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REDACTED – FOR PUBLIC INSPECTION

VIA HAND DELIVERY

February 22, 2010

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW, Suite TW-A325
Washington, DC 20554

Re: Reply Comments of Cbeyond, Inc., WC Dkt. No. 09-223

Dear Ms. Dortch:

On behalf of Cbeyond, Inc. ("Cbeyond"), please find enclosed two copies of the redacted version of Cbeyond's Reply Comments for filing in the above-referenced docket. Pursuant to the Public Notice in this proceeding,[1] one copy of the redacted version will be provided via email to the Competition Policy Division of the Wireline Competition Bureau at CPDcopies@fcc.gov and to the Commission's copy contractor, Best Copy and Printing, Inc., at fcc@bcpiweb.com. One copy of the redacted version will also be filed electronically on ECFS.

Pursuant to paragraphs 5 and 14 of the *Protective Order* in this proceeding,[2] one original of the confidential version of Cbeyond's Reply Comments is being filed with the Secretary's Office under separate cover. Also pursuant to paragraphs 5 and 14 of the *Protective Order*, two copies of the confidential filing will be delivered in person to Ian Dillner or Heather Hendrickson of the Competition Policy Division.

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[1] *Pleading Cycle Established For Comments On Petition For Expedited Rulemaking Filed By Cbeyond, Inc.*, Public Notice, WC Dkt. No. 09-223, DA 09-2591 (rel. Dec. 14, 2009) ("Public Notice").

[2] *In re Cbeyond, Inc. Petition for Expedited Rulemaking to Require Unbundling of Hybrid, FTTH, and FTTC Loops Pursuant to 47 U.S.C. § 251(c)(3) of the Act*, Protective Order, WC Dkt. No. 09-223, DA 10-69, ¶¶ 5, 14 (rel. Jan. 13, 2010) ("*Protective Order*").

Please do not hesitate to contact me if you have any questions or concerns about this submission.

Respectfully submitted,

Thomas Jones
Nirali Patel
Attorneys for Cbeyond, Inc.

Enclosures

REDACTED – FOR PUBLIC INSPECTION

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Cbeyond, Inc. Petition for Expedited	)	
Rulemaking to Require Unbundling of	)	WC Docket No. 09-223
Hybrid, FTTH, and FTTC Loops	)	
Pursuant to 47 U.S.C. § 251(c)(3) of the Act	)	

REPLY COMMENTS OF CBEYOND, INC.

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February 22, 2010

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REPLY COMMENTS OF CBEYOND, INC.

Pursuant to the Public Notice in the above-captioned proceeding,[1] Cbeyond, Inc. ("Cbeyond"), through its undersigned attorneys, hereby submits these reply comments in support of its Petition.[2]

I. INTRODUCTION AND SUMMARY.

In a speech delivered at the NARUC Conference in Washington, D.C. last week, Chairman Genachowski described the extraordinary promise of broadband for small businesses.[3] As Chairman Genachowski explained, small businesses have accounted for more than 22 million new American jobs over the last 15 years.[4] He stated that the availability of broadband services

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[1] *See Pleading Cycle Established for Comments on Petition for Expedited Rulemaking Filed by Cbeyond, Inc.*, Public Notice, DA 09-2591, WC Dkt. No. 09-223 (rel. Dec. 14, 2009) ("Public Notice").

[2] *See* Cbeyond, Inc. Petition for Expedited Rulemaking to Require Unbundling of Hybrid, FTTH, and FTTC Loops Pursuant to 47 U.S.C. § 251(c)(3) of the Act, WC Dkt. No. 09-223 (filed Nov. 16, 2009) ("Petition").

[3] *See generally* Prepared Remarks of Chairman Julius Genachowski, Federal Communications Commission, "Broadband: Our Enduring Engine for Prosperity and Opportunity," NARUC Conference, Washington, D.C. (Feb. 16, 2010), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296262A1.pdf.

[4] *See id.* at 3.

to small businesses is critical because "[b]roadband allows small business to think big and grow bigger" and "[w]ith a high-speed Internet connection and the emergence of cloud computing, every small business can have access to a world-class IT system and a national, indeed, global workplace."[5]

Unfortunately, as Cbeyond explained in its Petition, small businesses in this country have not generally experienced these benefits. To do so, small businesses need both broadband connections at or above 6 Mbps of capacity—well above the level delivered by legacy DS1 circuits—and the transformative applications, such as cloud computing, that can be delivered over such high-bandwidth connections. Today, neither incumbent LECs nor cable companies make these tools available to small businesses in a meaningful way. Incumbent LECs, and in some cases cable companies, can provide the necessary bandwidth. They might even list on their websites some of the applications needed by small businesses. But incumbent LECs and cable companies do not have the willingness or expertise to engage in the kind of consultative service provider relationship that small businesses need in order to understand the efficiencies that broadband and applications such as cloud computing can yield.

For many years now, competitive LECs such as Cbeyond, Integra, One Communications, Covad, XO, PAETEC and many others that rely on unbundled loops have specialized in providing consultative, hands-on customer service to small businesses. These carriers have done so by aggressively investing in the delivery of services via DS1 loops. Indeed, Cbeyond reinvests a higher percentage of its revenues than the RBOCs.[6] But DS1-based services are

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[5] *Id.*

[6] For example, Cbeyond invested 25.0 percent of its 2007 revenues in 2008 capital expenditures. *See* Cbeyond, Inc., Annual Report (Form 10-K), at 32-33 (filed Mar. 6, 2009). By contrast, AT&T, Verizon and Qwest invested 17.1 percent, 18.4 percent and 12.9 percent, respectively, of

insufficient to deliver the promise described by Chairman Genachowski. Applications like cloud computing can only be provided via loops that deliver 6 Mbps or more of capacity to the end user. If competitors were to obtain access to unbundled packetized loops (i.e., the packetized capabilities of hybrid and fiber loops) at this capacity, they would aggressively deliver the efficiencies that will transform local businesses into global powerhouses of investment and job creation. Instead, with competitors such as Cbeyond foreclosed from the market, small businesses are unable to realize the efficiencies of broadband technology. That is why the Commission's National Broadband Plan team recently reported that small businesses in this country fail to utilitize broadband efficiently and that "small businesses are less likely to adopt key applications such as e-commerce, CRM and video conferencing."[7]

Cbeyond has a simple solution to this problem. It proposes that incumbent LECs offer unbundled packetized transmission facilities at the prices that incumbent LECs charge retail customers for broadband Internet access services. In other words, competitors would pay the prices that incumbent LECs have themselves chosen to maximize the incumbents' profits. While the retail price covers both broadband transmission and the enhancements used to provide Internet access, Cbeyond proposes that competitors would only receive the broadband transmission. One would think that the incumbent LECs would be eager to earn the extra profits that this service would yield. But this is not the case. Instead, the incumbent LECs and their

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their 2007 revenues in 2008 capital expenditures. *See* AT&T 2008 Annual Report at 22, http://www.att.com/Common/about_us/annual_report/pdfs/2008ATT_FullReport.pdf; Verizon 2008 Annual Report at 13-14, http://investor.verizon.com/financial/annual/2008/downloads/08_vz_ar.pdf; Qwest Communications International Inc., Annual Report (Form 10-K) at 28 (filed Feb. 13, 2009).

[7] *See* FCC, "National Broadband Plan: National Purposes Update," Commission Meeting, at 51 (Feb. 18, 2010), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296353A1.pdf.

allies argue strenuously that requiring them to offer such a highly profitable service is unlawful, would harm their incentive to deploy broadband and is generally bad for America. The FCC should reject these assertions.

First, opponents of the petition argue that Cbeyond's and other competitors' past success in serving small businesses via DS1 loops shows that competitors are not impaired absent the availability of unbundled packetized loops. But as the FCC has recognized, impairment must be assessed on a product market-by-product market basis. Competitors have thus far offered products via 1.5 Mbps transmission facilities. They now seek to offer service in an entirely different set of product markets—the markets for services delivered via packetized loops of 6 Mbps or more of capacity—and these product markets are characterized by transmission speeds several times higher than 1.5 Mbps and by the delivery of entirely different services and applications. Moreover, the technical characteristics of these transmission facilities are entirely different from legacy DS1 loops. Accordingly, competitors' success in serving small business customers via DS1 loops is not relevant to the impairment analysis for packetized loops of 6 Mbps or more of capacity.

Nor is there any question that reasonably efficient competitors are impaired in this market absent the availability of unbundled packetized loops of 6 Mbps or more of capacity. While it is undeniably true that multiple, bonded DS1 or DS3 loops or self-deployed fiber loops can yield higher bandwidths, reasonably efficient competitors cannot charge enough for services provided to small businesses via such loops to cover their costs. In addition, the presence of cable companies in the relevant market is irrelevant because cable companies, which enjoy unique historic advantages, do not qualify as reasonably efficient competitors for purposes of the impairment analysis. Moreover, as the record in the National Broadband Plan proceeding

demonstrates at length, wireless carriers do not offer a substitute for wireline broadband services. It is clear, therefore, that competitors are impaired in the absence of unbundled packetized loops.

Second, opponents of the Petition claim that requiring incumbent LECs to offer packetized loops at the prices the incumbent LECs have themselves chosen to maximize their profits would somehow undermine the incentive to invest in broadband. As a threshold matter, it is not at all clear that appropriate regulation of incumbent LEC loop facilities has had any negative effect on incumbent LEC investments in the past. As Economics and Technology, Inc. ("ETI") has explained in a study recently filed in this docket, the available evidence on incumbent LEC investment trends supports the opposite conclusion. Incumbent LECs seem to set their capital expenditure levels in response to priorities based primarily on the level of competition they face. Where regulation yields increased competition, ETI has found that the incumbent LECs increase investment. Thus, properly targeted unbundling requirements would likely increase incumbent LEC investment levels.

But even if the incumbent LECs and their allies were correct in asserting that eliminating unbundling of packetized loops has in the past spurred investment, such arguments are irrelevant to the instant Petition. These assertions are based on the assumption that the network elements would be subject to TELRIC-based or other purportedly below-market prices set by a regulator. This, of course, is not true of the Cbeyond proposal which seeks nothing more than retail pricing for these network elements. In addition, virtually all of the investment in fiber facilities cited by the incumbents and their allies pertains to facilities serving residential customers. Cbeyond specifically excluded such facilities from its proposal. In any event, the vast majority of the end-user connections over which incumbent LECs deliver packetized transmission are copper loops. Reliance on such loops reflects the absence of incumbent LEC investment.

There is also no basis for the incumbent LECs' fatuous argument that eliminating unbundling for packetized loops increases investment by non-incumbent LECs. As explained, it is economically infeasible for competitors to deploy loops to small businesses. Eliminating unbundling eliminates the very basis for CLEC business plans and CLEC investment. Moreover, the data regarding historic investment by cable companies shows no correlation between unbundling requirements and investment.

Finally, the Commission need not be distracted by the incumbents' assertion that Cbeyond is seeking access to a new product that does not exist today. Incumbent LECs offer stand-alone broadband Internet access service to residential and small business customers. This service basically consists of two parts: (a) broadband transmission and (b) enhancements needed to deliver Internet access. The incumbent LECs combine these two components to transmit traffic between the end-user customer and a hand-off point to an Internet backbone. As explained, Cbeyond and other competitors merely seek the right to purchase the broadband transmission connection from the incumbent LEC. As also explained, the price that Cbeyond is willing to pay for this transmission is the price that incumbent LECs charge for the combination of broadband transmission and the enhancements needed to deliver Internet access. In other words, Cbeyond will purchase (a) for the retail price charged for (a) and (b) together. Thus, the difference between packetized loops and the incumbent LECs' retail offerings would result in an increased profit for the incumbent LECs. Nor is the provision of a stand-alone packetized loop to wholesale customers anything novel or technically difficult. Incumbent LECs have in the past offered this service in response to requests for proposals from competitive carriers.

It follows that there is no sound basis for denying competitors access to unbundled packetized loops. On the contrary, making these facilities available to competitors would

unleash a virtuous cycle of investment, innovation and job creation. It would do so without requiring the expenditure of government money and without burdening incumbent LECs—truly, a Cashless Stimulus for small businesses.

II. REQUIRING UNBUNDLING OF PACKETIZED LOOPS WOULD YIELD TREMENDOUS BENEFITS FOR CONSUMER WELFARE.

As Cbeyond explained in its Petition, if competitive providers of applications and services such as Cbeyond were able to obtain unbundled access to packetized loops, they could provide small businesses with affordable, "big business" applications that would lower small businesses' costs, increase efficiency and productivity, spur innovation and enable them to hire more employees.[8] The Small Business Administration's ("SBA's") Office of Advocacy agrees.[9] It states that adoption of the Cbeyond Petition could "set the stage for increased job creation by small businesses."[10]

In addition, ETI has conducted an analysis, which was recently filed in this proceeding by Public Knowledge, Cbeyond and other parties,[11] that builds on the *March 2009 ETI Study* cited in Cbeyond's Petition.[12] In the *February 2010 ETI Study*, ETI assesses the broader impact of

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[8] *See* Petition at 3-5.

[9] *See* SBA Office of Advocacy Comments at 2. All comments referenced herein are to those filed on January 22, 2010 in WC Dkt. No. 09-223 unless otherwise indicated.

[10] *Id.* at 2.

[11] *See generally* Susan M. Gately et al., Economics and Technology, Inc., "Regulation, Investment and Jobs: How Regulation of Wholesale Markets Can Stimulate Private Sector Broadband Investment and Create Jobs" (February 2010), attached to Letter from Harold J. Feld, Legal Director, Public Knowledge, William Weber, Chief Administrative Officer, Cbeyond, Inc., et al., GN Dkt. No. 09-51, WC Dkt. Nos. 05-25, 06-172, 07-97, 09-135, 09-222 & 09-223 (filed Feb. 12, 2010) ("*February 2010 ETI Study*").

[12] *See generally* Lee L. Selwyn et al., Economics and Technology, Inc., "The Role of Regulation in a Competitive Telecom Environment: How Smart Regulation of Essential Wholesale Facilities

several changes in regulation designed to ensure economic wholesale access to incumbent LEC facilities as envisioned in the Telecom Act of 1996, including policy changes similar to those proposed by Cbeyond.[13] ETI has concluded that such changes are likely to "speed the delivery of 'high speed ubiquitous broadband' and *should, in particular, expand broadband options for small businesses that depend upon competitively priced, innovative broadband services to enhance efficiency, remain competitive, and create new jobs*."[14]

ETI has also found that effective regulation of incumbent LEC wholesale provision of local transmission services will have quantifiable benefits for the telecommunications industry in particular. According to ETI, appropriate regulation of incumbent LEC wholesale last-mile facilities would increase competition, which would in turn increase job creation and investment by both competitors and incumbents.[15] For example, once competitors are "able to address segments of the market that have been foreclosed to them for the better part of the last decade," they will hire additional workers to support market entry and ILECs "will also need to recruit and hire employees to respond to that new competition."[16] Specifically, ETI forecasts that these policy changes will boost telecommunications industry-wide employment by between 135,000 jobs (under the most conservative assumptions) and 450,000 jobs (under "a more realistic

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Stimulates Investment and Promotes Competition," attached as Attachment B to Petition ("*March 2009 ETI Study*").

[13] *See February 2010 ETI Study* at 23.

[14] *Id.* (emphasis added).

[15] *See id.* at 24.

[16] *Id.*

assumption set") over the next five years relative to retaining the regulatory status quo.[17] Thus, at a time when the RBOCs are laying off thousands of employees,[18] the introduction of unbundled packetized loops would help contribute to job growth and jump-start the wireline telecommunications sector.

In addition, ETI expects that, rather than deterring investment, these policy changes will stimulate investment in high-speed broadband infrastructure.[19] In particular, they will promote investment in the provision of services to the kinds of business customer locations that have not been adequately served by incumbent LECs and cable companies.[20] Specifically, ETI projects that "the cumulative investment by ILECs and CLECs will increase between $20-billion (under the most conservative assumptions) and $60-billion (under . . . the most realistic scenario) by

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[17] *Id.* at iv; *see also id.* at 31.

[18] *See, e.g.,* John Murawski, "Cuts fill Verizon's horizon," THE NEWS & OBSERVER (Jan. 27, 2010), http://www.newsobserver.com/2010/01/27/305860/cuts-fill-verizons-horizon.html ("Verizon cut 13,000 positions in its landline business in 2009 . . . ."); Peter Svensson, "AT&T 2Q Earnings fall 15 percent yet beat Street estimates," Associated Press (July 23, 2009) (stating that "AT&T's business services division has suffered" and that AT&T reduced its employment by 14,000 workers during the first two quarters of 2009); Cari Tuna, "Many Companies Hire as They Fire," WALL ST. J., at B6 (May 11, 2009), http://online.wsj.com/article/SB124198904713604533.html (reporting that while AT&T is "adding 3,000 workers in its growing wireless, Internet and television units," it "plans to cut 12,000 employees, or 4% of its work force, including technicians and installers from its traditional wireline business" in 2009); W. David Gardner, "Debt-Ridden Qwest May Be In Acquisition Talks," *InformationWeek* (Apr. 6, 2009), http://www.informationweek.com/story/showArticle.jhtml?articleID=216402912 (reporting that "[i]n recent financial filings, Qwest said it has cut 1,700 jobs"); Steve Raabe, "Qwest poised for total sale?" DENVER POST, at B.8 (Apr. 3, 2009), http://www.denverpost.com/business/ci_12059813 ("Qwest . . . is laying off an unspecified number of workers in its business-markets group, which relies heavily on the company's fiber-optic network.").

[19] *See February 2010 ETI Study* at 22-28.

[20] *See id.* at 24.

2014, compared to the level of investment that can be expected to occur absent [these reforms]."[21]

III. COMPETITORS ARE IMPAIRED WITHOUT UNBUNDLED ACCESS TO PACKETIZED LOOPS.

Opponents of the Petition assert that Cbeyond fails the impairment standard because Cbeyond has been successful in providing services to small businesses via DS1 loops.[22] Opponents miss the point entirely. As the Commission has recognized in the past, the impairment analysis must be performed separately for different product markets.[23] The issue here is not whether Cbeyond is impaired in the absence of unbundled loops when seeking to compete in the market for services delivered via 1.5 Mbps of capacity.[24] The relevant issue in this proceeding is whether Cbeyond and other reasonably efficient competitors are impaired absent access to unbundled incumbent LEC loops when seeking to compete in an entirely different set of product markets. Those product markets are characterized by transmission speeds several times higher than 1.5 Mbps and by the delivery of entirely different services and

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[21] *Id.* at iv; *see also id.* at 26-28.

[22] *See* AT&T Comments at 18; Corning Comments at 15; Qwest Comments at 26-27; Verizon Comments at n.61.

[23] *See In re Unbundled Access to Network Elements; Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Remand, 20 FCC Rcd. 2533, ¶¶ 174-181 (2004) ("*TRRO*") (conducting capacity-specific impairment analysis for high-capacity loops); *see also id.* ¶¶ 126-135 (conducting capacity-specific impairment analysis for dedicated interoffice transport).

[24] Cbeyond surely is impaired in that context, as the Commission has found. *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. 16978, ¶ 325 (2003) ("*TRO*") (subsequent history omitted) ("We find that requesting carriers generally are impaired without access to unbundled DS1 loops.").

applications. As discussed below, Cbeyond and other competitors are indeed impaired in those higher-capacity product markets.

A. Cbeyond Seeks Unbundled Access To Packetized Loops In Order To Provide Service In Product Markets That It Does Not Currently Serve.

While Cbeyond has been using DS1 loops to provide small business customers with services that deliver 1.5 Mbps of capacity, it now seeks to enter new product markets in which the services provided to small business customers deliver capacity at or above 6 Mbps but below DS3 capacity (i.e., 45 Mbps). DS1-based services are not in the same product market as services that deliver 6 Mbps or more of capacity. To begin with, the technical characteristics of TDM-based DS1 and DS3 services are fundamentally different from packetized services. Packetized services such as xDSL services provide higher bandwidth more efficiently and cost-effectively than traditional TDM-based services. Most importantly, as Cbeyond and other commenters have explained, there are many services and applications that can be provided using the packetized capabilities of hybrid and fiber loops that cannot be provided via DS1 loops[25] and for which DS3 loops are too expensive.[26] These include, for example, virtualized desktops, remote desktop management, high-resolution video conferencing, broadcast/live video streaming, robust data

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[25] *See* Petition at 18; *see also* Integra and One Communications Comments at 3-6 ("SMBs increasingly demand services that require both greater bandwidth and more sophisticated features than Integra and One can offer via DS-1 loops. The next generation of SMB services can only be efficiently provided via higher capacity packetized loops.").

[26] *See* Petition at 18; *see also* Integra and One Communications Comments at 5 (explaining that "if a customer demands a service requiring 20 megabits of bandwidth, it is not efficient, or in many cases economically feasible, for the retail carrier to . . . 'overbuy' a single DS-3 from the incumbent"); PAETEC Comments at 9 ("Nor is a DS3 § 251(c)(3) UNE an alternative because these facilities are far too expensive for small businesses to realistically purchase and employ.").

protection, sophisticated video security systems, cloud computing and software-as-a-service.[27] The incumbent LECs themselves recognize the profound differences between TDM-based and packetized services. As AT&T recently acknowledged, "legacy TDM and copper-based DSn services . . . are rapidly being replaced by higher capacity packetized and fiber-based services to meet exploding bandwidth demands by wireless carriers and other consumers of high-capacity transmission services."[28]

Moreover, with access to packetized loops, Cbeyond could reach an entirely new segment of small business customers whose demand patterns are different from those of its existing customers. Given that Cbeyond seeks access to packetized loops in order to enter new product markets, Cbeyond's present ability to rely on TDM loops to deliver 1.5 Mbps of capacity to a customer is irrelevant to the impairment analysis for the packetized services at issue.

B. Absent Unbundled Access To Packetized Loops, Reasonably Efficient Competitors Are Impaired In The Provision Of Services At Or Above 6 Mbps Of Capacity.

Without unbundled access to packetized loops, reasonably efficient competitors are impaired in their provision of services that deliver 6 Mbps or more of capacity for several reasons. *First*, as Cbeyond explained in its Petition, CLECs cannot rely on unbundled copper

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[27] *See* Petition at 18; *id.*, Attachment A, Declaration Of Brooks Robinson On Behalf Of Cbeyond, Inc., ¶ 4 (dated Nov. 16, 2009) ("Robinson Decl.") (describing the benefits of some of these services). Similarly, Integra and One Communications explain that advanced packetized telephony services, high-capacity Internet access applications, virtual private line and high-bandwidth private line services, and high-capacity imaging and video services cannot be provided to small businesses using TDM-based DS1 loops. *See* Integra and One Communications Comments at 4-6.

[28] Comments of AT&T Inc., WC Dkt. No. 05-25, at 66-67 (filed Jan. 19, 2010); *see also* Comments of Qwest Communications International Inc., WC Dkt. No. 05-25, at n.9 (filed Jan. 19, 2010) (stating that the Commission is "correct" to differentiate "TDM-based DSn-level services" from "packet-switched enterprise broadband services such as Ethernet and ATM").

loops from the central office to the end user customer to provide such services in the majority of small business customer locations.[29] Nor is reliance on copper subloops in combination with remote terminal collocation a viable strategy. As QSI Consulting ("QSI") has explained in the record, "[a]lthough the distribution portions of those [FTTC/FTTH] loops may remain on copper and in theory could be purchased on an unbundled basis, the economic reality is that accessing them at the ILECs' remote terminals ('RTs') is almost always economically infeasible, because the high costs of collocating the CLECs' DSLAMs at the RT (as well as the transport required from the RT) cannot be spread across a sufficiently large customer base, in contrast to what can be achieved at the higher level of aggregation occurring upstream at the ILEC central office."[30] CLECs that relied on this strategy have either gone out of business or abandoned reliance on remote terminals. To Cbeyond's knowledge, no CLEC has succeeded with such a business plan today.

Second, in general, it is economically infeasible for Cbeyond to bond multiple DS1 UNE loops together in order to provide packetized services at or above 6 Mbps of capacity to small business customers. In most cases, the cost of multiple DS1 inputs exceeds the revenues that can be generated. For example, **[BEGIN CONFIDENTIAL]**

[END CONFIDENTIAL][31]

Accordingly, Cbeyond would have to pay **[BEGIN CONFIDENTIAL]**

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[29] *See* Petition at 18-19 & *id.*, Attachment C; *see also* PAETEC Comments at 9-10; Covad Comments at 4 (discussing obstacles to CLECs' use of an Ethernet-over-copper strategy).

[30] QSI Consulting, Inc., "Viability of Broadband Competition in Business Markets: An Analysis of Broadband Network Unbundling Policies and CLEC Broadband Competition," at 12 (Jan. 21, 2010) ("*QSI Business Broadband Paper*"), attached as Exhibit A to Covad Comments.

[31] Cbeyond internal analysis.

[END CONFIDENTIAL] to provide a 7.5 Mbps ADSL service. However, Verizon, for example, charges only $89.99 per month for 7.1 Mbps high-speed Internet service.[32] Thus, the price of DS1 UNE loops places Cbeyond in an untenable price squeeze. Moreover, reliance on DS1 UNE loops would almost certainly place Cbeyond in a similar price squeeze in any geographic area in any retail market for business services provided via xDSL technology at capacities at or above 6 Mbps.[33]

Nor is reliance on a DS3 UNE loop economically feasible. For instance, if Cbeyond were to use a DS3 UNE loop to provide a small business customer in its Washington, D.C. serving area with 7.1 Mbps high-speed Internet service similar to the $89.99 service offered by Verizon, Cbeyond would have to pay $961.37 per month for that DS3 UNE loop.[34] There is simply no way for a CLEC to compete where these differentials between input costs and retail prices exist.[35]

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[32] *See* Verizon High Speed Internet Plans, http://smallbusiness.verizon.com/products/internet/hsi_pricing.aspx (last visited Feb. 20, 2010) (using addresses for Washington, DC and Maryland suburbs) (listing monthly price of $89.99 for "Dynamic Premium Package," providing maximum connection speed of 7.1 Mbps downstream and 768 Kbps upstream).

[33] This is certainly true in the AT&T territory. AT&T charges $79.95 per month for 6.0 Mbps ADSL business retail service. *See* AT&T Internet Services, http://businessesales.att.com/products/matrix_internet.jhtml?SoHo=&_requestid=41830 (last visited Feb. 18, 2010) (using Dallas, TX address). Cbeyond would have to pay **[BEGIN CONFIDENTIAL]** **[END CONFIDENTIAL]** to provide a 6.0 Mbps ADSL service. Again, these differentials place Cbeyond in a price squeeze that forecloses entry.

[34] *See* Comments of Sprint Nextel, WC Dkt. No. 05-25, Exhibit 3, "Comparison of UNE and Special Access Rates," at 2 (filed Aug. 8, 2007) ("Sprint Exhibit 3") (showing DS3 UNE loop price of $961.37 for all zones in Maryland).

[35] In another example, if Cbeyond were to use a DS3 UNE loop to provide a small business customer in the Dallas market with 6.0 Mbps ADSL service similar to the $79.95 service offered by AT&T (*see supra* note 33), Cbeyond would have to pay $450.00 for that DS3 UNE loop. *See*

Third, contrary to some commenters' assertions,[36] the need for unbundled access to packetized loops is not merely a matter of lowering Cbeyond's costs. As demonstrated above, the price difference between multiple DS1 UNE loops or a single DS3 UNE loop on the one hand, and incumbent LEC retail services in the 6+ Mbps services market on the other hand, is so great that competitors are foreclosed entirely from relying on DS1 and DS3 UNEs to compete in this product market. Thus, the difference between the availability of unbundled packetized loops and the absence of unbundled packetized loops in this context is the difference between a competitor entering the market or forgoing the market entirely. This is why, in the absence of unbundled packetized loops, Cbeyond does not serve the market for 6+ Mbps services.

Fourth, the costs associated with self-deployment are generally far too high to make self-deployment economic for purposes of providing 6+ Mbps services to the small business market. The Commission has held that self-deployment is not economically feasible unless a CLEC can provide at least two DS3s to a specific customer location.[37] Thus, one can assume that a competitor can only self-deploy a loop where the service to be provided via the loop yields revenues similar to the retail price of two DS3s. As discussed above, however, even the costs of a single DS3 UNE loop input is orders of magnitude higher than the prices of 6+ Mbps ADSL services for small businesses in the downstream retail market. The retail price for two DS3s is

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Sprint Exhibit 3, at 2 (showing DS3 UNE loop price of $450.00 for all zones in Texas). Thus, even at the lowest DS3 UNE loop prices, the input cost is orders of magnitude higher than the incumbent LEC prices for the retail services at issue.

[36] *See* AT&T Comments at 20; Qwest Comments at 5.

[37] *See TRO* ¶ 321 (self-deployment is economically feasible only where a CLEC can provide multiple DS3s to a specific customer location); *see also id.* ¶ 324 (holding that "because the record confirms that it is economically possible to self-deploy at a three DS3 loop level to a particular customer location, we limit an incumbent LEC's unbundling obligation to a total of two DS3s per requesting carrier to any single customer location").

almost certainly much higher than the single DS3 UNE loop price. Accordingly, notwithstanding TIA and FTTH Council's assertions,[38] the revenues generated from the provision of 6+ Mbps services to small businesses are insufficient to justify self-deployment.[39] Thus, competitors are foreclosed from relying on self-deployment to compete in the 6+ Mbps services market. This conclusion is consistent with the Commission's findings regarding the absence of self-deployment by CLECs in the business market as a whole.[40]

In support of their argument that CLECs should deploy their own fiber to provide the 6+ Mbps services at issue, TIA and FTTH Council also rely on the Commission's finding in the *TRO* that entry barriers with respect to FTTH deployments appear to be largely the same for incumbents and competitors.[41] However, as QSI explains, "those greenfield deployments generally constitute a small fraction of the ILECs' overall broadband build-outs."[42] In fact, the evidence available today demonstrates that CLECs do not have a significant share of the FTTH market as the Commission had expected. A recent Columbia Institute for Tele-Information report on "Broadband in America" shows that the three RBOCs collectively had 3.3 million

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[38] *See* TIA & FTTH Council Comments at 15-17.

[39] *See also TRO* ¶ 320 (finding that "a single DS3 loop, generally, can not provide a sufficient revenue opportunity" to "recover the significant fixed and sunk construction costs of DS3 loops").

[40] *See In re Petitions of the Verizon Telephone Companies for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Boston, New York, Philadelphia, Pittsburgh, Providence and Virginia Beach MSAs*, Memorandum Opinion and Order, 22 FCC Rcd. 21293, ¶ 37 (2007) ("*Verizon 6-MSA Forbearance Order*"); *In re Petitions of Qwest Corp. for Forbearance Pursuant to 47 U.S.C. § 160(c) in the Denver, Minneapolis, St. Paul, Phoenix and Seattle MSAs*, Memorandum Opinion and Order, 23 FCC Rcd. 11729, ¶ 28 (2008) ("*Qwest 4-MSA Forbearance Order*").

[41] *See* TIA & FTTH Council Comments at 3 (citing *TRO* ¶¶ 275-77); *see also* ITTA Comments at 4.

[42] *QSI Business Broadband Paper* at n.44.

FTTH subscriptions as of March 30, 2009 while CLECs had approximately 176,000 FTTH subscriptions, or approximately 5 percent of the total RBOC subscriptions.[43] Actual market experience therefore shows that CLECs are nowhere near on par with the RBOCs in their opportunity to deploy FTTH facilities.

Fifth, contrary to incumbent LECs' claims,[44] the presence of cable companies in the small business market does not prove the absence of impairment without unbundled access to packetized loops. The Commission has held that cable companies have not established a significant presence in the small business market.[45] The experiences of Cbeyond and other CLECs confirm this finding. As Cbeyond's Chief Marketing Officer, Brooks Robinson, has explained, "Cbeyond has found that . . . small businesses do not perceive the offerings of incumbent LECs and cable operators as viable substitutes for the applications and services that Cbeyond offers."[46] In addition, according to Mr. Brooks, "neither incumbent LECs nor cable operators offer . . . sophisticated, high-bandwidth applications at prices suitable for small

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[43] *See* Robert C. Atkinson & Ivy E. Schultz, Columbia Institute for Tele-Information, "Broadband in America: Where It Is and Where It Is Going," at 15-16 & Figures 2-3 (Nov. 11, 2009) ("*CITI Broadband in America Report*"). The report shows that 681 non-RBOCs (the vast majority of which are likely incumbent LECs) have 1.1 million FTTH subscriptions and that CLEC FTTH subscriptions comprise 15.8 percent of those 1.1 million subscriptions (i.e., approximately 176,000). *See id.*

[44] *See* AT&T Comments at 18-19; Qwest Comments at 5; Verizon Comments at 16.

[45] *See Verizon 6-MSA Forbearance Order* at n.16; *see also Qwest 4-MSA Forbearance Order* ¶ 36 (finding insufficient retail competition from cable operators in the residential market, let alone the business market, to justify forbearance in the 4 MSAs at issue).

[46] Robinson Decl. ¶ 3; *see also* Integra and One Communications Comments at 2-3 (explaining that in Integra and One Communications' experience, cable companies have not focused on serving the small and medium business market); PAETEC Comments at 9 (explaining that "the cable companies' business services are not a substitute for the services that competitors would offer if they had reasonably priced access to the ILECs' fiber and hybrid loops").

businesses via fiber or hybrid loops today."[47] Cbeyond's churn data confirms these conclusions. For example, from January 2009 to January 2010, Cbeyond lost only **[BEGIN CONFIDENTIAL]**

[END CONFIDENTIAL][48]

Even if cable companies were to enter the small business market in a meaningful way in the future, which is certainly possible, their ability to do so does not lead to the conclusion that a reasonably efficient CLEC could do so. As the Commission expressly held in the *TRO*, "we do not find the presence of intermodal alternatives dispositive in our impairment analysis as some commenters suggest."[49] The Commission held that it would instead examine the extent to which the presence of an intermodal competitor demonstrated that the relevant barriers to deploying network facilities could be overcome by competitors other than a single intermodal competitor.[50] For example, the FCC expressed skepticism that the cable companies' provision of relevant services over their own facilities demonstrated a lack of impairment for non-cable companies because cable companies had benefited from historic advantages that other competitors lack

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[47] Robinson Decl. ¶ 4.

[48] *See* "Attachment A" (attached hereto), Table 1: "Number and Percentage of Cbeyond Customer Accounts Lost to Cable Providers, January 2009-January 2010." Moreover, the number of voice lines associated with each of those lost customer accounts shows that the vast majority of those customers were very small businesses that are not in Cbeyond's target market. That is, Cbeyond's average small business customer has 8 voice lines and **[BEGIN CONFIDENTIAL]**

[END CONFIDENTIAL] *See id.*, Table 2: "Number of Voice Lines Associated with Customer Accounts Lost to Cable Providers, January 2009-January 2010."

[49] *TRO* ¶ 97.

[50] *See id.* ¶¶ 97-98.

(e.g., "first-mover advantages and scope economies not available to other new entrants").[51] The obvious implication is that the presence of a single intermodal competitor in the market is not sufficient, by itself, to demonstrate the absence of impairment. Moreover, any other interpretation of impairment would permit a duopoly—a result that is unlikely to yield efficient outcomes.[52]

Sixth, despite incumbent LECs' claims to the contrary, wireless services are irrelevant to the impairment analysis because they are not in the same product markets as the services which Cbeyond seeks to provide to small businesses using packetized loops. As Cbeyond and other parties have explained at length in the National Broadband Plan proceeding and in other Commission proceedings, mobile wireless broadband service is not a substitute for wireline business broadband service.[53] Nor is the mere existence of several fixed wireless providers that purport to serve small businesses[54] evidence that fixed wireless service is a viable substitute for wireline business broadband service.

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[51] *See id.* ¶ 98.

[52] *See generally* Declaration of Dr. Stanley M. Besen, attached to Letter from Andrew D. Lipman, Counsel for TDS Metrocom, LLC et al. & Thomas Jones, Counsel for Cbeyond, Inc. et al., to Marlene H. Dortch, Secretary, FCC, WC Dkt. Nos. 08-24 & 08-49 (filed Apr. 23, 2009).

[53] *See, e.g.,* Workshop Response of tw telecom, One Communications, Cbeyond, and Integra, WC Dkt. Nos. 09-51 et al., CC Dkt. No. 98-147, at 7 (filed Sept. 15, 2009) ("Because of the technical characteristics of wireless networks, wireless broadband services are unlikely in the foreseeable future to constitute a full substitute for even residential wireline broadband service, let alone business wireline broadband service."); *see id.* at 7-10; Declaration of Dr. Michael D. Pelcovits at 19 (dated Apr. 21, 2009), attached to Letter from Samuel L. Feder, Counsel for Cavalier Telephone & TV, to Marlene H. Dortch, Secretary, FCC, WC Dkt. Nos. 08-24 & 08-49 (filed Apr. 21, 2009) (concluding that "there is no basis on which to conclude that wireless broadband service belongs in the same product market as wireline broadband service"); *see also id.* at 16-19 (explaining why wireless broadband is not a substitute for most wireline broadband usage).

[54] *See* AT&T Comments at 19; Verizon Comments at 14.

Finally, the argument that Cbeyond seeks unbundling that is suitable only to its individual business plan[55] is clearly wrong. The record in this proceeding demonstrates that other competitors are also ready to fill the gap left by incumbent LECs[56] and bring game-changing, high-capacity applications to small businesses via packetized loops. As Integra and One Communications explain, "[t]he inability of current incumbent LEC access technologies to meet the burgeoning demands of the SMB market makes it absolutely critical that the FCC make available to competitors the packetized capabilities of incumbent LEC fiber and hybrid loops."[57] Integra and One Communications state that they "are ready and willing" to deliver next-generation small business services that can only be provided via higher capacity packetized loops.[58] These include advanced packetized telephony service, high-capacity Internet access applications, VPN and high-bandwidth private line services and high-capacity imaging and video services.[59] Similarly, Covad and PAETEC explain that with unbundled access to packetized loops, competitors will be able to roll out "transformational, next-generation applications, which require much more than 1.544 Mbps capacity, such as high definition video-conferencing,

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[55] *See* Corning Comments at 16; TIA & FTTH Council Comments at 14-15.

[56] *See* Integra and One Communications Comments at 2 ("Integra's and One Communications' experience in the market is that SMBs and typically ignored by the incumbent LECs because of the relatively limited revenue opportunity they provide."); *see also* PAETEC Comments at 9 (stating that "small businesses have been most harmed by [the Commission's] policy approach because [] they have been neglected by ILECs").

[57] Integra and One Communications Comments at 7.

[58] *Id.* at 5.

[59] *See id.* at 4-5.

distance learning, telemedicine, telecommuting" and other applications for small and medium-sized businesses.[60]

IV. THERE IS NO BASIS FOR CONCLUDING THAT UNBUNDLING OF PACKETIZED LOOPS AT RETAIL PRICES WOULD DIMINISH INVESTMENT IN THE PROVISION OF BROADBAND TO BUSINESSES.

While opponents of the Petition claim that unbundling of packetized loops at retail rates would deter investment in the business broadband market, they offer no basis for this conclusion, and there is none. As a threshold matter, it is important to note that regulation is only one of many factors that businesses, including telecommunications carriers, take into account when making investment decisions.[61] As ETI states, "[t]he ILECs' argument that deregulation will spur investment rests upon the assumption that when a carrier (ILEC or CLEC) is considering whether to make an investment in facilities, the 'cost' of regulation . . . will tip the balance on some investment decisions to the negative side."[62] But this is an overly simplistic view that does not comport with reality. As Free Press has explained in the Commission's net neutrality proceeding, investment decisions are not "binary" as incumbents would have the Commission believe (i.e., the imposition of any regulation does not automatically deter investment).[63] Rather,

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[60] Covad Comments at 2; PAETEC Comments at 2.

[61] Other factors may include "demand, supply costs, competition, interest rates, corporate taxes, and general economic confidence." *See* Comments of Free Press, GN Dkt. No. 09-191 & WC Dkt. No. 07-52, at 13 (filed Jan. 14, 2010) ("Free Press *Open Internet* Comments").

[62] *February 2010 ETI Study* at 5.

[63] Free Press *Open Internet* Comments at 13. Indeed, Free Press has found that following the Commission's imposition of net neutrality rules on AT&T (as a condition of the agency's approval of the AT&T-BellSouth transaction), AT&T's "gross investment [] increased more than any other ISP's in America during [the 2006-2008] period." *Id.* at 25. While Free Press does "not mak[e] a claim of causality about this one single case of the imposition of a strict principle of non-discrimination and its impact on investment," it does conclude that "[t]he rhetoric about network neutrality discouraging investment is just a general reflection of the common but

the factors that influence return on investment "are themselves in turn driven by other considerations—some interrelated—making overall investment decision-making a complex process that depends on the specifics of a given market."[64] As discussed below, the available evidence does not support the conclusion that unbundling packetized loops would cause this decision-making process to yield less investment; if anything, it would likely yield more investment.

A. The Available Evidence Indicates That Effective Regulation—Not Deregulation—Of Incumbent LEC Loop Facilities Will Promote Competition And, In Turn, Spur Investment.

The *March 2009 ETI Study* referenced in Cbeyond's Petition and the more recent *February 2010 ETI Study* confirm that, contrary to incumbent LECs' claims, deregulation has not yielded increased investment by incumbents or competitors. In fact, the FCC's deregulatory policies of the early 2000s have resulted in less investment.[65] As ETI explains, "[f]acing only

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misguided belief that any and all regulation discourages investment." *Id.* at 26-27. As demonstrated above, the same can be said here about incumbents' claims that unbundling of packetized loops at retail prices will discourage investment. Moreover, incumbent LECs themselves recognize that not all regulation is *per se* harmful. Indeed, in situations in which incumbent LECs have sought access to essential inputs controlled by other entities, incumbent LECs have advocated for FCC regulation of the terms and conditions on which those essential facilities are made available. *See, e.g., In re Verizon Tel. Co. v. Madison Square Garden, L.P.*, Program Access Complaint, CSR-8185-P, ¶¶ 3, 8 (Jul. 7, 2009) (arguing that "[g]iven the importance of regional sports programming to consumers, it is critical for competing video providers to carry that programming in order to compete effectively" and requesting that the FCC require Cablevision to "immediately [] provide their regional sports programming, in all formats, to Verizon on reasonable and nondiscriminatory rates, terms, and conditions"); Comments of AT&T Inc., WC Dkt. No. 07-245, at 33 (filed Mar. 7, 2008) (requesting that the Commission advance broadband deployment "by establishing a uniform broadband pole attachment rate and by extending to ILECs section 224(b)(1)'s protections of 'just and reasonable' rates, terms, and conditions for pole attachments").

[64] *Id.*

[65] *See* Petition at 14-16 (citing *March 2009 ETI Study*); *see also February 2010 ETI Study* at 1-14.

limited remnants of the post 1996 Act competition, the ILECs' incentives to expand their own capital expenditures was diminished, and their investment outlays declined as well."[66] For example, "the net book value of [RBOC] plant in place at the end of 2007 [wa]s *less* than it was in 2001, and even less than it had been in 1996 when the Act was passed."[67] ETI found that "CLEC investment followed similar trends, increasing during the period when regulation ensured the availability of cost-based wholesale inputs and falling off once it was clear that regulators were no longer committed to ensuring [such] availability."[68]

ETI also found that deregulation has resulted in fewer jobs.[69] According to ETI, "during the years 1996 through 2000, while being forced to make their underlying wholesale facilities available to competitors, RBOC employment remained almost constant at approximately 400,000," but "[b]etween 2001 and 2007 . . .[,] that number dropped to 260,000."[70] ETI further found that during the 1996-2000 period, "strong wholesale regulation spurred substantial and significant job creation throughout the non-BOC portions of the wireline telecommunications industry (primarily IXCs and CLECs, including cablecos)."[71] In sum, ETI's analysis

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[66] *February 2010 ETI Study* at ii.

[67] *Id.* at 7 (emphasis in original); *see also id.* at 9-10 (describing findings of a "carrier-by-carrier review of the RBOCs['] capital expenditures during the period 1996 (passage of the Act) to 2007 ([the] last year for which RBOC investment data is available)").

[68] *Id.* at 10.

[69] *See id.* at 15-21.

[70] *Id.* at 17-18.

[71] *Id.* at 18-19; *see also id.* at 18 (explaining that "when RBOC employment held steady" between 1996 and 2000, "other wireline carriers (IXCs and CLECs, Cablecos) and telecom resellers added some 300,000 employees to their payrolls").

demonstrates that more investment and job growth by both incumbents and competitors occurred "under regulation that encouraged competition than after its removal."[72]

Critics of the *March 2009 ETI Study* contend that it fails to take into account the bursting of the technology "bubble" in 2000-2001[73] and that it uses 2001 as the baseline for examining investment when unbundling of packetized loops was not eliminated by the FCC until 2003.[74] Notwithstanding the fact that the tech bubble disproportionately affected CLECs and fiber backbone providers rather than incumbent LECs, if deregulation actually spurs investment, as the incumbent LECs have argued, then there should have been a dramatic increase in incumbent LEC capital expenditures since 2003. But this simply did not happen.[75] Indeed, as ETI has shown, the total amount of incumbent LEC capital expenditures in 2008 was not significantly different from that in 2003.[76]

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[72] *Id.* at 3.

[73] *See* AT&T Comments at 13-14; Corning Comments at 9-10; Qwest Comments at 18.

[74] *See* Corning Comments at 9-10; Verizon Comments at 21.

[75] In addition, the decline in telecom sector jobs beginning in 2001 cannot be attributed solely to the bursting of the tech bubble. As ETI explains: "If the downturn in employment was associated with the end of a bubble, one would expect a one-time drop, followed by gradual recovery. Instead, the wireline, reseller and 'other' employment levels began their decline during 2001 and have never fully recovered. Only the wireless segment shows job growth . . . . Like the rest of the sector, employment in the wireless segment dropped during 2001 through 2003 . . ., but by 2004 the number of US wireless segment employees had begun to increase again, and by 2006 and job losses that might have been attributable to the end of the 'tech bubble' had been regained. . . . If the general economic conditions in 2001 and 2002 had been responsible for the substantial drop in telecom sector employment, employment levels should have rebounded in the wireline and reseller categories as well." *February 2010 ETI Study* at 20.

[76] *See id.* at 14, Figure 1-4. ETI's analysis does not account for inflation. If the incumbent LEC capital expenditures in Figure 1-4 of the *February 2010 ETI Study* were adjusted for inflation, the total amount of incumbent LEC capital expenditures in 2008 would be lower than that in 2003. *See, e.g.,* Bureau of Labor and Statistics, CPI Inflation Calculator, http://data.bls.gov/cgi-bin/cpicalc.pl (last visited Feb. 19, 2010) (showing that $1 in 2003 had the same buying power as

Moreover, the moderate recovery in RBOC investment levels beginning in 2005 was not a reaction to deregulation[77] but rather a response to competition from cable operators. That is, to the extent that RBOCs have made investments in new fiber loop facilities, those investments have been targeted almost exclusively to geographic and product markets in which the RBOCs face competition from cable operators. As ETI explains, "AT&T's and Verizon's annual reports to shareholders reveal that the vast majority of the investment that has been occurring in their ILEC networks since 2005 has been directed at mass market broadband deployment – FiOS and U-verse."[78] In addition, according to ETI, both incumbent LEC and cable company investment declined between 2001—the first year that cable company mass market broadband deployment passed more than 50 percent of U.S. households—and 2004, and incumbent LEC annual investment levels did not begin their modest increase until cable company mass market broadband deployment had already passed 90 percent of households and cable company

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$1.17 in 2008 and therefore, $1 billion in 2003 had the same buying power as approximately $1.17 billion in 2008). While one may argue that electronics costs have declined over time and adjusting for inflation is therefore inappropriate, much of the incumbent LECs' capital expenditures have been on labor-intensive deployment of fiber, which is not subject to downward price trends. In addition, to the extent that incumbent LECs are deploying electronics subject to lower costs, the incumbent LECs should be investing more aggressively in higher-quality networks and they would do so if they faced meaningful competition in the provision of business broadband.

[77] Similarly, rural ILECs' investment in fiber has been entirely unrelated to deregulation. The *CITI Broadband in America Report*, which is heavily relied upon by the ITTA (*see* ITTA Comments at 7-8), reports that the "'drivers for the rural independent telcos [to deploy FTTH] include aging copper lines in need of replacement, the opportunity to deliver video given a more robust platform, . . . and in some cases, subsidies such as rural broadband loan programs and universal service funds.'" *CITI Broadband in America Report* at 16 (quoting RVA LLC research findings). In fact, these factors would cause rural ILECs to deploy fiber even if they were subject to the proposed regulation.

[78] *February 2010 ETI Study* at 13.

investment also began to increase.[79] Thus, as ETI concludes, "[t]he broadband investment that the RBOCs have made in the mass market came largely from efforts to compete with the cable companies, and has occurred primarily – if not entirely – in areas where cable company competition exists."[80] While critics of the *March 2009 ETI Study* assert that it improperly fails to distinguish more recent broadband deployment from total plant investment,[81] the fact is that recent RBOC investments have targeted *residential*, not business customers.[82]

The RBOCs have not attempted to show that they would have foregone their recent investments if unbundling obligations had applied to hybrid and fiber loops. In any event, incumbent LECs offer no evidence that they have made any significant investment in fiber facilities to business customers. This is unsurprising because competition in the business broadband market has been gutted by Commission decisions to scale back unbundling obligations to only TDM-based loops.

B. Opponents' Arguments That Unbundling Of Packetized Loops At Retail Rates Would Diminish Incumbent LEC Investment Are Meritless.

The results of the *February 2010 ETI Study* and the *March 2010 ETI Study* demonstrate that the benefits of requiring unbundling of packetized loops outweigh the costs. That is, as discussed in Section II above, this policy change would result in increased competition and job

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[79] *See id.* at 13-14 & Figure 1-4.

[80] *Id.* at n.16.

[81] *See, e.g.,* AT&T Comments at 14-15; Corning Comments at 10; Qwest Comments at 19-20.

[82] *See February 2010 ETI Study* at 8. For example, as ETI explains, "there is considerable evidence that the bulk of [Verizon's] recent capital spending has been directed mainly at the residential markets – not at business broadband." *Id.* at 9. According to ETI, Verizon spent approximately $0.5 billion per year between 2004 and 2007 on (non-FiOS) interoffice transport and enterprise and wholesale last mile facilities, "considerably less" than the average $2.4 billion per year that Verizon had been spending on such facilities between 1996 and 2003. *Id.* at 10.

creation by small businesses and by both incumbents and competitors in the telecommunications industry. In addition, contrary to incumbent LECs' arguments that this policy change would deter investment in broadband, the *ETI Studies* show that unbundling would increase investment by both incumbents and competitors. However, even if opponents of the Petition are somehow correct that the elimination of unbundling of hybrid and fiber loops at TELRIC-based rates has promoted and will continue to promote investment in mass-market fiber loops, such arguments are irrelevant to the instant Petition.

First, the incumbent LECs' arguments regarding the effect of unbundling on investment decisions generally assume that TELRIC or purportedly below-market rates set by a regulator would apply.[83] But this is not true. Cbeyond merely seeks access to incumbent LEC loop facilities at incumbent LEC retail prices. These are not prices imposed on incumbent LECs by a regulator. Rather, they are prices that the incumbent LECs themselves have set in an unregulated market to maximize profits. It strains credulity to assert that services priced at these levels could possibly harm incumbent LECs' incentives to deploy network facilities.

Second, almost all of the "evidence" of incumbent LEC broadband investment proffered by opponents pertains to loops deployed to residential customers.[84] This is unsurprising because,

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[83] *See, e.g.,* AT&T Comments at 22 (relying on *TRO* and *USTA I*, 290 F.3d 415 (D.C. Cir. 2002)); Verizon Comments at 6 & n.12 (same); *id.* at 25 ("Mandating *any* below-market rates – even if those rates are above TELRIC prices – would create a disincentive to investment in fiber loops.") (emphasis in original).

[84] *See, e.g.,* AT&T Comments at 9 ("AT&T has announced plans to increase its U-verse fiber-to-the-neighborhood initiative to 30 million living units by the end of 2011"); Corning Comments at 6-7 (providing statistics on the number of FTTH homes passed nationwide); Qwest Comments at 16 ("Verizon reported that, as of the third quarter of 2009, it now serves 9.174 million broadband customers, including 3.28 million FiOS FTTH high-speed Internet customers."); Verizon Comments at 10-11 ("By September 2009, 5.3 million homes were receiving broadband service over fiber loops, an increase of more than 40 percent in one year. Verizon in particular has committed $23 billion to its all-fiber FiOS network . . . .").

as discussed above, the RBOCs' recent broadband investments have focused almost entirely on the residential market. Such investments are irrelevant to the instant Petition, in which Cbeyond requests unbundled access to packetized loops in order to serve small business customers.

Third, the vast majority of the incumbent LEC network facilities to which Cbeyond seeks access are those in which incumbent LECs continue to rely on legacy copper loops to the end user (i.e., hybrid loops), and to which opponents' investment arguments are therefore irrelevant. Hybrid fiber/copper loop network architectures are critically reliant on the copper loop facilities that incumbent LECs deployed while they possessed legally protected monopolies. Reliance on these facilities reflects the *absence* of significant changes in ILEC network architectures. Moreover, incumbent LECs' investment in fiber feeder plant began long before the Commission eliminated unbundling of hybrid and fiber loops in the *TRO*. Incumbent LECs' investment in fiber feeder plant was largely undertaken to reduce costs and increase the efficiencies of the legacy copper loop plant[85] and was made possible because of the economies of scale and scope (e.g., large volumes of traffic) enjoyed as a result of incumbent LECs' historic monopoly.

Fourth, the Commission has already recognized that unbundling relief is not necessary to increase incumbent LEC investment in fiber loops to business customers. In the *MDU*

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[85] *See, e.g.,* Letter from Thomas Jones, Counsel for Allegiance Telecom, Inc., to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338, 96-98, & 98-147, n.4 (filed Feb. 13, 2003) ("As Allegiance has explained, many of the investments the ILECs claim are necessary for broadband deployment, such as replacing copper with fiber in the feeder plant, are made to reduce ILEC costs in the provision of existing services. . . . Unbundling would appear to place *de minimis* costs in these situations."); *see also* Letter from Thomas Jones, Counsel for Allegiance Telecom, Inc., to Marlene H. Dortch, Secretary, FCC, CC Dkt. Nos. 01-338, 96-98, & 98-147, Attachment, "The Death of Facilities-based Competition" (filed Jan. 31, 2003) (describing how ILECs invested in next generation Digital Loop Carrier systems in order to reduce operating expenses and maintenance actions); *see also CITI Broadband in America Repo*rt at 16 (reporting that the research firm RVA LLC found that "'drivers for the rural independent telcos [to deploy FTTH] include aging copper lines in need of replacement'") (alteration in original).

Reconsideration Order, the Commission limited the scope of its FTTH unbundling relief to residential multiple dwelling units ("MDUs") rather than all types of MDUs in part because "[a] categorical rule . . . would eliminate unbundling for enterprise customers where the record shows additional investment incentives are not needed."[86] This is surely correct. In the *TRO*, however, the Commission incorrectly eliminated unbundling for the packetized capabilities of hybrid loops serving business customers and for fiber loops serving single-occupancy business locations. Cbeyond merely requests that the Commission correct its error.

Finally, the *Berkman Study's* findings with respect to dark fiber unbundling in Japan support the conclusion that unbundling will not deter investment. As Cbeyond explained in its Petition, the *Berkman Study* found that NTT was not deterred from investing in fiber partly because fiber elements were priced "so as to secure a profit for the incumbent that invested in the fiber."[87] In fact, data compiled by the Counselor for Communications Policy for the Embassy of Japan shows that following the establishment of unbundling rules for dark fiber in April 2001,[88] the level of investment in fiber local loops increased and has remained well above the 2001 level.[89] Furthermore, while opponents assert that the experiences of Japan and other countries

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[86] *In re Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, Order on Reconsideration, 19 FCC Rcd. 15856, ¶ 8 (2004) ("*MDU Reconsideration Order*"); *see also id.* at n.26 (finding "no evidence that unbundling relief for fiber loops deployed to multiunit premises will increase fiber deployment to the enterprise market").

[87] *See* Petition at 24 (quoting *Berkman Study* at 86).

[88] *See* Masaru Fujino, Counselor for Communications Policy, Embassy of Japan, "National Broadband Policies: 1999-2009, Japan" at 21, 23 (dated Oct. 2009), http://www.soumu.go.jp/main_sosiki/joho_tsusin/eng/presentation/pdf/091019_1.pdf.

[89] *See id.* at 25. In addition, the Embassy of Japan has compiled data showing that after the MIC instituted copper unbundling in 2000 and dark fiber unbundling in 2001, increased competition resulted in substantial increases in the number of DSL and FTTH subscribers nationwide. *See id.* at 23. This example of the positive effect of copper unbundling on competition and broadband

are inapplicable to the U.S. because broadband deployment in those countries has been heavily subsidized,[90] NTT has told the FCC that "FTTH construction in Japan is almost entirely the product of private sector initiative and investment."[91]

C. Opponents' Arguments That Unbundling Of Packetized Loops Would Deter Investment By Competitors Are Also Without Merit.

Although opponents of the Petition claim that unbundling of packetized loops would discourage investment by competitors,[92] the reality is that CLEC investment levels have been,

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subscribership is relevant given that, as discussed above, the overwhelming majority of loops to which Cbeyond and other competitors seek access are hybrid fiber/copper loops.

[90] *See, e.g.,* AT&T Comments at 23-24; TIA & FTTH Council Comments at 19.

[91] NTT Comments, WC Dkt. No. 09-51, at 7 (filed Nov. 16, 2009). Opponents' other criticisms of the *Berkman Study* and of Cbeyond's reliance on the *Berkman Study* are also overstated. *First*, Verizon takes issue with Cbeyond's reliance on Denmark, Norway, Sweden, and the Netherlands as examples of countries in which unbundling contributed to strong broadband deployment. *See* Verizon Comments at 22 (asserting that "in addition to unbundling requirements, Denmark, Norway, Sweden, and the Netherlands also have extensive facilities-based competition, favorable demographics, active government funding of broadband, and well-developed high-technology industries"). However, Cbeyond does not argue that unbundling is the *only* factor that has played a role in broadband deployment in these countries. Cbeyond has already acknowledged that "factors other than mandated unbundling (e.g., the presence of a robust cable competitor to the incumbent LECs) have an important effect on broadband deployment, prices and adoption." Petition at 22. Moreover, Verizon's claim that the factors it cites "may have been far more important than unbundling in achieving high rates of broadband deployment" is mere speculation. *See* Verizon Comments at 22. *Second*, opponents claim that the findings of the *Berkman Study* are inapplicable to the U.S., which has robust intermodal competition. *See* TIA & FTTH Council Comments at 18-19; *see also* Verizon Comments at 22. As mentioned above, however, a cable-ILEC duopoly is unlikely to yield efficient outcomes. *See supra* note 52 and accompanying text. In addition, as discussed above, the experience of Cbeyond and other CLECs is that cable companies and incumbent LECs are not meeting the needs of small businesses and this is unlikely to change unless intermodal competition is complemented by intramodal competition based on access to unbundled packetized loops. *Third*, opponents argue that the *Berkman Study* ignores studies with contradictory findings. *See, e.g.,* AT&T Comments at 12 & n.42; Corning Comments at 10; Verizon Comments at 22. However, many of those studies have examined the effects of unbundling at rates (often cost-based or below-market rates) set by a regulator, not at retail rates set by the incumbents themselves, as Cbeyond has proposed.

and will continue to be, determined by the availability of appropriately regulated incumbent LEC loops. As ETI has shown, CLEC investment increased when regulation ensured the availability of such inputs.[93] However, because it is generally economically infeasible for CLECs to self-deploy last-mile facilities, deregulation not only failed to spur CLEC investment, it caused many CLECs to exit the market.[94]

Moreover, while opponents point to fiber deployment by cable companies as evidence of post-*TRO* investment in broadband,[95] the reality is that the elimination of unbundling of packetized loops has had *no effect* on cable company investment levels. Data submitted by the National Cable and Telecommunications Association ("NCTA") in the Commission's National Broadband Plan proceeding demonstrates this point. In particular, NCTA shows that cable companies began investing heavily in upgrading their networks to deliver broadband services long before the Commission issued the *TRO*.[96] Nor did the cable industry increase its investment levels after 2003.[97] Instead, cable companies reached their peak investment levels during the 2000-2002 period, decreased their investment levels between 2003 and 2006, and increased their investment levels for 2007 and 2008 close to those of the 2000-2002 period.[98]

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[92] *See, e.g.,* Qwest Comments at 25; Verizon Comments at 18.

[93] *See February 2010 ETI Study* at 10-11.

[94] *See id.* at 10.

[95] *See, e.g.,* AT&T Comments at 14; Qwest Comments at 13-14.

[96] *See* Comments of the National Cable & Telecommunications Association, GN Dkt. No. 09-51, at 9 (filed June 8, 2009) (showing cable industry infrastructure expenditures from 1996 to 2008).

[97] *See id.*

[98] *See id.*

V. INCUMBENT LECS' CLAIMS THAT CBEYOND SEEKS A DISCOUNTED PRICE ON A "NEW" WHOLESALE OFFERING ARE MAKEWEIGHT.

Incumbent LECs claim that Cbeyond's request for access to unbundled packetized loops at retail prices is in fact a request for an entirely new wholesale product at prices below market rates.[99] However, these arguments are merely an attempt to distract the Commission and should be rejected for several reasons.

First, while incumbent LECs argue that the service to which Cbeyond seeks access does not exist, Cbeyond is merely requesting that the incumbent LECs provide part of what they already offer to retail customers (i.e., the broadband transmission component of standalone broadband Internet access) at the full price charged to retail customers. *Second*, given that Cbeyond is willing to pay the full retail price for only one component (i.e., broadband transmission) of the incumbent LECs' current retail offerings, incumbent LECs cannot object to Cbeyond's proposal based on price. *Third*, contrary to incumbent LECs' claims,[100] there are no technical obstacles to the incumbent LECs' provision of the packetized UNEs that Cbeyond seeks. In fact, Qwest already offers stand-alone broadband transmission at wholesale on its website.[101] In addition, incumbent LECs regularly offer stand-alone broadband transmission in response to requests for proposals from wholesale customers. Cbeyond only asks that these

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[99] *See* AT&T Comments at 16, 20-21; Qwest Comments at 29-30; Verizon Comments at 19-20 & 24-25.

[100] *See* Qwest Comments at 29 (asserting that "requiring incumbent LECs to offer such a new 'packetized bandwidth' service to CLECs would require significant and expensive changes to the network architecture").

[101] *See* "Qwest Wholesale Broadband (QWB) - V4.0," http://www.qwest.com/wholesale/pcat/qwb.html (last visited Feb. 22, 2010) (offering connection speeds up to 12 Mbps downstream). Pricing for this wholesale service is not listed on the QWB web page.

facilities be made available on terms and conditions that support sustainable competitive entry into the markets for products delivered via packetized loops of 6 Mbps or more of capacity.

Finally, in order to set the rates for packetized UNEs at the prices that the incumbent LECs already charge for their retail offerings, the Commission could adopt the pricing standard set forth in Attachment B.[102] As described in Attachment B, incumbent LECs would be required to file with each state public utility commission a list of their lowest priced, non-promotional retail offerings made available to any consumer or business in that state at any time during the previous year in each of several categories.[103] All commercially-offered bandwidths must be listed without regard to the services that are bundled with those bandwidths.[104] The state commissions would then identify the prices that CLECs would pay in each state for Layer 2 access to the bandwidths in the identified product categories.[105] These prices would be incorporated into CLEC interconnection agreements along with any other Section 251 UNEs.[106]

The price for the packetized UNE would remain the same for one year unless the incumbent LEC retail price for the identified product decreased by more than 10 percent (excluding certain promotions), in which case the incumbent LEC would be required to make the lower price immediately available and applicable to all provisioned CLEC lines that utilize the

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[102] *See generally* "Proposed Retail Pricing Standard For Packetized UNEs" (attached hereto as "Attachment B").

[103] *See id.* ¶ 2 (listing product categories).

[104] *See id.*

[105] *See id.* ¶ 3.

[106] *See id.* ¶ 1.

technology for which the price decrease applied.[107] Prices would be reset annually but could not increase by more than the rate of inflation and new pricing would apply only prospectively.[108] That is, the price for a provisioned circuit would remain the same for as long as the circuit remained in service.[109] Furthermore, non-recurring charges would be set at the same rate as the retail service from which the packetized UNE ordered was derived.

VI. CONCLUSION.

For the foregoing reasons, the Commission should grant Cbeyond's Petition.

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[107] *See id.* ¶ 4.

[108] *See id.* ¶ 6.

[109] *See id.*

ATTACHMENT A

Table 1: Number and Percentage of Cbeyond Customer Accounts Lost to Cable Providers January 2009-January 2010
[BEGIN CONFIDENTIAL]

[END CONFIDENTIAL]

Table 2: Number of Voice Lines Associated with Customer Accounts Lost to Cable Providers January 2009-January 2010
[BEGIN CONFIDENTIAL]

[END CONFIDENTIAL]

ATTACHMENT B

REDACTED – FOR PUBLIC INSPECTION

Proposed Retail Pricing Standard for Packetized UNEs

1. Pricing for Packetized UNEs in each state would be set annually by the state public utility commission based on retail pricing standards set forth by the FCC as described below; the public utility commission in each state would ensure that the established prices and terms and conditions for access are incorporated into CLEC interconnection agreements as they are for other Section 251 UNEs.

2. On a selected date each year, the ILECs would be required to file with each state commission a list of their lowest priced, non-promotional retail offerings made available to any consumer or business in that state at any time during the previous 12 months in each of the categories listed below to the extent the ILEC offered a product in the identified category or categories. To the extent that the ILEC's lowest price for a service is different in different parts of the state, it would file a description of the geographic areas in which such differences exist as well as the lowest price offered in each geographic area. The services for which ILECs would be required to make the above filing are as follows:

    a. Services provided to end-user customers by the ILEC using ADSL (G.998.1), ADSL2 (G.998.2), ADSL2+ (G.998.3) or subsequent iterations of G.998 technology at all commercially-offered bandwidths without regard to what services are bundled with those bandwidths.

    b. Services provided to end-user customers by the ILEC using VDSL (G.993.1), VDSL2 (G.993.2) or subsequent iterations of G.993 technology at all commercially-offered bandwidths without regard to what services are bundled with those bandwidths.

    c. Services provided to end-user customers by the ILEC using GPON (G.984 or subsequent technology iterations) and BPON (G.983 or subsequent technology iterations) technology at all commercially-offered bandwidths without regard to what services are bundled with those bandwidths.

    d. Services provided to end-user customers by the ILEC using EFM (802.3ah or subsequent technology iterations) technology at all commercially-offered bandwidths without regard to what services are bundled with those bandwidths.

    e. To the extent that the above product categories do not describe certain products which an ILEC uses to provide packetized bandwidth services to end-user customers, services provided to end-user customers by the ILEC using ATM-based or Ethernet-based packet technology at all commercially-offered bandwidths without regard to what services are bundled with those bandwidths (provided that the bandwidth offered with the product or service in question does not exceed the maximum bandwidth made available via any technology to residential end users during the preceding twelve-month period).

3. Based on the ILEC state public utility commission filings described in paragraph 2 above, each state commission would identify the prices CLECs would pay in each state for Layer 2 access to the bandwidths in the identified product categories.

4. The price would remain in place for one year unless the ILEC retail price for the identified product dropped by more than 10% (excluding promotional offers made available for less than one month during the calendar year) ("Qualifying Price Decrease"). If a Qualifying Price Decrease occurs, the ILEC would have to make the lower price immediately available and applicable to all provisioned CLEC lines that utilize the technology for which the Qualifying Price Decrease applied.

5. Each ILEC would utilize prequalification databases and electronic responses to electronic queries to provide the CLECs with the product offering(s) and bandwidth(s) available at each service address. Alternatively, upon request by a CLEC, an ILEC would provide electronic responses to service-specific queries, including batch queries, for each of the categories described above in paragraph 2 above. Choosing from the list of available technologies, a CLEC would specify the desired product and bandwidth in its electronic order. Hand-off of the packetized data stream would occur (1) at the Layer 2 technology native to the circuit (ATM or Ethernet) and (2) at a single aggregation point in each LATA.

6. Prices would be reset annually, but could not increase by more than the rate of inflation in any given year. New pricing would apply only prospectively; the price for a provisioned circuit would remain the same for as long as that circuit remained in service.

7. Non-recurring charges would be set at the same rate as the retail product from which the Packetized UNE ordered was derived.