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

In the Matter of:	)	
	)	
Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers	)	CC Docket No. 01-338
	)	
Implementation of the Local Competition Provisions of the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Deployment of Wireline Services Offering Advanced Telecommunications Capability	)	CC Docket No. 98-147

COMMENTS OF CONVERSENT COMMUNICATIONS, LLC

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April 5, 2002

No. of Copies rec'd 0+4
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COMMENTS OF CONVERSENT COMMUNICATIONS, LLC

Conversent Communications, LLC ("Conversent" or the "Company"), through its attorneys, hereby files these comments in response to the Notice of Proposed Rulemaking released by the Federal Communications Commission ("FCC" or "Commission") on December 20, 2001.[1]

Because of the critical importance of unbundled dark fiber to Conversent's business plan, Conversent is focusing its comments on the importance of keeping dark fiber as an unbundled network element ("UNE") that must be available on a nation-wide basis.

Conversent currently provides local and long distance voice services and data services to small and medium sized business customers in second and third tier urban and suburban markets in the Verizon-north service area and New Jersey. The average Conversent customer has

[1] *See Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecommunications Act of 1996; Deployment of Wireline Services Offering Advanced Telecommunications Capability*, Notice of Proposed Rulemaking, FCC 01-361 (rel. Dec. 20, 2001).

approximately 7 lines, and many Conversent customers have only a single business line. Conversent has found that it can efficiently provide voice and data service to these customers by relying on its own switches, collocated transmission equipment, unbundled local loops (including 2 wire analogue, xDSL, DS-1, DS-3 and dark fiber loops), and unbundled dark fiber interoffice transport ("unbundled IOF dark fiber"). Although Conversent has only been in business since the fall of 1999, by December 31, 2000, it had already accumulated over 27,000 local business lines in Massachusetts, New Hampshire, Rhode Island and Maine, using the above described entry strategy. Moreover, Conversent's rate of growth continued to accelerate in 2001, as it expanded into second and third tier urban and suburban areas in three new states: New York, New Jersey and Connecticut. As a result, Conversent's access line count increased to over 100,000 lines by the end of 2001. Conversent anticipates that its networks in these new states, utilizing unbundled dark fiber, will be completed later this year. This expansion into these three new markets is directly related to the availability of unbundled dark fiber pursuant to the FCC's *UNE Remand Order.*[2]

I. INTRODUCTION

In the *UNE Remand Order*, the FCC ruled that the lack of access to unbundled dark fiber loops and unbundled interoffice transport (including unbundled IOF dark fiber) would impair a carrier's ability to provide the services it seeks to offer.[3] The FCC indicated that it intended to review the list of UNEs that ILECs must provide in three years.[4] The FCC also recognized that

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[2] *See Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, Third Report and Order and Fourth Further Notice of Proposed Rulemaking, 15 FCC Rcd 3696 (1999) ("*UNE Remand Order*").

[3] *See id.* ¶¶ 181, 196, 332, 333, 340, 349, 350, 355, 361.

[4] *See id.* ¶ 130.

market entrants need stability and that premature review would have a destabilizing effect on the business plans of market entrants and their ability to attract financing.[5]

Unfortunately, only one year following the effective date of the FCC's decision to require ILECs to unbundle dark fiber and only a matter of months after Conversent was able to obtain UNE Remand Amendments to its interconnection agreements that allow it to actually order unbundled dark fiber in its new markets, the ILECs filed a Joint Petition to remove unbundled dark fiber from their unbundling obligations.[6] As a result, Conversent was forced to expend the time and resources to demonstrate, again, that requiring it to self-provision or to obtain dark fiber from third-party vendors would (i) materially increase its cost of market entry; (ii) materially diminish the service quality it can provide to its customers; (iii) materially delay its market entry; and (iv) require it to scale down the size of its networks because of the lack of ubiquitous interoffice transport facilities between ILEC central offices. The FCC has not yet ruled on the Joint Petition. Conversent anticipates that the ILECs will use this proceeding as yet another opportunity to reduce or limit their dark fiber unbundling obligations, creating still more regulatory uncertainty for facilities-based CLECs such as Conversent that use unbundled dark fiber as a critical component of their entry strategy.

Conversent has already installed SONET ring networks in Massachusetts, New Hampshire, Rhode Island and Maine by using access to unbundled IOF dark fiber from Verizon. Specifically, Conversent entered these states by purchasing and installing switches, aggressively collocating in a large number of Verizon central offices (so that it can order unbundled loops), connecting such central offices by leasing unbundled IOF dark fiber and energizing such

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5 *See id.* ¶¶ 114, 150, 151, 158, 366.

6 *See* Joint Petition of BellSouth, SBC and Verizon for Elimination of Mandatory Unbundling of High-Capacity Loops and Dedicated Transport, CC Docket No. 96-98 (filed Apr. 5, 2001) ("Joint Petition").

unbundled IOF dark fiber with Conversent electronics. The reason that Conversent was able to install these networks so quickly is that, as a result of state commission decisions, Conversent was able to gain access to unbundled dark fiber in these states before the *UNE Remand Order*. By allowing such access to Verizon's unbundled dark fiber under reasonable terms and conditions, state commissions lowered the entry barriers to facilities-based entry, especially those associated with entry in smaller sized cities and surrounding suburban areas that had not yet seen the benefits of facilities-based competition.

The *UNE Remand Order* was extremely helpful to Conversent because, at the time, it appeared to provide much needed certainty to Conversent's business plan. This is because Verizon had appealed a New Hampshire PUC ruling that dark fiber is a UNE, had threatened to appeal a Massachusetts decision, and did not appear to recognize a Rhode Island Arbitration Order affirming an arbitrator's finding that dark fiber is a UNE (even though Verizon never contested the arbitrator's finding at the PUC hearing).

The *UNE Remand Order* was also very helpful because it allowed Conversent to enter into new markets using unbundled dark fiber. Conversent relied on the *UNE Remand Order* to enter New Jersey, New York and Connecticut and has ordered a considerable number of spans of unbundled IOF dark fiber in these states.

Unfortunately, the ILEC efforts to remove or limit their dark fiber unbundling obligations have cast a cloud over Conversent's business plan, which relies on dark fiber as a critical component of its entry strategy. Conversent believes that this is not what the FCC intended when it included dark fiber on the list of UNEs that ILECs must provide nationally. The FCC must reject these ILEC efforts to reconstruct barriers to entry and confirm that dark fiber will remain a UNE for at least three more years.

II. THE AVAILABILITY OF UNBUNDLED DARK FIBER PROMOTES RAPID FACILITIES-BASED COMPETITION IN SECOND AND THIRD TIER MARKETS.

In many second and third tier markets, true facilities-based competition did not initially develop after passage of the Telecommunications Act of 1996. The main reason for this was the high cost of interoffice transport (either from the ILEC or through self-provisioning). The availability of unbundled IOF dark fiber has now made efficient facilities-based entry in second and third tier markets possible.

As described in the Declaration of David A. Graham, Conversent's experience in Massachusetts serves as a vivid example.[7] In eastern Massachusetts, Conversent has collocated in 49 Verizon central offices that are collocated primarily in small cities and suburban areas. Ideally, Conversent would have been able, at the outset, to connect each of its 49 collocation arrangements by obtaining unbundled IOF dark fiber and energizing it with Conversent electronics. Initially, however, unbundled IOF dark fiber was not available from Verizon (or from other sources for that matter), in 8 of Conversent's 49 collocation arrangements. Nevertheless, Conversent was able to connect the other 41 of its Massachusetts collocation arrangements using unbundled IOF dark fiber. Recently, unbundled IOF dark fiber has become available for 7 more of Conversent's interoffice spans in eastern Massachusetts. As a result, Conversent now has a 48 node, 75 span, 609 route-mile (450 air-mile) SONET ring network using unbundled IOF dark fiber in eastern Massachusetts.[8]

As can be seen from this example, the availability of unbundled dark fiber has allowed Conversent to install and turn up networks that cover a far more ubiquitous geographic area than

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[7] *See* Declaration of David A. Graham on Behalf of Conversent Communications, LLC ("Graham Decl.") (attached as Exhibit 1).

[8] *See id.* ¶ 11.

if such access were denied. Without access to unbundled dark fiber, Conversent would have not been able to deploy its Massachusetts networks in the geographic areas it chose to enter.[9]

III. AT THIS TIME, THERE ARE NO REASONABLE SUBSTITUTES FOR UNBUNDLED DARK FIBER.

Conversent's transport costs illustrate why ILEC interoffice lit transport is not a substitute for unbundled IOF dark fiber. Conversent's transport costs for using unbundled IOF dark fiber for its SONET rings in eastern Massachusetts amount to approximately $826,458.48 per year.[10] This is not a small expenditure for a market entrant, but it is economical compared to the so-called alternatives. As described in the Declaration of David Graham, if Conversent were forced to attempt to replicate its eastern Massachusetts SONET rings by relying on Verizon's unbundled, lit, OC-48 transport offering, it would result in an annual recurring charge of $15,372,594.00.[11] This increase in transport costs would prevent efficient entry in the second and third tier markets in which Conversent operates in Massachusetts.

Not only would it be prohibitively expensive for Conversent to replicate its existing networks using ILEC interoffice lit transport, having to rely on ILEC interoffice lit transport would also result in a material decrease in Conversent's service quality.[12] To understand why, one must understand that access to Verizon's unbundled IOF dark fiber provides Conversent with important service quality advantages. This is because as Verizon delivers unbundled IOF dark fiber between Conversent's collocation arrangements, Conversent purchases and installs its

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9 *See id.*
10 *See id.* ¶ 17.
11 *See id.* ¶ 18.
12 *See id.* ¶¶ 21-22.

own multiplexers to complete its SONET ring. Importantly, this network design provides Conversent with complete control over its network for provisioning, surveillance and repair.[13]

A limitation on Verizon's interoffice lit OC-48 transport is that it is offered on a point-to-point basis only. This would further increase Conversent's costs and would result in a material decrease in service quality because it would require the introduction of three multiplexers at each collocation cage instead of the single multiplexer that is required if Conversent is allowed to continue to use unbundled dark fiber.[14]

Using Conversent's 48 node, 75-span SONET rings in eastern Massachusetts as an example, Verizon would install a total of 96 unnecessary multiplexers and introduce 96 additional points of potential failure in Conversent's network that would not exist in the rings that Conversent has built with dark fiber.[15]

If unbundled IOF dark fiber were no longer available in Massachusetts, New Hampshire, Rhode Island and Maine, and Conversent were required to lease interoffice lit transport from Verizon, Conversent's control and management of its interoffice transport spans would be totally dependent upon Verizon identification, diagnosis and repair of Verizon's interoffice transport facilities and multiplexing equipment.[16] Conversent's surveillance operation would not be able to manage Conversent's multiplexer equipment, and would have no management capability for Verizon's multiplexers or interoffice transport facilities.[17] In contrast, as a result of the

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13 *See* Graham Decl. ¶ 23.
14 *See id.* ¶ 20.
15 *See id.* ¶ 22.
16 *See id.* ¶ 23.
17 *See id.*

availability of unbundled IOF dark fiber, Conversent is currently able to establish and maintain total control of its ring architecture and its overall service quality.[18]

A. Neither Procuring Interoffice Fiber from Third-party Vendors Nor Installing it through Self-Provisioning Constitutes A Reasonable Substitute for Unbundled Dark Fiber.

A theoretical alternative to obtaining unbundled dark fiber from ILECs is attempting to procure dark or lit fiber from third-party vendors. Third-party vendors for fiber such as NEON, NEES, CTC, or other CLECs do exist in the northeast and Conversent does in fact purchase long haul fiber from such vendors.[19] But at this point in time, they do not offer a readily available, inter-changeable, ubiquitous substitute for unbundled dark fiber IOF.[20]

The major problem with third-party vendors is that they do not offer dark or lit fiber on a ubiquitous basis. Conversent's experience is at this stage in the market, *such vendors do not have fiber ubiquitously available in the locations where Conversent needs it - between ILEC central offices.*[21]

To illustrate that unbundled IOF dark fiber from third-party vendors is not available between most ILEC central offices, in eastern Massachusetts access to dark fiber IOF from third-party vendors is only available for 10 of Conversent's 75 interoffice spans. In Rhode Island, access to dark fiber from third-party vendors is only available for 2 of Conversent's 11 interoffice spans.[22] In New Hampshire, access to dark fiber from third-party vendors is only available for 2 of Conversent's 8 interoffice spans.[23] In Maine, access to dark fiber from third-

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18 *See id.*
19 It is important to note that most CLECs are not willing to lease fiber to their competitors.
20 *See* Graham Decl. ¶ 24.
21 *See id.* ¶ 25.
22 *See id.* ¶ 26.
23 *See id.*

party vendors is not available for any of Conversent's 4 interoffice spans.[24] In New York, dark fiber from third-party vendors is available for only 2 of Conversent's 13 interoffice spans.[25] In Connecticut, dark fiber from third-party vendors is not available for any of Conversent's 22 interoffice spans.[26] In New Jersey, dark fiber from third-party vendors is available for 5 of Conversent's 9 interoffice spans.[27] Accordingly, if Conversent were required to rely on third-party vendors, it could not replicate its existing networks, could not complete its new networks, and would have to drastically reduce the size of each.

With respect to self-provisioning, Conversent can and does procure and install dark fiber for use in its network. However, the process is time consuming and expensive. Obtaining permits, performing excavation work and securing necessary access to rights of way, pole attachments and conduit space is a very lengthy and often protracted process. For example, it took Conversent six months just to gain access to Verizon conduit space in order to be able to pull cable 11,000 feet from Verizon's switch to Conversent's switch in Worcester, Massachusetts.[28]

Based on actual quotes from make-ready work from Verizon and from estimates from third-party contractors, Conversent's costs to install its own fiber in Verizon conduit is approximately $49,843.00 per mile in Massachusetts.[29] Accordingly, if Conversent were required to replicate its 609 route-mile SONET rings in eastern Massachusetts by installing its own fiber in Verizon conduit, it would cost Conversent approximately $30 million.[30] Of course this

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24 *See id.*
25 *See id.*
26 *See* Graham Decl. ¶ 25.
27 *See id.*
28 *See id.* ¶ 28.
29 *See id.* ¶ 29.
30 *See id.* ¶ 29.

assumes that Verizon conduit is available. If it were not, and Conversent were required to replicate these rings by installing its own conduit and fiber, it would cost Conversent approximately $81 million.[31] Although the networks Conversent has installed in New Hampshire, Rhode Island and Maine are somewhat smaller than in Massachusetts, the conclusion is essentially the same. It would be cost prohibitive for Conversent to replicate its networks by self-provisioning interoffice transport.

Conversent anticipates completing its SONET rings in Connecticut, New York and New Jersey later this year. If unbundled dark fiber were not available in these states and Conversent were required to install its own fiber as interoffice transport, Conversent's plans to provide service would not only be substantially delayed, its plans would be substantially downsized.

IV. IF CONVERSENT COULD REPLICATE ITS EXISTING NETWORKS AND INSTALL ITS NEW NETWORKS BY RELYING ON THIRD-PARTY VENDOR DARK FIBER, IT WOULD DO SO.

It would be an understatement to say that Verizon does not make it easy for CLECs to order and use unbundled dark fiber. Unfortunately, it has undertaken a number of actions to delay, degrade, and most recently to destabilize the ability of CLECs to use unbundled dark fiber.[32] With respect to delay, Verizon has done very little to help CLECs order unbundled IOF dark fiber. For example, Verizon has required CLECs to order unbundled IOF dark fiber on a point-to-point basis, but has generally refused to assist them in identifying where such IOF dark fiber is routed.[33] This essentially has required Conversent to play a game of "go fish" with Verizon. If Conversent does not guess correctly about where the fish is located, it must go back to the deck, draw another card, and guess again. It would be much more efficient for all

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31 *See id.* ¶ 30.
32 *See* Graham Decl. ¶ 32.
33 *See id.*

concerned, if Verizon, at the outset, would provide Conversent with maps that show the way dark fiber is routed across Verizon's wire centers.

Relatedly, in most states, unless ordered to do so, Verizon has refused to provide CLECs with access to dark fiber that runs through intermediate central offices, even though it does so for CLECs that order lit fiber. To illustrate, in the past, if Conversent ordered unbundled IOF dark fiber from central office A to central office B (point-to-point) but, unbeknownst to Conversent, such fiber runs through an intermediate central office C, where Conversent is not collocated, Verizon would respond that no dark fiber is available. The effect of this limitation, of course, is to decrease the availability of dark fiber to Conversent, and correspondingly, to delay its ability to serve customers in that market.[34]

With respect to the degradation of Conversent's service, Verizon has refused to provide CLECs with dark fiber that meets its own internal standard (or any other standard) for transmission quality.[35] In contrast, SNET and third-party vendors agree to provide fiber, where it is available, that meets specified minimum transmission standards.[36]

The ILECs' continuous efforts to eliminate or limit their dark fiber unbundling obligations destabilize Conversent's operations and create uncertainty about its business plan. At the very time that Conversent is attempting to rely on the FCC's *UNE Remand Order* to expand its customer base in its core footprint and to expand its operations into three new states, Verizon and the other ILECs are trying to remove dark fiber from their unbundling obligations.

The fact of the matter is, if Conversent did not have to purchase unbundled dark fiber from the ILECs, it would not. If there were a competitive market for dark fiber interoffice

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34 *See id.* ¶ 33.
35 *See id.* ¶ 34.
36 *See id.*

transport, Conversent would be much better served by procuring it from a vendor that really wanted its business instead of from a competitor who wants to put it out of business.

V. LIMITING THE USE OF UNBUNDLED DARK FIBER TO VOICE TRAFFIC WOULD RENDER CONVERSENT A POTS PROVIDER, TO THE DETRIMENT OF ITS CUSTOMERS

Conversent typically serves end users by bundling local and long distance voice services with data services. This is what Verizon does in states where it has obtained 271 authority. Conversent's Internet and data services include xDSL service, a higher bandwidth DS-1 service and an integrated DS-1 service that can be used for voice grade and data transmissions over the same DS-1 pipe.[37]

The ILECs are Conversent's primary competitor in serving small and medium sized businesses. They do not seem to provide the innovative integrated DS-1 service that Conversent offers.[38] Moreover, Conversent has discovered that there is a very significant level of demand among small and medium sized customers for this service.[39] Limiting the use of unbundled dark fiber to voice traffic only would serve to stifle the innovative products that CLECs such as Conversent have created.

Conversent also faces competition from other facilities-based CLECs that rely on Verizon for UNEs. However, except for certain pockets in Long Island and Westchester, New York, and one large building owner in Providence, Rhode Island that houses many retail establishments, Conversent has not faced substantial competition for small and medium sized business from cable companies or their affiliates.[40]

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37 *See id.* ¶ 38.
38 *See* Graham Decl. ¶ 39.
39 *See id.*
40 *See id.* ¶ 40.

If unbundled dark fiber loops and IOF were available solely for use in providing voice service, Conversent would be forced to stop providing data services to its customers. This would deprive Conversent of substantial revenue and would (except in the few areas where cable operators provide high-speed data service to small and medium sized businesses) leave these customers with no alternative to the ILEC for local data connectivity. Moreover, since the ILECs with which Conversent competes apparently do not provide the integrated DS-1 service Conversent has found to be so popular, customers would likely be deprived of the opportunity to purchase this product altogether.

VI. CONCLUSION

For the above reasons, Conversent urges the Commission to retain dark fiber as a UNE for at least three more years.

Respectfully Submitted,

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ATTORNEYS FOR
CONVERSENT COMMUNICATIONS, LLC

April 5, 2002

EXHIBIT 1

DECLARATION OF DAVID A. GRAHAM
ON BEHALF OF
CONVERSENT COMMUNICATIONS, LLC

I. INTRODUCTION

1. My name is David A. Graham. I am the Senior Vice President of Engineering for Conversent Communications, LLC ("Conversent" or the "Company"), formerly known as New England Voice & Data, LLC.

2. As Senior Vice President of Engineering, my primary responsibilities are the design, engineering, installation and turn-up of the Company's outside network, including transport, collocation, and the delivery of services.

3. I have over 34 years of experience in the design, planning, engineering, installation, surveillance and restoration of telecommunications networks. I began my career as an employee of New England Telephone Company in 1968 in its New Hampshire Outside Plant Engineering Department and held numerous technical and engineering management positions with New England Telephone, NYNEX and NYNEX Corporate prior to my retirement in April 1997. My more significant responsibilities while employed by NYNEX were the management and administration of a $50 million annual capital construction program for expansion and modernization of NYNEX's telecommunications infrastructure for the state of Rhode Island. This responsibility included not only the identification, funding and scheduling, but also the engineering and construction of cable, loop electronics, poles, frame, conduit and surveillance equipment to ensure overall service continuity in a cost effective manner. Since leaving NYNEX, I have worked for CLECs on engineering and operations matters.

4. Conversent currently provides local and long distance voice services and data services to business customers in second and third tier urban and suburban markets. The average Conversent customer has approximately 7 lines, and many Conversent customers have only a single business line.

5. Conversent has found that it can efficiently provide voice and data services to small businesses in second and third tier markets by relying on its own switches and collocated transmission equipment and by leasing collocation space, unbundled loops (including 2 wire analogue loops, xDSL loops, DS-1 loops, and dark fiber loops), and unbundled interoffice dark fiber ("unbundled IOF dark fiber") transport from Verizon ("VZ").

6. Although Conversent has only been in business since the fall of 1999, by December 31, 2000, it had already accumulated over 27,000 local business lines in Massachusetts, New Hampshire, Rhode Island and Maine, using the above described entry strategy.[1]

[1] Although Conversent targets its sales efforts to small businesses in second and third tier markets, Conversent's Massachusetts network does go through parts of Boston.

7. Moreover, Conversent's rate of growth continued to accelerate in 2001 as it expanded into second and third tier urban and suburban areas in three (3) new states: New York, New Jersey and Connecticut. As of December 31, 2001, Conversent had installed over 100,000 access lines. Conversent's expansion into these three states is directly related to the availability of unbundled dark fiber pursuant to the FCC's *UNE Remand Order.*

II. THE AVAILABILITY OF UNBUNDLED DARK FIBER PROMOTES RAPID FACILITIES-BASED COMPETITION

8. In many second and third tier markets, true facilities-based competition did not initially develop after passage of the Telecommunications Act of 1996. The main reason for this was the high cost of obtaining lit interoffice transport (either from the ILEC or through self-provisioning). The availability of unbundled dark fiber has now made efficient facilities-based entry in second and third tier markets possible.

9. Conversent first began entering local markets in states such as Massachusetts, New Hampshire, Rhode Island and Maine as a result of state commission decisions that had mandated the availability of unbundled dark fiber prior to the *UNE Remand Order.* In the early stages of its development, however, Conversent's business plan was very much at risk. This is because it was far from clear that the pre-*UNE Remand Order* state dark fiber decisions would be sustained on appeal or enforceable.

10. Initially, the *UNE Remand Order* reduced the level of regulatory uncertainty surrounding Conversent's use of unbundled dark fiber in Massachusetts, New Hampshire, Rhode Island and Maine. The *UNE Remand Order* also enabled Conversent to begin to expand into New York, New Jersey and Connecticut, where unbundled dark fiber previously had not been available.

11. Conversent's experience in eastern Massachusetts illustrates how the availability of unbundled dark fiber has allowed Conversent to quickly and efficiently deploy its network. In eastern Massachusetts, Conversent has collocated in 49 VZ central offices. Conversent would have preferred to connect each of its 49 collocation arrangements by obtaining unbundled IOF dark fiber and energizing it with Conversent electronics. Initially, however, unbundled IOF dark fiber was not available from VZ (or from other sources) between 8 of Conversent's 49 collocation arrangements. Conversent was forced to purchase lit interoffice transport facilities from Verizon to connect those 8 collocations arrangements. Conversent was able to connect the other 41 collocation arrangements using 562 miles of unbundled IOF dark fiber pairs in SONET ring configurations.[2] Conversent has also relied on unbundled dark fiber loop facilities in Massachusetts. If dark fiber facilities had not been available, Conversent would not have been able to deploy its Massachusetts network in the geographic areas it chose to enter.

12. Unfortunately, only one (1) year after the effective date of the FCC's decision to require ILECs to unbundle dark fiber, and only ten (10) months after Conversent was able to obtain

[2] Since 1999, unbundled IOF dark fiber has become available between seven more of Conversent's collocation arrangements in eastern Massachusetts. As a result, Conversent now has a 48 node, 75 span, 609 route-mile (450 air miles) SONET ring network using unbundled dark fiber.

UNE Remand Amendments to its Interconnection Agreements that allowed it to actually order unbundled dark fiber in its new markets, SBC and VZ filed a Joint Petition in which they seek to remove unbundled dark fiber from their unbundling obligations. Although the FCC has not ruled on it, the very existence of the Joint Petition has cast uncertainty on Conversent's business plan. Conversent anticipates that the ILECs will seize the instant proceeding as another opportunity to remove dark fiber from their unbundling obligations, thereby disrupting CLEC business plans.

III. THERE ARE NO SUBSTITUTES FOR DARK FIBER LOOPS

13. There are no substitutes for unbundled dark fiber loops. Just like conventional 2-wire and 4-wire copper loops, fiber optic loops are bottleneck facilities that tend to hold the end-user hostage to the ILEC until and unless they are unbundled as a UNE. If CLECs are required to build out loops to reach end user customers, there will be no widespread competition, especially for residential and small business customers.

14. If unbundled dark fiber loops were not available to CLECs, their ability to offer state-of-the-art products and services such as Rate Adaptive Digital Subscriber Line ("RADSL") (High Speed Bandwidth to the premise) would be limited to a physical distance of approximately 2 miles (± 12,000) of non-loaded copper from the central office.

15. Access to unbundled dark fiber in the feeder/distribution network allows CLECs to extend this service offering to subscribers throughout the exchange by placing CLEC equipment at the end of the fiber lead, thereby maximizing customer coverage while minimizing the length of the copper extension and meeting the 2 mile threshold. Accordingly, keeping unbundled dark fiber loops available on a national basis will promote the development of advanced telecommunications services.

IV. ILEC INTER-OFFICE LIT TRANSPORT IS NOT A REASONABLE SUBSTITUTE FOR INTER-OFFICE DARK FIBER

A. Relying on ILEC Inter-Office Lit Transport Would Prohibitively Increase Conversent's Costs

16. If Conversent were required to purchase ILEC lit inter-office transport in place of unbundled dark fiber, it would prohibitively increase the cost of Conversent's existing and planned networks.

17. Based on current ILEC tariffs, Conversent's transport costs in eastern Massachusetts illustrate why ILEC lit interoffice transport is not a substitute for unbundled IOF dark fiber. Conversent's transport costs for using unbundled dark fiber IOF for its eastern Massachusetts rings include a recurring monthly charge of $68,871.54. This monthly recurring charge includes fixed charges of $15.45 termination per fiber pair + $6.39 cross-connect per end-office + $4.06 per CAT x 2-wire centers x 75 span x 2 pairs per span ($7,770.00) and an intermediate office charge of $26.65 for 41 spans (82 circuits) + monthly mileage charges of $65.40 per fiber pair x 900.86 air miles ($58,916.24). Thus, the current, combined annual recurring charge to Conversent for its fiber rings in eastern Massachusetts using unbundled IOF dark fiber amounts to $826,458.48.

18. If Conversent were forced to attempt to replicate the above-described 48 node, 75 span, 609 mile network by relying on VZ's lit, OC 48 transport UNE offering, its transport costs would increase enormously. For example, VZ's charges for OC-48 transport (assuming it were still available as a UNE) in the Commonwealth of Massachusetts includes a fixed charge of $11,531.11 per node and a per mile charge of $386.83. Thus, *for Conversent to complete its 48 node, 75 span, 609 mile SONET ring configurations in eastern Massachusetts by leasing VZ's OC-48 transport, it would cost a staggering $15, 372,594.00 annually. This is 18.4 times more expensive than leasing unbundled dark fiber IOF.* This increase in transport costs would prevent efficient entry in the second and third tier markets in which Conversent operates in eastern Massachusetts.

19. Although Conversent's Massachusetts network is larger than its networks in other states, a similar magnitude of increased expense would apply with respect to Conversent's existing SONET ring networks in New Hampshire, Rhode Island and Maine, as well as the networks that Conversent is installing in New York, New Jersey and Connecticut.

20. Finally, an important limitation on VZ's lit OC-48 transport is that it is offered on a point-to-point basis only. This limitation means that reliance on lit transport would further increase Conversent's costs because it would require (as explained more fully below) the introduction of three multiplexers ("MUXES") at each collocation cage instead of the single MUX that is required if Conversent is allowed to continue to use unbundled dark fiber.

B. Relying on ILEC Lit Interoffice Transport Would Result in a Material Decrease in Conversent's Service Quality

21. It would simply not be possible for Conversent to use VZ's lit interoffice transport for its SONET ring networks in a manner that would allow Conversent to provide a level of service that is at parity with VZ. As can be seen from the diagram attached to this Declaration as Attachment 1, establishing ring topography using lit OC-48 interoffice transport from VZ would require the deployment of two additional MUXES in each Conversent collocation: one terminating MUX to deliver the incoming link to Conversent and a second MUX to accept the outgoing link from Conversent for transport to the next node. Thus, in this configuration, a Conversent MUX must be placed between the two VZ MUXs for interconnection to complete the hand off at each node.

22. *Using Conversent's 48 node, 75 span, 609 mile SONET rings in Massachusetts as an example, reliance on unbundled lit interoffice transport would require that VZ install a total of 96 unnecessary MUXs and introduce 96 additional points of potential failure in Conversent's network that would not exist in rings built with unbundled IOF dark fiber.*

23. Furthermore, if unbundled IOF dark fiber were no longer available in Massachusetts, New Hampshire, Rhode Island and Maine and Conversent were required to lease lit unbundled inter-office transport from VZ, Conversent's control and management of its UNE transport facilities would be totally dependent upon VZ for the identification, diagnosis and repair of troubles on VZ's transport facilities and multiplexing equipment. Conversent's surveillance operations would not be able to manage Conversent's multiplexer equipment, and it would have no management capability for VZ's multiplexers or transport. In contrast, with the

availability of unbundled IOF dark fiber, Conversent is currently able to establish and maintain total control of its ring architecture and its overall service quality.

V. NEITHER PROCURING INTER-OFFICE FIBER FROM THIRD PARTY VENDORS NOR INSTALLING IT THROUGH SELF-PROVISIONING CONSTITUTES A REASONABLE SUBSTITUTE FOR UNBUNDLED DARK FIBER

24. Neither purchasing interoffice transport from non-ILEC sources nor self-provisioning inter-office transport is a viable alternative to unbundled IOF dark fiber in the second and third tier markets in which Conversent operates. Third party vendors of fiber such as Neon, NEES, C2C, or other CLECs (most CLECs are not interested in leasing fiber to their competitors), do exist in the Northeast, and Conversent has used them to procure long haul fiber. But at this time they do not offer a readily available, interchangeable, ubiquitous substitute for unbundled dark fiber IOF. Moreover, self-provisioning is simply not an efficient means of entry on a widespread basis in the markets in which Conversent competes.

A. Dark Fiber IOF is Not Ubiquitously Available from Third Party Vendors

25. The major problem with third party vendors is that at this stage, *such vendors do not have fiber ubiquitously available in locations where Conversent needs it - between ILEC central offices or between ILEC central offices and end users.*

26. For example, in eastern Massachusetts, Conversent currently leases 75 spans of IOF dark fiber from VZ. Third party vendors have fiber in only 10 of these interoffice spans. In Rhode Island, dark fiber from third party vendors is only available for 2 of Conversent's 11 interoffice spans. In Maine, dark fiber from third party vendors is not available for any of Conversent's 4 interoffice spans. In New Hampshire, where Conversent is collocated in eight (8) Verizon central offices, third party vendor fiber is only available for 2 of these 8 interoffice spans. In New York, dark fiber from third party vendors is available for only 2 of Conversent's 13 interoffice spans. In Connecticut, dark fiber from third party vendors is not available for any of Conversent's 22 interoffice spans. In New Jersey, dark fiber from third party vendors is available for 5 of Conversent's 9 interoffice spans.

B. Self-Provisioning is Prohibitively Expensive and Would Require Conversent to Substantially Curtail its Existing Networks and its Plans to Expand

27. Conversent can and does self-provision dark fiber for use in some parts of its network where alternatives are unavailable. Given the substantial costs associated with self-provisioning IOF dark fiber, however, it is not efficient for Conversent to self-deploy these facilities in many of the second and third tier markets in which it operates. Even where potentially efficient, self-deployment is extremely time-consuming. Obtaining permits, performing excavation work, and securing necessary access to rights-of-way, pole attachments, and conduit space is a very lengthy and often protracted process.

28. As an example, it took Conversent six months just to gain access to VZ conduit space in order to be able to pull cable 11,000 feet from VZ's switch to Conversent's switch in Worcester, Massachusetts.

29. Based on actual quotes for make-ready work from VZ and estimates from third party contractors, Conversent's cost to install its own fiber in VZ conduit would be approximately $49,843.00 per mile in Massachusetts. Accordingly, if Conversent were required to replicate its 609 route mile SONET rings in eastern Massachusetts by installing its own fiber in VZ conduit, it would cost Conversent approximately $30 million. Conversent cannot compete efficiently in the markets in which it operates if it must incur transport costs of this magnitude.

30. Further, based on estimates from third party contractors, Conversent's cost to install its own underground fiber where conduit is not available is approximately $485,812.80 per mile in Massachusetts. Based on estimates from third party contractors, Conversent's cost to install its own aerial fiber on leased poles on existing pole lines is approximately $44,915.40 per mile. On average, approximately 20% of sections would require underground construction and approximately 80% of the section could use aerial construction. Based on these assumptions, the cost to replicate the 609 route mile Eastern Massachusetts network would be approximately $81 million.

31. Although the networks Conversent has installed in New Hampshire, Rhode Island and Maine are somewhat smaller than in Massachusetts, the conclusion is essentially the same. It would be cost prohibitive for Conversent to replicate its networks by self-provisioning interoffice transport.

VI. IF CONVERSENT COULD REPLICATE ITS EXISTING NETWORKS AND INSTALL ITS NEW NETWORKS BY RELYING ON THIRD PARTY VENDOR DARK FIBER, IT WOULD DO SO

32. VZ has used a number of tactics to delay, degrade, and most recently, destabilize the ability of CLECs to use unbundled dark fiber. With respect to unnecessary delay, VZ has required CLECs to order unbundled dark fiber IOF on a point to point basis, but has refused to assist CLECs in identifying where such dark fiber IOF is routed. This has essentially required Conversent to play a game of fish with VZ. If Conversent does not guess correctly about where the fish is located it must go back to the deck, draw another card, and guess again. It would be much more efficient for all concerned, if VZ, at the outset, would provide Conversent with maps that show how dark fiber is routed across VZ's wire centers.

33. Unless ordered by state commissions to do so, VZ has refused to provide CLECs with access to dark fiber that runs through intermediate central offices, even though it does so for CLECs that order lit fiber. To illustrate, in circumstances where Conversent has ordered unbundled dark fiber from central office A to central office B but, unbeknownst to Conversent, such fiber runs through intermediate central office C, where Conversent is not collocated, VZ has responded that no dark fiber is available. The effect of this limitation, of course, is to decrease the availability of unbundled dark fiber to Conversent, and correspondingly, to delay its entry into the market.

34. With respect to the degradation of Conversent's service, VZ has refused to provide CLECs with unbundled dark fiber that meets its own internal standard for transmission quality (or any standard, for that matter). In contrast, SNET and third party vendors agree to provide fiber that meets minimum transmission standards. For example, one of Conversent's vendors commits to provide fiber with an average bidirectional loss that does not exceed 0.22 to 0.25

dB/KM at a wavelength of 1550nm. In contrast, VZ guarantees no standard. Worse, the actual average bidirectional loss for unbundled IOF dark fiber provided by VZ to Conversent is in excess of 1dB/KM, which is approximately 4 times worse than other vendors.

35. The filing of the Joint Petition, and indeed the FCC's inclusion of dark fiber in this proceeding, tends to destabilize Conversent's operations and creates uncertainty about its business plan. At the very time that Conversent is attempting to rely on the *UNE Remand Order* in order to expand its customer base in its core footprint and to expand its operations into three new states by relying on unbundled dark fiber, the ILECs are trying to remove dark fiber from their unbundling obligations.

36. Because of problems such as these in obtaining unbundled dark fiber from VZ, Conversent would self-provision fiber or purchase dark fiber interoffice transport (as well as loops) from third parties if it were possible to do so. Conversent would be much better served by self-provisioning fiber or by procuring it from a vendor that really wanted its business instead of from a competitor who wants to put it out of business. Unfortunately, neither of these options is generally available to Conversent in the markets in which it operates.

VII. LIMITING THE USE OF UNBUNDLED DARK FIBER TO VOICE TRAFFIC WOULD RENDER CONVERSENT A POTS PROVIDER, TO THE DETRIMENT OF ITS CUSTOMERS

37. Conversent typically serves end users by bundling local and long distance voice services with data services. Verizon has (except as described below) adopted a similar strategy in the states where it has obtained 271 authority.

38. Conversent's data services offerings include xDSL service, a higher bandwidth DS-1 service, and an integrated DS-1 service that can be used for voice grade and data transmissions over the same DS-1 pipe.

39. The ILECs are Conversent's primary competitor in serving small and medium sized businesses. The ILECs do not seem to provide the innovative integrated DS-1 service that Conversent offers. Moreover, Conversent has discovered that there is a very significant level of demand among small and medium sized customers for this service.

40. Conversent also faces competition from other facilities-based CLECs that rely on VZ for UNEs. However, except for certain pockets in Long Island and Westchester, New York and one large building owner in Providence, Rhode Island that houses many retail establishments, Conversent has not faced substantial competition for small and medium sized businesses from cable companies or their affiliates.

41. If unbundled dark fiber loops and IOF were available solely for use in providing voice service, Conversent would be forced to stop providing data services to its customers. This would deprive Conversent of substantial revenue and would (except in the few areas where cable operators provide high-speed data service to small and medium sized businesses) leave these customers with no alternative to the ILEC for local data connectivity. Moreover, since the ILECs with which Conversent competes apparently do not provide the integrated DS-1 service Conversent has found to be so popular, customers would likely be deprived of the opportunity to purchase this product altogether.

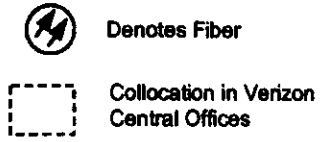
I, David A. Graham, hereby declare under penalty of perjury that the foregoing is true and correct.

David A. Graham

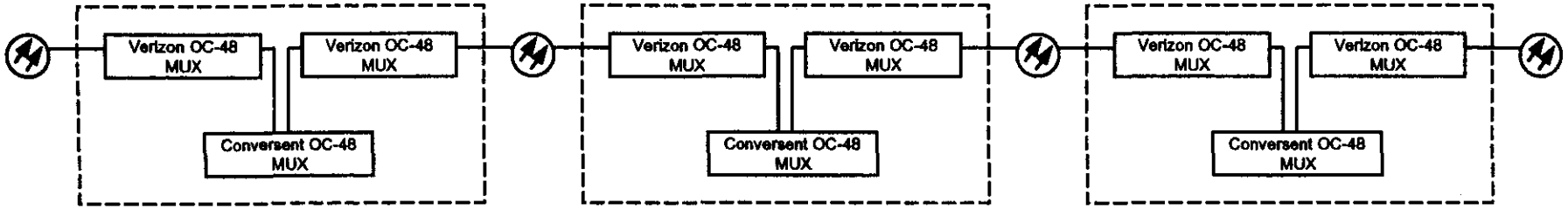
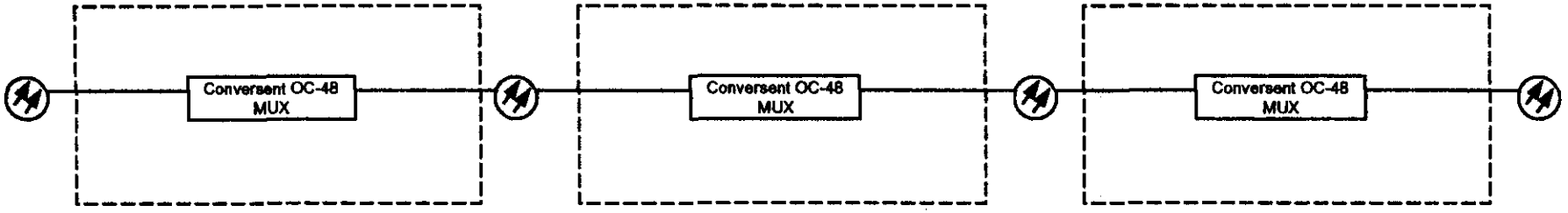
Executed on April 4, 2002.

ATTACHMENT 1

LIT FIBER/DARK FIBER CONFIGURATION



LIT FIBER



DARK FIBER