

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

In the Matter of

Wireline Competition Bureau Short Term
Network Change Notification filed by
Verizon Virginia LLC

Report No. NCD-2378

VERIZON RESPONSE¹

Verizon is retiring copper in a small number of older cross boxes in the Midlothian wire center that currently are used to provide just nineteen POTS lines and three broadband Internet access lines. Upgrading these customers to Verizon's more advanced and reliable fiber facilities is an efficient and reasonable step. There has been no valid objection to the limited copper retirement. In fact, no objections were filed by customers living or working in these areas or by providers serving them, and no request for an extension of time made. The claims raised by the only commenter, an industry advocacy group, are not specific to the facilities to be retired, and have no merit.

A. Fiber Brings Tremendous Advantages to The Customers Here and There Is No Reason to Continue to Maintain Redundant Copper Facilities

Most of the customers served by the facilities to be retired are purchasing retail plain old telephone service, or POTS. Following the retirement of these facilities, they can continue to receive the same traditional POTS service over fiber on the same terms and conditions and at the same or better price as they received over copper. There is no change in the underlying features and functionalities in the voice service available over fiber: voice mail, collect calling, and other

¹ This response is filed on behalf of Verizon Virginia LLC ("Verizon").

features will continue to work just as they did over copper; customers will continue to be able to use fax machines, medical monitoring devices, and home alarms; and accessibility services – such as relay services used by customers who are deaf or hard of hearing – also will continue to work as before. There will be no change to customers’ ability to call 911; public safety answering points will receive the same E911 information as before.

For the three customers purchasing broadband Internet services over the copper facilities to be retired, FiOS Internet will offer them the ability to receive more than they are getting today.

To be clear: phone service received over fiber facilities is not the same thing as Verizon’s FiOS service. Fiber refers to a physical medium: a network made up of fiber optic cables. FiOS refers to particular Verizon branded voice, video, and data services, including FiOS Digital Voice, FiOS TV, and FiOS Internet, that Verizon provides on an optional basis to customers over fiber. While millions of customers have elected to switch to Verizon’s best-in-class FiOS service – provisioned over fiber-optic cable – many others, including those who so choose in this area, receive the same traditional phone service, with the same features and at the same or better price, over Verizon’s advanced fiber network.

As customers and public entities have widely recognized, fiber is a safe, proven, and known technology with a track record of serving communities well. From the perspective of reliability, fiber is immune to many environmental factors that affect copper cable, and is less likely to experience outages during weather events, homeland security incidents, or other public safety emergencies. Fiber lines are generally more durable, do not corrode, have a much longer lifespan, and require fewer repairs than copper lines.

The reliability advantages of fiber directly benefit customers. For example, as a result of Verizon’s programs in recent years to encourage customers experiencing repeated service issues

with copper facilities to migrate to fiber, there have been approximately *one million* fewer repair or trouble-shooting dispatches than would have been required had these customers remained on copper facilities. This equates to one million instances in which customers have *not* experienced an outage or other problem with their service. And for many of those customers, this also equates to time savings, since they would not have to schedule repair appointments and take time out to meet a repair technician. While the resulting consumer welfare gains may be difficult to quantify precisely, to put this in perspective, if one million customers were able to avoid a repair visit with a four hour window, a conservative estimate of the consumer welfare gains from those avoided repairs would approach \$100 million.² Of course, there may be other ways to quantify the benefits as well, but regardless of the calculation the point is the same; the benefits to customers are significant and large. And the customer benefits from avoiding the outage or other service problem in the first place.

Fiber also provides performance advantages, as it offers significantly greater bandwidth and is much less sensitive to distance limitations than is copper. Because the fiber optic signal is a light rather than an electrical signal, there is very little signal loss during transmission, and data can move at higher speed and for greater distances. As a result, fiber can support much greater broadband and higher speed services than copper.

Fiber facilities are also more energy efficient than copper because they use laser light – not an electrical signal – reducing energy consumption and resulting in a greener network. Once copper facilities are retired, there is no longer a need to power two parallel networks as there is

² This values customers' time based on the national average hourly wage of \$24.45. See Bureau of Labor Statistics, Table B-3: *Average hourly and weekly earnings of all employees on private nonfarm payrolls by industry sector, seasonally adjusted*, <http://www.bls.gov/news.release/empst.t19.htm> (last update Aug. 1, 2014) (calculating average wage at \$24.45).

today. Instead, only the more efficient fiber network will consume energy going forward. Additionally the move to fiber reduces the opportunity for the theft of copper cable which has been on the rise in many areas.³ Within only a subset of Verizon's ILEC footprint, there have been over 1700 incidents of copper theft in recent years, resulting in customer outages, financial losses and safety concerns. Retiring copper facilities that are no longer needed to serve customers avoids these problems.

Based on the many benefits of fiber, communities throughout the United States have been clamoring for the benefits of all-fiber networks. The President has praised fiber deployment and investment; the Commission has had as a long-standing goal the encouragement of more widespread fiber deployment. Indeed, providers across the country have deployed fiber cables in their networks and to homes for decades.

B. There Are No Valid Objections to Verizon's Copper Retirement Notice

As required by the Commission's long-standing procedures in Sections 51.325 and 51.333,⁴ Verizon properly served and filed its copper retirement notice for the facilities in question. Not a single objection was filed by a telecommunications or information services provider, nor did the one comment submitted contain the information required under Section 51.333(c) to substantiate a proper objection. No commenter submitted specific reasons why it could not accommodate these changes by the stated implementation dates six months after filing,⁵ nor did any explain what steps it was taking to accommodate these changes. Nor did any

³ See, e.g., *Verizon Offers \$50,000 Reward in Copper Thefts*, New Castle News, http://www.ncnewsonline.com/news/local_news/article_82471fee-2464-11e4-a2c1-0019bb2963f4.html (Aug. 15, 2014) (reporting that nearly 1,000 feet of copper cable worth thousands of dollars has been stolen in Pennsylvania in the prior two weeks).

⁴ 47 C.F.R. §§ 51.325, 51.333.

⁵ Verizon plans to retire these lines in Midlothian on or after November 1, 2014.

commenter submit comments or objections specific to compliance with this small retirement, nor did residents of this area raise concerns.

Instead, the sole commenter reiterated its contentions only about copper retirement more generally. The Alarm Industry Communications Committee (AICC) continues its claim that the fiber and cable systems now supporting millions of customers nationwide are unsafe. It separately argues that the Commission's long-standing network change and copper retirement notification process is not sufficient and argues that copper retirement will result in a reduction or impairment of service and thus should be reviewed under Section 214. Both of its contentions are meritless.

First, as noted above, fiber and coaxial cable based facilities are widely deployed across the country and around the world, and provide reliable and efficient service to millions of customers, including customers using alarm systems. Contrary to AICC's comments, alarm companies already rely heavily on fiber facilities and tout their products' compatibility with fiber, even though these systems all rely on some form of battery back-up. For example, ADT, one of the country's leading alarm companies and a member of AICC, acknowledged in 2007 that Verizon's fiber facilities were approved to work with ADT alarm services, and Verizon is continuing to work with ADT to ensure ongoing compliance with ADT requirements.

Second, as noted previously,⁶ AICC's claims concerning the copper retirement notice procedures have already been addressed and rejected by the Commission when it established the procedures for copper retirement filings. Consistent with its other broadband policies, the

⁶ See, e.g., Verizon New York Inc. and Verizon Virginia LLC Response, *Wireline Competition Bureau Short Term Network Change Notifications*, Report Nos. NCD-2353 and NCD-2354, at 5-6 (May 28, 2014); Verizon New England d/b/a Verizon Massachusetts, *et al.* Response, *Wireline Competition Short Term Network Change Notifications*, Report Nos. NCD-2365, NCD-2372, and NCD-2373, at 5-8 (July 14, 2014).

Commission determined in the *TRO* that ILECs are permitted to retire copper facilities after deploying fiber, subject only to the obligations to comply with the Commission’s network disclosure rules and to provide competitive providers with access to narrowband capabilities over fiber.⁷ Far from finding the move from copper to fiber an “impairment” to a particular service that could possibly require a separate filing under Section 214, the Commission specifically addressed and rejected proposals that would require affirmative regulatory approval prior to the retirement of any copper loop facilities.⁸ The Commission concluded that such proposals were “not necessary” and that the established network disclosure rules would best encourage all providers, including non-ILECs, to invest in broadband facilities.⁹ Pursuant to these rules,¹⁰ the Commission provided for a period of notice to the public and to interconnecting carriers, and created a specific time frame for objections that would both allow well-founded objections to be heard but also not delay retirement more than six months from the provider’s notice. The Commission acknowledged that requiring providers to retain copper or other facilities no longer needed to serve their customers would necessarily divert resources better spent deploying or enhancing the networks that they intend to use to serve their customers, to the detriment of consumers.¹¹

⁷ See *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, 18 FCC Rcd 16,978, ¶¶ 273, 281 (2003) (“*TRO*”).

⁸ *TRO*, ¶ 281.

⁹ *Id.*

¹⁰ See 47 C.F.R. § 51.333.

¹¹ See FCC, *Connecting America: The National Broadband Plan*, at 48-49 (2010), <http://download.broadband.gov/plan/national-broadband-plan.pdf> (stating that incumbents forced to retain redundant copper networks would have reduced incentives to invest in and deploy next generation facilities) Relatedly, in the USF context the Commission has recognized that it makes no sense to support duplicative networks, and has accordingly proposed that support be limited to “[a] single fixed broadband connection” per residence/household. *Connect America Fund; et*

AICC offers no new evidence of any changed circumstances that would justify revisiting those procedures or findings now (and the Commission could not do so absent a new rulemaking in any event), nor does it argue that Verizon failed to comply with them here. As noted above, alarm companies around the country including members of AICC agree that Verizon's fiber-based facilities may be used in connection with their alarm systems and have done so for many years.

AICC cannot dispute that the overwhelming majority of customers today – whether they purchase service from cable providers, over-the-top providers, or wireless providers – do not have a line-powered copper telephone, or that many of these customers already use alarm systems that function on platforms other than copper and which have battery back-up for instances of commercial power outages. Nor can AICC dispute that its own members have widely accepted cable and fiber-based facilities and voice services, with their attendant battery back-up, for use with their alarm systems. AICC also concedes that Verizon is offering affected consumers here even more control over back-up battery for traditional voice customers during commercial power outages by making available a battery back-up for voice services that uses standard D Cell batteries.¹² These batteries are widely available and replaceable, which allows the customer to extend the amount of battery back-up.¹³

al., Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17,663, ¶ 1256 (2011).

¹² See, e.g., AICC Comments, *Wireline Competition Bureau Short Term Network Change Notification filed by Verizon Virginia LLC*, Report No. NCD-2378, at 4-5 (Aug. 13, 2014).

¹³ Verizon provides customers with information about the back-up battery option on four separate occasions: when customers receive a notification letter about the migration; when they speak to a representative about migration; from the technician who migrates their service; and, in their written welcome package.

AICC’s criticism of the battery back-up is ironic given the heavy reliance of its members on batteries to support their alarm systems, both during commercial power outages and at other times. Indeed, alarm systems themselves also rely heavily on back-up power units in the event of a commercial power failure, often batteries similar to the 12v lead-acid battery Verizon has traditionally used for its fiber-based customers. Even outside of the context of power outages, alarm companies often rely on standard batteries to support some parts of home alarm systems, such as smoke detectors, carbon-dioxide detectors, motion sensors, and door and window sensors.¹⁴

Notwithstanding the reliance by consumers on batteries both in the context of their communications and alarm services, AICC now makes alarmist claims that the D-cell back-up option is “a public safety issue.”¹⁵ It levels this claim even as it states that “AICC has no quarrel with the use of fiber optic technology in general and, in the main, is agnostic about fire and burglary alarm transmission technology.”¹⁶ But AICC cannot have it both ways. Like alarm systems, fiber and cable company transmission facilities are not line-powered, and thus all of these platforms require some form of battery back-up during commercial power outages.

As Verizon has deployed fiber, it has consistently sought to provide customers with battery back-up options that would meet their needs, including during times of power outages. Verizon’s customers served over fiber have historically had the option of a using a 12 volt battery back-up, which generally provided customers with up to 8 hours of backup during power outages. Millions of Verizon’s customers have been well-served by these battery backup units over the last decade, as fiber facilities have supported their communications needs – including in

¹⁴ See, e.g., <https://www.myadt.com/static/manuals/battery/WirelessDevicesSelfServiceList.pdf>.

¹⁵ AICC Comments at 2.

¹⁶ *Id.* at 7.

conjunction with their home alarm systems. Verizon's introduction of its new D-Cell approach to back-up battery will only improve this consumer experience, allowing customers to more easily provide extended battery-backup using familiar and easy-to-obtain batteries. This approach offers customers *more* control over their battery back-up, with the ability to purchase replacement batteries at their convenience from almost any grocery or drug store. Rather than the threat that AICC suggests, this is a best-in-class approach to battery backup that provides substantial consumer benefits.

Respectfully submitted,

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August 20, 2014