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March 29, 2004

Ex Parte

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: WC Docket No. 01-337, 01-338, 02-33 and 02-52

Dear Ms. Dortch:

Verizon is providing the attached declaration of Jerome Holland, Vice President, Fiber Network Service for Verizon Network Services to supplement the record in the above proceedings. Please let me know if you have any questions.

Sincerely,

Attachment

cc: P. Arluk
M. Carey
T. Navin
S. Bergmann
M. Brill
D. Gonzalez
C. Libertelli
J. Rosenworcel

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

In the Matter of	)	
	)	
Petition for Forbearance of the Verizon Telephone Companies	)	CC Docket No. 01-338
	)	

DECLARATION OF JEROME HOLLAND

1. My name is Jerome Holland. I am the Vice President, Fiber Network Service for Verizon Network Services ("Verizon"). I submit this declaration in support of Verizon's Petition for Forbearance in the above-captioned matter. I am responsible for managing the implementation of Verizon's Fiber to the Premises ("FTTP") deployment. I have had this position since July 2003. I have been with Verizon for sixteen years. I have a bachelor's degree in engineering, and a master's degree in business administration.

2. Verizon's petition seeks forbearance from any obligations that section 271 may impose to unbundle the next-generation broadband facilities that the Commission has decided should not be unbundled under section 251. As discussed below, and in Verizon's previous submissions in this proceeding, enforcing such obligations would dramatically increase the costs of deploying those facilities, would raise a host of intractable administrative and regulatory problems, and would provide strong disincentives for the widespread deployment of such facilities by Verizon and the other Bell companies.

I. Background.

3. Relying on the de-regulatory promises made when the Commission announced its Triennial Review Order last year, Verizon has significantly increased the reach of its broadband services. Verizon invested more than $600 million since the beginning of last year to increase the availability of our DSL services, including the addition of more than 10 million additional DSL-qualified lines by year's end. At the end of 2002, 62% of our lines were DSL loop qualified; within one year, we had increased that number to 80%. We plan to continue this expansion of DSL availability, with the goal of adding another 7 million DSL-qualified lines in 2004.

4. Verizon also increased the number of DSL lines in service from 1.7 million in 2002 to 2.3 million by the end of 2003. This largely was accomplished through our actions, in May 2003, in slashing DSL prices by 30% to $34.95 per month (or $29.95 when bundled with phone service), and increasing the speed of our basic DSL offering (download speeds of now have more than doubled, from 768 kbps to 1.5 Mbps). In response to the needs of small business customers, we also introduced a symmetric DSL service in July 2003. *See* Letter from Richard Ellis, Verizon, to Marlene Dortch, FCC, Transmittal No. 343 (July 22, 2003). We are continuing to increase DSL penetration in the marketplace during 2004, by developing new products and services and marketing attractive alternatives to cable competitors' offerings. For example, we recently conducted a marketing trial of iobi, a resource that allows users to manage communications from their wireline and wireless phones, computers, laptops and PDAs, and have plans to

deploy it in certain markets starting at the end of the second quarter of 2004. We have presented customers with various bundling options, including video offered through our partnership with DirecTV.

5. These actions benefit not only our customers, but also increase competitive pressure on the dominant cable providers. In fact, Verizon's actions have prompted several of the major cable companies to respond in kind, by increasing the speed of their own broadband offerings, reducing prices, or both. For example, just a few months after we offered higher speeds at lower prices, Time Warner increased its download speeds from 2 Mbps to 3 Mbps in October 2003. In advertisements, Time Warner has been claiming that its service "leaves DSL in the dust." In third quarter 2003, Comcast announced a promotion offering cable modem service for $19.99 per month (effective for three or six months) for video customers, or $33.99 per month for non-video customers, in most markets.

6. Verizon also has moved ahead aggressively with plans to roll out the second generation of broadband networks, making a major commitment to deploying fiber to customers' premises sooner, rather than later. Rather than simply upgrading to fiber as part of our routine maintenance, we are accelerating the Fiber to the Premises ("FTTP") deployment, working toward the goal of passing one million homes by the end of 2004. We have already completed the process of issuing requests for proposals and selecting vendors for the equipment and facilities that will make up these advanced networks. In November 2003, we selected several primary vendors to provide various aspects of the FTTP technology, such as the fiber-optic cabling and other outside plant equipment. In

February 2004, we announced the signing of a multi-year contract with Advanced Fibre Communications Inc. ("AFC") to provide the "active" elements of the network – the central office and premises electronics to run the FTTP technology. Field trials of that technology, called FiberDirect, are scheduled to begin this summer. We have already completed the engineering design work for about 400,000 of the million homes we intend to pass this year.

7. This FTTP deployment fundamentally will be a new network. Even in "brownfield" areas, in most instances the new FTTP facilities will completely overlay the existing circuit-switched feeder and distribution network over an entire central office serving area. The new network will enable Verizon to provide a broad range of important benefits to the public, including enormous bandwidth and better quality of service capable of providing seamless and simultaneous voice, data, multimedia, and video services.

8. Specifically, Verizon's new FTTP network will provide customer applications, products, and data speeds unattainable via existing technologies. The FTTP network will be capable of transmitting up to 622 megabits of data per second and receiving 155 megabits of data per second (shared by the customers on each fiber), which is in addition to a separate path on the same fiber for video. By comparison, our DSL service transmits data to our residential customers at speeds of up to 1.5 megabits per second. While Verizon is still working on the parameters of its service offerings, we are contemplating offering a service that would provide FTTP customers with speeds that are ten to twenty times faster than current DSL or cable modem offerings. Thus, rather than taking

approximately 24 hours to download a feature-length film using DSL at speeds of 768 kbs, or 11 to 13 hours for DSL or Cable operating at 1.5 mbps, if the FTTP operates at speeds up to 30 mbps, such a download would take only 7 to 8 minutes.

9. FTTP also will give Verizon the capability to provide customers with access to a broad variety of real-time applications and data-rich services, including innovative new video services and HDTV quality video, very high-speed Internet access, interactive video, video telephony and telecommuting support, network-based personal video recording, backing up of data to secure and centralized servers, and premises surveillance. The widespread deployment of such new networks thus presents the potential to provide a range of advanced services for consumers, and also provide facilities-based competition in markets currently dominated by the cable incumbents.

10. In addition to the greater speeds and innovative services it will make possible, FTTP is also more reliable than copper-based technologies and, once installed, less expensive to maintain. Verizon's current business plan is to build FTTP facilities not only in newly developed "greenfield" areas, but also to overlay fiber on its existing networks throughout an entire wire center serving area, transitioning customers to the new network over time.

11. Even apart from its direct consumer benefits, deployment of advanced broadband networks will bring substantial benefits to the U.S. economy. First, it will stimulate the development of high-speed work-at-home and other business-oriented applications that will greatly enhance efficiency and productivity in a

range of industries. Second, some analysts have predicted that the very deployment of more advanced broadband technologies is expected to generate billions of dollars in new investment over the next several years and create countless permanent new jobs. Indeed, Verizon is prepared to devote some $1 billion in investment capital to achieve its goal of passing over 1 million homes with new fiber throughout one hundred central offices in nine states by the end of this year. Within five years, Verizon hopes to make FTTP available to a significant portion of its subscriber base.

12. Despite its indisputable benefits, however, deployment of FTTP in the U.S. has barely begun. At present, only approximately 180,000 homes are passed by such fiber facilities, and only approximately 65,000 of those homes subscribe to fiber services. This slow growth results from the enormous expense and complexity of deploying FTTP and other "last mile" facilities. Widespread deployment of FTTP entails massive upfront investment and risk.

II. The Need for Forbearance.

13. Verizon has based its plans to build next-generation broadband networks on the assumption that there will be no unbundling requirements for such networks under any provision of the 1996 Act. It bases that assumption on the logic and promise of the *Triennial Review Order*, in which the Commission explained that compelled access to broadband elements was not only *unnecessary* for broadband competition, but also affirmatively *harmful to competition* because it "tend[s] to undermine the incentives of both incumbent LECs and new entrants to invest in new facilities and deploy new technology." *Triennial Review Order* ¶ 3.

14. As discussed below, the threat of potential unbundling obligations under section 271 would have the same negative effects on broadband investment and deployment that the Commission correctly concluded would result from the enforcement of similar unbundling obligations under section 251. The Commission should act promptly to remove this investment-chilling uncertainty by forbearing from any stand-alone obligations to unbundle broadband elements under section 271.

A. FTTP network design does not accommodate intermediate points of interconnection.

15. New FTTP networks are neither designed nor built to accommodate access by multiple carriers. Verizon's FTTP network uses passive optical network ("PON") technology, which provides a seamless fiber connection between the central office to a customer's premises. Unlike the existing narrowband copper-based network, FTTP loops cannot be split into discreet elements, such as loops, subloops, and separate network interfaces devices. Thus, the network technology that is being deployed does not permit intermediate points of access. In addition, there is not a one-for-one transmission path between the central office and the end user, as is the case, for example, with copper loops terminating on a main frame. A single fiber on the FTTP network may be used to serve up to thirty-two different customers and at any one given time, and the central office equipment may be processing a combination of data and voice traffic from multiple locations. Construing section 271 to require unbundled access to Verizon's FTTP network would require a significant redesign of this new integrated fiber network

architecture to create new and artificial points of access to individual components of the network architecture. Any unbundling requirement would thus require a costly redesign of the network and associated systems, not only by Verizon but by its equipment suppliers as well. That redesign would eliminate many of the inherent efficiencies that help drive broadband deployment. Unbundling requirements would therefore result in sub-optimal technology, as well as add substantial cost and inefficiency. All of these factors would delay and possibly deter deployment of these already risky new technologies. If Verizon were required to unbundled its FTTP, it would have to stop deployment, redesign network and active elements, and request its equipment manufacturers to redesign equipment such as the optical network terminal ("ONT") and optical line terminal ("OLT"). Although it is difficult to predict how much the cost or burdens of unbundling would be, I predict that unbundling requirements would set back Verizon's FTTP deployment by a year or more.

16. Another critical aspect of deploying next-generation networks is the development and deployment of Operations Support Systems ("OSS") necessary to operate these new networks. As is the case with the fiber networks themselves, Verizon is designing and building entirely new systems to support the FTTP deployment that will provide customers with new and enhanced service capabilities. Of the approximately $1 billion being spent in for 2004 FTTP deployment, more than 10% (approximately $120 million) is budgeted for the development of OSS to support FTTP. For example, Verizon intends to offer the capability for "real time" provisioning of FTTP, which would allow an existing FTTP customer to

change their data product (*e.g.*, ordering greater bandwidth speeds) almost instantaneously via website or calling a Verizon customer representative.

17. OSS are essential to providing services as efficiently and at as high a quality as possible to benefit customers. They are also one of the major cost components of deploying these new networks. Imposing an unbundling obligation under section 271 would require the design and development of still new systems to cope with the complex requirements of unbundled access to piece parts of next-generation technology—with all the attendant costs of "the tangled management inherent in shared use of a common resource." *USTA v. FCC*, 290 F.3d 415, 429 (D.C. Cir. 2002).

18. Specifically, if unbundling were required, OSS would have to provide support for provisioning, billing, order-processing, maintenance and other functions for multiple providers using these various individual broadband elements. Verizon alone already has spent hundreds of millions of dollars in modifying existing systems to handle unbundling requirements for narrowband network elements. For broadband, we would essentially have to duplicate these systems, and incur the same types of costs, all over again. The requirements would both increase the costs of new systems and reduce their benefit by sacrificing efficiency and quality, all of which would further undermine incentives to deploy.

19. Some parties have suggested altering the Commission's definition of "new-build" FTTP loops so that it would include only fiber that was "newly constructed in its entirety by the incumbent LEC on or after October 2, 3003 (Effective Date of the UNE Triennial Review Order)." *See* Ex parte letter of ACN Communication

Services, Inc., et al, CC Docket Nos. 01-338, 96-98, and 98-147, at 3 (Jan. 8, 2004). While the vast majority of Verizon's FTTP deployment will not use fiber feeder in existence before October 2003, it is possible we will use spare fiber in existing feeder plant in some cases for our FTTP deployment if it is economical to do so. Present planning suggests that less than 5% of fiber needs for this new network would be met with existing fiber. However, regardless of whether fiber feeder is used, such FTTP deployment would still constitute a new network. Such fiber is not being used today, and is not currently part of services being provided by the copper loop. If existing fiber feeder is used for new FTTP deployment, it still would provide a new path from the central office to the end user that did not exist before. Thus, precluding Verizon from using existing fiber, where it is available, could needlessly increase the costs of its FTTP build-out. Verizon should not be restricted in its ability to deploy what it believes to be the most efficient network design in extending fiber from central offices directly to customer locations.

B. Broadband unbundling obligations would become increasingly unmanageable over time.

20. A separate concern with potential unbundling costs is the expense and uncertainty of new obligations over time. As demonstrated by Verizon's experience in the context of its section 251 obligations, any unbundling requirement evolves over time as it is interpreted and applied, thereby requiring carriers to continually modify both their underlying networks and the accompanying OSS in order to comply with the changing regulations.

21. First, CLECs in particular are likely to argue for complex and onerous variations on any underlying unbundling requirement, regardless of whether they have realistic plans to avail themselves of the regulatory results. One instructive case in point is the economic waste that CLECs inflicted on Verizon in New York in connection with the implementation of line-splitting requirements in 2000 and 2001. At the CLECs' instigation, the New York PSC ordered Verizon to make major alterations to its OSS to accommodate specific "scenarios" to facilitate CLECs and DLECs splitting a Verizon line to provide a combination of voice and DSL service. And it directed Verizon to accelerate its work on accommodating these scenarios. Verizon spent many months and millions of dollars on this effort, all on the basis of forecasts by CLECs that they would soon need to submit thousands of line-splitting orders to Verizon per month. In fact, that demand never materialized, and the total number of such in-service lines in New York is still dramatically lower than CLECs' projections, years after the fact. The prospect of similar economic waste on a much larger scale poses strong

disincentives to any company contemplating enormous capital investments that trigger ill-defined regulatory obligations.

22. Second, although the Commission clarified in the *Triennial Review Order* that TELRIC does not apply to section 271-only unbundling obligations, the potential for intrusive state pricing rules remains. Indeed, CLECs have already argued to state regulators that they have a right to oversee—*i.e.*, comprehensively regulate—these federal obligations.[1/] While that argument is misplaced, because any remaining obligation under section 271 is purely federal, it nonetheless makes clear that the pricing of any elements under section 271 would remain the subject of additional rounds of litigation. The prospect of such litigation would undermine investment by increasing its projected costs and, even more important, prolonging uncertainty about the nature of the regulatory obligations applicable to an ILEC's network design.

23. Third, even if (contrary to initial indications) all states agreed that pricing for section 271-only elements is a purely federal issue within the exclusive jurisdiction of this Commission, there would still be significant uncertainty as to how that standard should be applied. While the Commission has made clear that negotiated, market-based rates will satisfy the section 201 pricing standard, history has shown that other parties will nonetheless try to game the regulatory

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[1/] *See* Summary of TRIP Triennial Review Meeting Discussions, Washington, D.C. at 2 (Oct. 10, 2003) ("CLECs say states do have a role" in "setting prices under §§ 201 and 202 for UNEs required under § 271"). Covad, for example, is currently seeking to assert indefinite line-sharing rights under California law at a prescribed rate of $0 for the high-frequency portion of the loop, even though the Commission has ordered the removal of the HFPL from the list of elements to be unbundled.

process, either to pre-empt private negotiations entirely or to obtain extra leverage. This concern is borne out by Verizon's own experience in offering federally tariffed broadband services. In 2002, Verizon reluctantly withdrew its tariff for a wholesale DSL service, which was theoretically subject to evaluation only under a section 201 "reasonableness" standard, once the Commission required Verizon to offer proof of why a "UNE pricing methodology"—*i.e.*, TELRIC—should not apply to that service.[2/] In short, the prospect of rate regulation even under the pricing standards of sections 201 and 202 would generate substantial uncertainty and further pointless litigation so long as the underlying unbundling obligations remain in place.

24. Verizon, and other telephone companies, should be permitted to voluntarily negotiate wholesale service offerings, meeting the rapidly fluctuating demands of a free market. In contrast, government-imposed unbundling mandates would require major alterations in an ILEC's systems and network architecture, and they would inject additional costs, complexities, and regulatory uncertainty into an already risky undertaking.

[2/] *See, e.g., Verizon Telephone Companies Tariff FCC Nos. 1 & 11, Transmittal No. 232 (PARTS)*, 17 FCC Rcd 23598, ¶ 8 (2002).

I hereby declare under penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge, information, and belief.

Jerome Holland

Executed on March 29, 2004