputs and the breakage that SCIS automatically includes, Verizon compounds
14 this underutilization of individual trunks by applying utilization fill factors that
15 further reduce overall utilization of trunks.

16 As explained above, Verizon already has conservatively low line and
17 trunk fill factors entered into SCIS, and SCIS calculates additional costs for
18 breakage. No additional adjustments are needed to the utilization factors. The
19 AT&T/WorldCom restatement, as in the prior restatement, sets these utilizations
20 to 1.0. AT&T/WorldCom use the Verizon's utilization input in VCOST to reflect
21 the re-allocation of the non-traffic sensitive cost additive to the ports to avoid
22 having to make programming modifications to VCOST (see AT&T/WorldCom
23 Cost Panel Rebuttal at 115 n. 98).

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22 See Verizon's Responses to AT&T/WorldCom Data Request Set 14, Requests 11 and 12 (attached as Exh. CEP-6).

VI. VERIZON'S RIGHT-TO-USE (RTU) FACTOR NEEDS TO BE CORRECTED.

Q. WHAT NEW INFORMATION HAS BEEN PROVIDED ON THE RIGHT-TO-USE FACTOR?

A. As explained in prior testimony (AT&T/WorldCom Cost Panel Rebuttal at 116-17), AT&T/WorldCom did not have adequate information to determine the appropriateness of Verizon's forecasted right to use expenditures. In its 4th Supplemental Reply to AT&T/WorldCom's Data Request Set 9, Request 7, Attachment 9-7c,[23] provided on October 15, 2001, Verizon provided information demonstrating that its 1999 expenditure for central office right to use fees was much lower than the value Verizon used in its RTU study (Part G-9). Verizon made buyout purchases that are long-term arrangements with a switch vendor to purchase software for most, if not all, of its switches. These buyouts include one-time expenditures for features for the life of the switch. At least one of the buyouts was for multiple years' sequential software upgrades in order to "catch-up" switches running on older software. There is no evidence to suggest that the level of expenditures, spiked by buyouts, will continue. In their restatement, AT&T/WorldCom have changed the 1999 Verizon expenditure. AT&T/WorldCom have replaced the incorrect number and calculated a new RTU factor that can be seen in Proprietary Exhibit CEP 4.[24]

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[23] Attached as Exh. CEP-6.

[24] Verizon does not appear to have made this correction in either the Matt Supplemental or Matt Second Supplemental testimony.

VII. VERIZON CONTINUES TO MISALLOCATE NON-TRAFFIC SENSITIVE SWITCH INVESTMENTS TO TRAFFIC SENSITIVE UNE RATE ELEMENTS DESPITE VERIZON AND TELCORDIA EVIDENCE THAT THESE COSTS SHOULD BE DESIGNATED NON-TRAFFIC SENSITIVE.

Q. SHOULD THE RIGHT-TO-USE FEES BE ALLOCATED TO TRAFFIC SENSITIVE OR NON-TRAFFIC SENSITIVE UNE SWITCH RATE ELEMENTS?

A. The RTU fees are non-traffic sensitive. Even Verizon admits in discovery responses that it calculated RTU fees on a per line basis[25] and indicates that RTUs are usually paid for on a per switch basis. In the AT&T/WorldCom Cost Panel Rebuttal at 111-15, AT&T/WorldCom provided evidence describing why the cost driver of a second switch is ports, not usage.

Q. WHAT NEW INFORMATION HAS BEEN PROVIDED SUBSTANTIATING YOUR ARGUMENT THAT THE COMMON COSTS IN A SWITCH (GETTING STARTED AND EPHC) ARE NOT TRAFFIC SENSITIVE.

A. In Verizon's supplemental response to ATT/WCOM 12-25 (and others), Verizon provided the SCIS User Guide that indicate getting started costs are fixed and not traffic-sensitive. In the SCIS User Guide, Telcordia defines the getting started cost as follows: *****Begin Confidential*****

*****End Confidential*****[26] It is clear that the getting started cost does not change with increases or decreases in traffic and should therefore not be recovered via usage rate elements.

The SCIS User Guide also states that the primary reason for switch module exhaust is terminal (i.e., port) exhaust and not call capacity: *****Begin**

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25 See Verizon Response to ATT/WCOM Data Request Set 12, request 51 (attached as CEP-6).

26 See File 5ESS SCIS Section 3B, Pages 1-20.doc, Page B1 (attached as Proprietary Exh. CEP-6). Note also that Telcordia here, too, refers to a new switch.

Confidential***

*****End Confidential*****[27] Based on previous testimony and this new information provided in discovery by Verizon in the past two weeks, it is clear that the Getting Started and EPHC cost categories from the SCIS result reports and the RTU costs should be assigned to port investments and not usage-related rate elements.

VIII. FEATURE INPUTS ARE INCONSISTENT AND REMAIN UNSUBSTANTIATED.

Q. HAS VERIZON CHANGED ITS FEATURE INPUTS AND ARE THEY CORRECT?

A. Verizon has changed its inputs, but they are still not correct. Verizon claimed there was a minor error in its original filing showing the feature inputs. My experience in developing feature equations and determining inputs to develop the SCIS equations leads me to believe that the inconsistencies in Verizon's switch input data are a symptom of incorrect values that have not been reviewed for accuracy, thoroughness, consistency or reasonableness. AT&T/WorldCom have modified several feature inputs to make them consistent with similar inputs for other features in Verizon's filing. The details of these feature input changes can be seen in Proprietary Exhibit CEP 5.

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[27] See File 5ESS SCIS Section 3F Page 1-20.doc page F1 (attached as Proprietary Exh. CEP-6). The word "terminal" in the quotation is equivalent to ports.

IX. SUMMARY AND CONCLUSION

Q. PLEASE SUMMARIZE YOUR ANALYSIS OF VERIZON'S MULTIPLE CHANGES TO ITS COST STUDIES VIA SURREBUTTAL, SUPPLEMENTAL SURREBUTTAL AND SECOND SUPPLEMENTAL SURREBUTTAL TESTIMONIES.

A. Some of the changes made by Verizon are appropriate to deal with the missing lines and switches that plagued Verizon's initial switch cost study.[28] Verizon's attempts to force SCIS to estimate the cost of TR008 lines is simply wrong, however, and its treatment of cost allocation of combination local/tandem switches is inappropriate.

Verizon continues to use a defective methodology in computing switch discount inputs that relies on a limited number of primarily growth-only equipment purchases that result in inflated and distorted prices.

Verizon has provided updated RTU information demonstrating that the key 1999 expenditure was inflated.

Verizon's feature input data is still not corroborated with any realistic supporting documentation, rationale or evidence. Based on my experience, the inconsistencies of similar inputs across different features are not correct.

AT&T/WorldCom has again restated Verizon's study with the same corrections made in prior testimony along with corrections to the errors Verizon made in its last-minute revised studies.[29] AT&T/WorldCom's restatement costs have increased, in part, as a result of missing investment categories in Verizon's

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[28] At the time of testimony preparation, there were still outstanding discovery responses that could impact AT&T/WorldCom's testimony and restatement. In light of the outstanding discovery requests and the timing of the Matt Supplemental and Matt Second Supplemental filings, AT&T/WorldCom reserve the right to supplement this filing with additional testimony either prior to or during the upcoming hearings.

[29] See Exhibit CEP–7. Steve Turner is the AT&T/WorldCom witness on transport rates.

1 original cost study. AT&T/WorldCom have included these significant additional
2 costs in its restatement based on Verizon's categorical denial that any of these
3 investments have been double counted.[30] Verizon's study shows that although
4 lines and total minutes increased approximately 33%, switch investments
5 produced by SCIS increased 66%. AT&T/WorldCom's restatement also reflects
6 the relative increase in investment as we have been unable to determine what is
7 causing the incongruent increase.

8 **Q. PLEASE STATE YOUR CONCLUSIONS**

9 A. Verizon has made it clear that its SCIS model cannot accurately estimate the costs
10 of the network Verizon wants to model. The Synthesis Model should be used to
11 determine long-run forward-looking switch costs. If, however, the Synthesis
12 Model is not adopted, then Verizon's studies must be corrected to comply with
13 TELRIC principles as described in this and prior testimony.

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30 Verizon has not provided clear evidence, such as mathematical computations, to prove that these previously missing cost categories are not being double counted.

I. Catherine E. Pitts, hereby swear and affirm that the foregoing testimony was prepared by me or under my direct supervision or control and is true and accurate to the best of my knowledge and belief.

Signed:

Catherine E. Pitts

PROPRIETARY
EXHIBIT CEP 1

Verizon - Virginia

SCIS End Office Total Material Investment
Standard/Compliance

REDACTED

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Verizon - Virginia

End Office Minutes of Use

REDACTED

Source: SCIS/MO 2.8, Input Statistics Report

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PROPRIETARY
EXHIBIT CEP 2

Difference in 5ESS Investments Correcting only Verizon's G

REDACTED

303 data inputs

REDACTED

Verizon - Virginia

SCIS End Office Total Material Investment
Standard/Compliance

REDACTED

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