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August 8, 2001

BY HAND DELIVERY

Ms. Magalie R. Salas
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

RE: *WorldCom, Cox, and AT&T v. Verizon*
CC Docket Nos. ~~00-218, 00-249~~ and 00-251

Dear Ms. Salas:

Enclosed is a revised version of the testimony of Verizon witness Harold West. Verizon discovered that, due to a production error, Attachment A (labeled "Local Competition Report") to Mr. West's testimony was not included in Verizon's July 31 filing. Verizon is therefore filing a revised version of Mr. West's testimony to include Attachment A and aggregated information requested by counsel for AT&T. Verizon will not object if AT&T/WorldCom respond to this new information on or before August 24, 2001 – one week after the August 17, 2001 rebuttal testimony deadline.¹

Please contact the undersigned if you have any questions.

Very truly yours,


Catherine Kane Ronis
Attorney for Verizon Virginia Inc.

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cc: Dorothy Attwood (8 proprietary copies; 2 public copies)

¹ Of course, because this information is directly responsive to several issues raised by AT&T/WorldCom's direct testimony – e.g., the appropriate cost of capital and depreciation lives – Verizon could have filed this Attachment with its rebuttal testimony on August 17, 2001.

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) CC Docket No. 00-218
Virginia State Corporation Commission)
Regarding Interconnection Disputes)
with Verizon Virginia Inc., and for)
Expedited Arbitration)

In the Matter of)
Petition of Cox Virginia Telecom, Inc.)
Pursuant to Section 252(e)(5) of the)
Communications Act for Preemption) CC Docket No. 00-249
of the Jurisdiction of the Virginia State)
Corporation Commission Regarding)
Interconnection Disputes with Verizon)
Virginia Inc. and for Arbitration)

In the Matter of)
Petition of AT&T Communications of)
Virginia Inc., Pursuant to Section 252(e)(5)) CC Docket No. 00-251
of the Communications Act for Preemption)
of the Jurisdiction of the Virginia)
Corporation Commission Regarding)
Interconnection Disputes With Verizon)
Virginia Inc.)

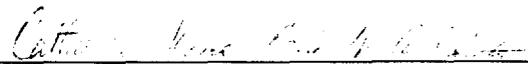
**VERIZON VIRGINIA INC.'S
DIRECT TESTIMONY
CERTIFICATE OF SERVICE**

I do hereby certify that true and accurate copies of the foregoing, Verizon Virginia Inc.'s revised Direct Testimony of Harold West was delivered this 8th day of August, 2001, by Priority Federal Express to:

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

BY EMAIL AND FEDERAL EXPRESS

Mark Keffer, Esq.
AT&T Corporation
3033 Chain Bridge Road
Oakton, VA 22185

Re: CC Docket Nos. 00-218, 00-249 & 00-251

Dear Mr. Keffer:

This is in response to your letter dated August 1, 2001 to Karen Zacharia regarding the CLEC proprietary information contained in the testimony of Verizon witness Harold West.

In responding to your letter, Verizon discovered that, due to a production error, Attachment A (labeled "Local Competition Report") to Mr. West's testimony was not included in Verizon's July 31 filing. Verizon is therefore filing a revised version of Mr. West's testimony to include Attachment A and the aggregated information. Verizon will not object if AT&T/WorldCom respond to this new information on or before August 24, 2001 – one week after the August 17, 2001 rebuttal testimony deadline.¹

Pursuant to your request, Verizon has supplemented Mr. West's testimony with aggregated information that combines together the CLEC proprietary information marked as confidential in the Local Competition Report.² This should satisfy your concerns.

¹ Of course, because this information is directly responsive to several issues raised by AT&T/WorldCom's direct testimony – e.g., the appropriate cost of capital and depreciation lives – Verizon could have filed this Attachment with its rebuttal testimony on August 17, 2001.

² See the revised Q&A dated August 8, 2001 in the conclusion.

Please call if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Catherine Kane Ronis".

Catherine Kane Ronis

cc: Katherine Farroba
Jeffrey Dygert
J.G. Harrington
Jodie Kelley
Lydia R. Pulley

Revised - 08/08/01

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

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OFFICE OF THE SECRETARY

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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., etc)

CC Docket No. 00-249 /

In the Matter of)
Petition of AT&T Communications of)
Virginia Inc., etc.)

CC Docket No. 00-251

VERIZON VIRGINIA INC.

Testimony of Harold E. West III

July 31, 2001

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1 **I. INTRODUCTION**

2 **Q. Please state your name, position and business address.**

3 A. My name is Harold E. West, III. I am Director – Regulatory Support for Verizon
4 Communications, Inc. My office is located at 540 Broad Street, Newark, New Jersey.

5

6 **Q. Please describe your professional and educational background and experience.**

7 A. I graduated from Princeton University in 1980 with a Bachelor of Sciences degree in
8 engineering. In 1991, I completed an Executive Masters program at the University of
9 Pennsylvania and received a Master of Sciences degree in engineering.

10 I began working for New Jersey Bell (now Verizon-New Jersey Inc.) in 1980 as a
11 central office equipment engineer. I then held positions of increasing responsibility in
12 Service Costs, Rates, Product Management and Sales. I assumed my current position in
13 December 1994. I have provided testimony before public utility commissions in
14 Delaware, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Virginia and
15 Washington, D.C. on various marketing, policy, and pricing issues associated with
16 competitive entry into telecommunications markets. I have also participated in CLEC
17 arbitration proceedings in Delaware, New Jersey and Pennsylvania.

18

19 **Q. What is the purpose of your testimony?**

20 A. I will testify about the general state of competition in the local exchange market in the
21 parts of Virginia served by Verizon Virginia Inc. (“Verizon VA”)¹, including all three

¹ Verizon VA serves those areas in Virginia that formerly were served by Bell Atlantic. Other parts of Virginia that are served by Verizon South, and formerly were served by

1 modes of interconnection under the Telecommunications Act and both business and
2 residential markets. Specifically, I will demonstrate that CLECs are today providing
3 local service to hundreds of thousands of Virginia customers using competitive facilities,
4 UNEs (including the UNE-Platform), and resale. I will demonstrate, moreover, that the
5 areas served by Verizon VA include concentrated metropolitan areas that are attractive
6 targets for competitors, who have generally focused first on lucrative business customers
7 and then expanded into the mass market.

8 I also will testify more specifically about the widespread deployment of
9 competitive switches, both on a nationwide basis and in Virginia.

10 Finally, I will demonstrate that competitors are poised to take over an even larger
11 share of the market in the future. As Dr. James Vander Weide and Mr. Allen Sovereign
12 explain in their testimony, the forward-looking economic cost principle requires a
13 consideration of the level of competition and investment risk over the entire future life of
14 Verizon VA's investment in network facilities. To that end, I will demonstrate that
15 Verizon VA faces competition in the future not only from facilities-based CLECs but
16 also from alternative facilities such as packet switching and Internet telephony, cable, and
17 wireless services.

18
GTE, are not at issue in these proceedings. My testimony therefore does not cover those areas.
All references to "Virginia" mean only the parts of Virginia served by Verizon VA.

1 **II. LOCAL COMPETITION IN VIRGINIA**

2 **Q. Please summarize the state of competition in Virginia.**

3 A. As Attachment A demonstrates, competition is thriving in Virginia. Verizon VA's
4 territory includes the most concentrated metropolitan areas in Virginia, including all of
5 the ten most populous cities. Such concentrated metropolitan areas are especially
6 attractive targets for competitors. As the Commission has recognized, CLECs have
7 generally entered the business market in more densely populated areas before expanding
8 into the mass market and less populated areas.²

9 Competitors are using all three modes of interconnection to provide service to
10 both residential and business customers throughout the Commonwealth: their own
11 facilities, Verizon VA's UNEs (including the UNE-Platform), and resale of Verizon
12 VA's services. Facilities-based competition in particular is flourishing.

13 The numbers themselves remove any doubt about the size and breadth of local
14 competition in Virginia. More than 75 CLECs are actively providing local service in
15 Virginia. As of the end of May 2001, CLECs had more than 1000 collocation
16 arrangements in place. Indeed, the number of completed collocation arrangements has
17 grown more than 100% since the beginning of 2000. CLECs currently are collocated in

² See, e.g., Ind. Anal. Div., FCC, *Local Competition: August 1999* at 4-5 (Aug. 1999) (“[T]he data set we have examined allows us to evaluate the validity of certain assertions of industry analysts. One such assertion, made by virtually all analysts, is that competition is emerging most rapidly in urban business districts. . . . [H]igh-volume, low-cost customers in urban business districts are more attractive to new entrants than either rural or residential customers.”); *id.* at 5 (“The facilities-based entry patterns in the three years following the 1996 Act’s passage provide empirical support for these observations. We have found statistical support for the fact that firms are entering the largest and densest markets first”); Ninth Report and Order and Eighteenth Order on Reconsideration, *Federal-State Joint Board on Universal Service*, 14 FCC Rcd 20432, 20441-42 ¶ 16 (1999) (“[C]ompetitors may be likely to target high-revenue business customers in low-cost urban areas. . . .”).

1 102 of the 215 wire centers in Verizon VA, covering approximately 88% of the access
2 lines served by Verizon in Virginia.

3 By the end of May 2001, CLECs had more than 121,000 facilities-based and
4 UNE-Platform residential directory listings and approximately 29,000 facilities-based
5 business directory listings. Competitors now have 9% of the local exchange market in
6 Virginia, above the national average of 8.5%.³

7 Competition in the local market not only is substantial, but also is expanding
8 rapidly. Since the beginning of 1999, for example, the number of interconnection trunks
9 purchased by CLECs increased by more than 600%. The number of UNE-Platforms
10 purchased by CLECs has increased by nearly 50% each month on average over the last
11 six months for which data is available. Customers, moreover, are switching to other
12 types of technologies in large numbers. I describe these alternatives in more detail
13 below.

14
15 **Q. Please explain in more detail the status of facilities-based local competition in**
16 **Virginia.**

17 **A.** Facilities-based competition is particularly strong, and growing rapidly. Industry reports
18 indicate that competitors in Virginia have deployed, or are in the process of deploying,
19 more than 40 local voice switches and at least 2000 route miles of fiber in Verizon's
20 service territory. For example, Adelphia operates three fiber networks with three local
21 voice switches in Virginia. WorldCom, with networks in Reston and in Richmond, has
22 deployed at least 71 route miles of fiber and one local voice switch. In addition to those

³ Robert Burke, *Phone*, Va. Bus., July 2001, at 22, 25.

1 carriers, Cavalier Telephone and two other CLECs each have three local voice switches
2 in Virginia, Cox and four other CLECs each have two, and six CLECs have one each.
3 CLECs also have deployed at least 25 data switches, and are using many of those
4 switches to provide voice services, as discussed further below. These figures do not even
5 include voice or data switches located in Washington, D.C. and Maryland that may also
6 be used to provide service in Virginia. For example, more than half of the local voice
7 switches located in Washington, D.C., and local voice switches located in Rockville and
8 Laurel, Maryland currently serve rate centers in Northern Virginia.

9 As of the end of May 2001, competitors had obtained more than 1000 collocation
10 arrangements in Virginia, covering 102 of the 215 wire centers in Verizon VA; the
11 number of completed collocation arrangements has more than doubled since the
12 beginning of 2000. Through those arrangements, CLECs have access to 88% of the
13 switched access lines served by Verizon in Virginia, including approximately 92% of
14 Verizon's total business lines and 86% of its total residential lines.

15 In addition, as of the end of May, CLECs had obtained approximately 150,000
16 facilities-based directory listings, including more than 121,000 for residential customers
17 and more than 29,000 for business customers, including both residential and business
18 listings in every area code in Virginia.

19
20 **Q. Please describe a few examples of facilities-based CLECs competing with Verizon in**
21 **Virginia.**

1 A. AT&T, Cavalier, and Adelphia exemplify the variety and scope of local facilities-based
2 competition in Virginia, including competition from high-speed data services and cable
3 networks.

4 As explained in Attachment A, AT&T, one of the largest facilities-based CLECs
5 in the U.S., serves [AT&T PROPRIETARY BEGINS] XXX [AT&T
6 PROPRIETARY ENDS] lines in Virginia over facilities it has deployed itself. As of
7 the end of June 2001, facilities-based directory listings showed that AT&T served
8 [AT&T PROPRIETARY BEGINS] XXX [AT&T PROPRIETARY ENDS]
9 residential lines over its own cable network. Its network includes two local voice
10 switches in the Richmond metropolitan area, and others in Norfolk, Roanoke,
11 Fredericksburg, and Arlington. AT&T has ported [AT&T PROPRIETARY BEGINS]
12 XXX [AT&T PROPRIETARY ENDS] numbers, and is using [AT&T
13 PROPRIETARY BEGINS] XXX [AT&T PROPRIETARY ENDS] unbundled stand-
14 alone loops. AT&T has obtained [AT&T PROPRIETARY BEGINS] XXX [AT&T
15 PROPRIETARY ENDS] NXX codes in Virginia.

16 Cavalier Telephone, for its part, states its “one purpose” is to provide competition
17 for Verizon. To that end, Cavalier has established a network in Richmond, Hampton
18 Roads, and northern Virginia that, by its own account, includes 150 miles of fiber optic
19 backbone, three switches, and more than 60 collocation sites. The company targets both
20 business and residential phone customers for its voice, Internet, and data service
21 offerings. June 2001 directory listings showed that Cavalier was providing service to
22 [CAVALIER PROPRIETARY BEGINS] XXX [CAVALIER PROPRIETARY
23 ENDS] lines over facilities it had deployed itself, including [CAVALIER

1 **PROPRIETARY BEGINS] XXX [CAVALIER PROPRIETARY ENDS]** lines to
2 residential customers. As of the end of June 2001, Cavalier had ported **[CAVALIER**
3 **PROPRIETARY BEGINS] XXX [CAVALIER PROPRIETARY ENDS]** numbers,
4 and was using **[CAVALIER PROPRIETARY BEGINS] XXX [CAVALIER**
5 **PROPRIETARY ENDS]** unbundled loops. By the end of May, Cavalier had obtained
6 **[CAVALIER PROPRIETARY BEGINS] XXX [CAVALIER PROPRIETARY**
7 **ENDS] NXX** codes in Virginia.

8 Adelphia Business Solutions (formerly Hyperion Telecommunications) was
9 formed in 1991 by Adelphia Communications, one of the nation's largest cable television
10 providers, to provide integrated communications services, including local service, to
11 business customers. Adelphia operates three fiber networks with three local voice
12 switches in Virginia, and is building a 700-mile network out of Norfolk. Adelphia uses
13 facilities it has deployed itself to serve **[ADELPHIA PROPRIETARY BEGINS] XXX**
14 **[ADELPHIA PROPRIETARY ENDS]** lines in Virginia, virtually all of which are to
15 business customers. As of the end of June 2001, it also served **[ADELPHIA**
16 **PROPRIETARY BEGINS] XXX [ADELPHIA PROPRIETARY ENDS]** lines to
17 business customers on a resale basis as of the end of May 2001. Adelphia has ported
18 **[ADELPHIA PROPRIETARY BEGINS] XXX [ADELPHIA PROPRIETARY**
19 **ENDS]** numbers. As of the end of May 2001, Adelphia had obtained **[ADELPHIA**
20 **PROPRIETARY BEGINS] XXX [ADELPHIA PROPRIETARY ENDS] NXX** codes
21 in Virginia.

22
23 **Q. Is CLEC demand for UNEs, including the UNE-Platform, increasing?**

1 A. Yes. CLEC competition using UNEs is broad and continuing to expand. As of the end
2 of May 2001, Verizon had provided a total of approximately 124,000 unbundled loops to
3 more than 25 different competitors. This figure includes more than 116,000 loops
4 provided on a stand-alone basis, plus more than 7,600 loops provided as part of UNE-
5 Platforms. Competitors have obtained loops throughout Virginia to serve both residential
6 and business customers.

7 Verizon is providing unbundled local switching to approximately five different
8 CLECs. As of the end of April 2001, Verizon was providing competitors with more than
9 7,600 unbundled switching line ports as part of platforms. Verizon has provided more
10 than 630 unbundled dedicated local transport facilities to CLECs in Virginia.

11 In addition, the number of UNE-Platforms purchased by CLECs has grown by
12 nearly half each month on average over the last six months for which data are available.

13

14 **Q. Are there large numbers of resellers that resell Verizon VA services?**

15 A. Yes. As of the end of May 2001, approximately 50 CLECs in Virginia were reselling
16 approximately 107,000 lines, including more than 70,000 business lines and more than
17 36,000 residential lines. All but one of Verizon's wire centers in Virginia had at least one
18 resold line, and 90% had at least ten.

19

1 **III. COMPETITION FROM DATA PROVIDERS**

2 **Q. Does Verizon VA face competition from data providers?**

3 A. Yes. A number of data providers offer data services in Virginia. As packet-switched
4 technology and Internet Protocol telephony become more prevalent, those providers will
5 be able to provide voice communications over their data networks.

6
7 **Q. Please discuss competition from data CLECs and DSL providers.**

8 A. Several CLECs have deployed DSL services in Virginia. For example, Covad has been
9 offering DSL service in Virginia since the end of 1998, and now provides service to both
10 business and residential customers in Arlington, Alexandria, and Fairfax, as well as
11 Richmond and Norfolk. Covad has completed [COVAD PROPRIETARY BEGINS]
12 XXX [COVAD PROPRIETARY ENDS] physical collocation arrangements and
13 [COVAD PROPRIETARY BEGINS] XXX [COVAD PROPRIETARY ENDS]
14 virtual collocation arrangement(s) in Virginia central offices, with another [COVAD
15 PROPRIETARY BEGINS] XXX [COVAD PROPRIETARY ENDS] physical
16 arrangement(s) in progress. In addition, Rhythms NetConnections provides DSL service
17 in Richmond, Norfolk, and Virginia Beach. Rhythms has completed [RHYTHMS
18 PROPRIETARY BEGINS] XXX [RHYTHMS PROPRIETARY ENDS] physical
19 collocation arrangements and [RHYTHMS PROPRIETARY BEGINS] XXX
20 [RHYTHMS PROPRIETARY ENDS] virtual collocation arrangement(s) in Virginia
21 central offices and has [RHYTHMS PROPRIETARY BEGINS] XXX [RHYTHMS
22 PROPRIETARY ENDS] physical collocation arrangement(s) in progress. Network
23 Access Solutions (NAS) began offering DSL service in Reston in February 1997. NAS
24 also offers service in Norfolk and Richmond. NAS has completed [NAS

1 **PROPRIETARY BEGINS] XXX [NAS PROPRIETARY ENDS]** physical collocation
2 arrangements and **[NAS PROPRIETARY BEGINS] XXX [NAS PROPRIETARY**
3 **ENDS]** virtual collocation arrangement(s) in Virginia central offices, with another **[NAS**
4 **PROPRIETARY BEGINS] XXX [NAS PROPRIETARY ENDS]** physical
5 arrangement(s) and **[NAS PROPRIETARY BEGINS] XXX [NAS PROPRIETARY**
6 **ENDS]** virtual arrangement(s) in progress.

7 Other CLECs are also offering advanced telecommunications services in Virginia,
8 both on a stand-alone basis and bundled with other telephone services. Cavalier and
9 NTELOS also have invested in and are providing DSL services to Virginia customers.

10 As of the end of May 2001, Verizon had provisioned approximately 22,000
11 unbundled loops for data communications services (primarily xDSL loops), including
12 **[COVAD PROPRIETARY BEGINS] XXX [COVAD PROPRIETARY ENDS]**
13 unbundled loops provisioned for Covad and **[NAS PROPRIETARY BEGINS] XXX**
14 **[NAS PROPRIETARY ENDS]** for NAS.

15
16 **Q. Please explain how data providers will be able to offer competitive voice services.**

17 A. Recent technological developments allow data providers to route voice communications
18 over DSL or other data networks. So-called “softswitches” operate over broadband
19 connections and can be used to route voice and data using Internet Protocol (IP). More
20 advanced softswitches, known as “virtual central offices,” even provide additional
21 services such as call forwarding and voice messaging. In addition, softswitches remove
22 the geographic constraints on conventional voice switching, because calls can be routed

1 to the Internet without passing through the switched telephone network to a central
2 office.⁴

3 Indeed, analysts have attributed a decline in the market for traditional circuit
4 switching equipment to the convergence of voice-onto-data networks.⁵ “The economics
5 of an IP packet-based platform are compelling. While a circuit switch network’s price
6 performance doubles every 80 months, that of an IP network doubles in about a quarter of
7 that time, or every 20 months. Providing voice and data services over a single network is
8 an economically attractive proposition. Carrying voice traffic on a packet platform saves
9 up to 70% in operating costs, by [Banc of America] estimates.”⁶

⁴ Vicky Uhland, *Switchin’ to Go*, Interactive Week, Jan. 15, 2001 (“A company can own one softswitch and 10 to 15 voice gateways and be able to access the entire country. Gone is the need for a central office.”) <www.zdnet.com/intweek/stories/news/0,4164,2674861,00.html>.

⁵ See C. Armacost, SG Cowen Securities Corp., Investext Rpt. No. 24601222 – Lucent Technologies – Company Report at *1 (Feb. 1, 2001).

⁶ Wall St. Transcript Corp., Investext Rpt. No. 2003080, Analyst Interview: Telecommunications – Industry Report at *3-*4 (Sept. 22, 2000) (quoting Trent Spiridellis, Principal and Senior Equity Research Analyst, Banc of America Securities). See also A. Lindstrom, *Talkin’ ‘Bout Next-Generation Telcos*, Bus. Comm. Rev., May 1, 2001, at 14 (quoting P. William Bane, vice president of Mercer Management Consulting: “New business models based on the use of IP-oriented switches have an infinitely better value proposition for carriers. . . . They’ll enable gross margins in the 60 percent-plus range and the ability to provide differentiated offerings.”).

See also E.R. Jackson, U.S. Bancorp Piper Jaffray Inc., Investext Rpt. No. 2267558, Sonus Networks Inc.: Initiating Coverage – Company Report (Aug. 21, 2000):

Packet switching takes advantage of very favorable technology trends. Currently, packet telephony offers potential reductions of up to 50% in switch per-port costs. This difference is very likely to increase due to the performance capabilities of data components doubling every 18 months due to the effects of Moore’s law while the performance capability of voice components is only doubling every 10 years. . . . Faster, cheaper, smaller, and more versatile switching equipment is transforming the central office. The use of packet

1 By their own statements, Verizon VA's competitors have made clear that they
2 intend to use data switches to provide voice telephony. Indeed, in 1999, both AT&T and
3 Sprint announced they would no longer buy circuit switches for their long-distance
4 networks, turning instead to ATM switches and IP technology.⁷ An AT&T official
5 recently testified before Congress that "with the growth of services like IP telephony,
6 there is no longer a clear distinction between 'voice' and 'data' transmissions."⁸
7 Similarly, a WorldCom official stated that "[a]s part of converging voice and data
8 services," WorldCom planned to roll out a "soft switch or IP switch to handle Internet
9 and voice services on IP backbone."⁹ According to Net2000, "All of Net2000's services
10 will be based on an ATM . . . backbone, which is capable of carrying multiple services,
11 including frame relay, IP and high-quality voice."¹⁰ Intermedia stated that it "has 200

telephony infrastructures can result in a reduction of up to 90% in equipment space requirements. This important point is amplified as Central Office space is a very finite resource and is some of the most costly real estate worldwide.

⁷ See T.K. Horan, CIBC Oppenheimer, Investext Rpt. No. 2749262, *Telecom Services: Daily Teletimes – Industry Report at *1* (Mar. 1, 1999) ("These announcements are consistent with our thesis that telephone networks are gradually migrating from circuit-switched to packet-switched. ATM switches are essentially a hybrid switch with many of the same features and functionality of both a circuit and packet switch.")

⁸ Prepared Testimony of James W. Cicconi, General Counsel and Executive Vice President, AT&T Corp., Before the House Committee on Commerce, Federal News Service (Apr. 25, 2001).

⁹ Fred Briggs, MCI Chief Technology Officer, quoted in *Telephony*, Comm. Daily (Apr. 14, 2000).

¹⁰ *Net2000 Communications Announces Installation of Six Nortel Networks Passport 7480 Multi-service Switches on Network*, PR Newswire (Dec. 7, 1999). See also *Net2000 Announces Record Financial Results for Fourth Quarter and Year-End 2000*, Bus. Wire (Feb. 7, 2001) (quoting Mark Mendes, Chief Operating Officer: As of the end of 4Q 2000, Net2000 had completed the first two phases of its network build plan, "putting in place a national

1 data switches deployed across the U.S. There's no way to put 200 DMS 500s in our
2 network, but with [voice-over-IP], we can provide voice to all of our customers in every
3 market.”¹¹

4 As noted above, CLECs have already deployed more than 25 data switches in
5 Virginia and already are using many of those switches to provide voice services. As the
6 technology is further refined and becomes even more affordable, data switches and voice-
7 over-IP will pose a formidable competitive challenge to Verizon VA's circuit-switched
8 networks.

data network over which we can carry both voice and data traffic for our existing East Coast customers.”).

¹¹ Lindstrom, *supra* note 5, at 14 (quoting Intermedia spokesperson).

1 **IV. COMPETITION FROM OTHER SOURCES**

2 **Q. What other alternative technologies compete with Verizon VA?**

3 A. Verizon VA also faces competition for local voice and data service from a number of
4 cable providers, who provide service by bypassing Verizon VA's network. In addition,
5 although the Commission has found that wireless services are not yet a substitute for
6 wireline, it nonetheless has recognized that wireless providers are increasingly
7 competitive in the local market.

8
9 **Q. Please discuss competition from cable providers.**

10 A. Several providers have made significant inroads into the Virginia telecommunications
11 market, particularly with high-speed Internet offerings.

12 For example, Cox Communications provides cable service to over 700,000
13 customers in Virginia. Cox began aggressively advertising Cox@Home, a high-speed
14 Internet service, to its 58,000 cable customers in Roanoke, Roanoke County, and Vinton,
15 last year. Cox spent \$13 million to upgrade its network there, and laid 550 miles of fiber-
16 optic and coaxial cable to offer new broadband service, including cable modem and
17 digital TV. Cox has been offering cable modem service in Newport News since 1997, in
18 Hampton Roads since 1999, and in northern Virginia since 2000. Cox also offers its
19 Digital Telephone service in Hampton Roads and parts of Newport News, Williamsburg,
20 and Virginia Beach.

21 Cox also provides voice service to business and residential customers over its
22 cable network using circuit-switched technology. Cox serves **[COX PROPRIETARY**
23 **BEGINS] XXX [COX PROPRIETARY ENDS]** lines in Virginia over facilities it has
24 deployed itself; facilities-based directory listings indicate that currently Cox serves **[COX**

1 **PROPRIETARY BEGINS] XXX [COX PROPRIETARY ENDS]** lines to residential
2 customers. Cox Digital Telephone service currently offers residential voice service to
3 Cox cable customers in Hampton Roads and parts of Newport News, Williamsburg, and
4 Virginia Beach. As of the end of June 2001, Cox also provided service to **[COX**
5 **PROPRIETARY BEGINS] XXX [COX PROPRIETARY ENDS]** business customers
6 on a resale basis. Cox has ported **[COX PROPRIETARY BEGINS] XXX [COX**
7 **PROPRIETARY ENDS]** numbers, and is using **[COX PROPRIETARY BEGINS]**
8 **XXX [COX PROPRIETARY ENDS]** unbundled stand-alone loops.

9 In addition, AT&T Broadband, “the nation’s largest broadband service provider”
10 and one of the largest cable operators in Virginia, has been providing cable modem
11 service in Richmond since June 1999 and now also offers its Road Runner cable modem
12 service in other areas in Virginia. AT&T also is competing for local phone customers in
13 the Richmond area through its cable company, MediaOne, and has made significant
14 upgrades to its network in central Virginia in preparation for its digital cable, telephone,
15 and high-speed Internet access service offering.

16 Adelphia is another notable example, providing cable modem services extensively
17 throughout Virginia, including its Powerlink service in Waynesboro, Winchester,
18 Staunton, Fredericksburg, Charlottesville, and Blacksburg. Comcast Cablevision offers
19 its @Home service in several areas, including Alexandria, Woodbridge and Chesterfield
20 County, as well as Expressnet service in Arlington. Other competitors are discussed in
21 Attachment A to this testimony.

22 Like the data providers discussed above, cable providers will be able to use data
23 switches to provide voice telephony.

1

2 **Q. Please discuss competition from wireless providers.**

3 A. Verizon also faces stiff competition from wireless carriers. For example, four mobile
4 wireless companies that provide full coverage of the U.S. — AT&T, Sprint PCS,
5 VoiceStream, and Cingular Wireless — operate wireless networks in Virginia. Verizon
6 has entered into more than 20 approved agreements with mobile wireless providers in
7 Virginia. WorldCom is also investing in its own fixed wireless technology to bypass the
8 LEC network and currently holds wireless licenses that cover 91 of Verizon VA's wire
9 centers.

10 Wireless service is already a viable alternative to traditional telephone service for
11 many residential and business customers in Virginia and is expected to grow in
12 popularity. In fact, the number of wireless telephone subscribers in Virginia increased by
13 32% in 2000, ahead of the national average of 27%.¹² The FCC has cited statistics on
14 increasing minutes of use as a reflection of “decreasing prices and the general wider
15 acceptance of and reliance upon wireless service,”¹³ and has noted that this trend “may
16 also indicate that mobile telephony is moving away from just complementing existing
17 wireline voice service and towards competing directly with it.”¹⁴

¹² Sixth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, FCC 01-192, App. C at Table 2 (rel. July 17, 2001) (“*Sixth CMRS Report*”); *id.* at e. Wireless/Wireline Competition (“For some, wireless service is no longer a complement to wireline service but has become the preferred method of communication.”).

¹³ Fifth Report, *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993*, 15 FCC Rcd 17660, 17682 (2000) (citing Paul Kagan Associates).

¹⁴ *Id.* See also *Sixth CMRS Report* at e. Wireless/Wireline Competition (“For some, wireless service is no longer a complement to wireline service but has become the preferred method of communication.”)

1 **V. CONCLUSION**

2 **Q. [Added 8/8/01] Please summarize the data, in the aggregate, for the CLECs**
3 **discussed in Attachment A, without revealing proprietary information specific to**
4 **any particular CLEC.**

5 A. The CLECs discussed in Attachment A, in the aggregate, serve approximately 409,000
6 lines using facilities they have deployed themselves, including approximately 106,000
7 residential lines. They provide approximately 43,500 lines to business customers on a
8 resale basis. These CLECs have ported a total of approximately 275,700 numbers and
9 obtained approximately 1300 NXX codes. They use a total of approximately 85,600
10 unbundled standalone loops. In addition, the data CLECs and DSL providers discussed
11 in Attachment A have approximately 175 physical collocation arrangements, in the
12 aggregate, as well as 11 virtual collocation arrangements. They also have 7 additional
13 physical or virtual collocation arrangements in progress.¹⁵

14

15 **Q. Please summarize your conclusions regarding the level of competition in Virginia.**

16 A. Attachment A demonstrates unequivocally that the Virginia local service market is
17 thriving. A number of competitors are currently serving a large number of customers
18 using their own facilities as well as UNEs, UNE-P, and resale.

19 Even more important, the evidence shows that competition in Virginia is
20 expanding rapidly, particularly with respect to facilities-based competitors. Indeed,

¹⁵ Attachment A discusses a number of major competitors, but does not provide specific data for all CLECs operating in Virginia. These figures represent aggregated data only for the CLECs discussed in Attachment A.

1 Verizon VA's competitors are investing heavily in facilities that will completely bypass
2 Verizon's network.

3

4 **Q. Does this conclude your testimony?**

5 **A. Yes.**

6