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January 24, 2003

Ms. Blanca S. Bayo, Director
Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: Docket No. 020960-TP
Petition for arbitration of open issues resulting from interconnection negotiations with Verizon Florida Inc. by DIECA Communications, Inc. d/b/a Covad Communications Company

Dear Ms. Bayo:

AUS
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OTH

On January 17, 2003, Verizon Florida Inc. filed the Direct Testimony of Don Albert and Alice B. Shocket in the above matter. Verizon recently discovered inadvertent errors in the testimony and respectfully requests to substitute the corrected version of that testimony (an original and 15 copies of which are enclosed) and also requests that the original version be withdrawn. Service of the corrected testimony has been made as indicated on the Certificate of Service. If there are any questions regarding this matter, please contact me at 813-483-2617.

Sincerely,

Kimberly Caswell

KC:tas
Enclosures

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that copies of the corrected version of the Direct Testimony of Don Albert and Alice B. Shocket on behalf of Verizon Florida Inc. in Docket No. 020960-TP were sent via U.S. mail on January 24, 2003 to the parties on the attached list.

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BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

Petition by DIECA Communications, Inc. d/b/a Covad Communications Company for Arbitration of Interconnection Rates, Terms, and Conditions and Related Arrangements with Verizon Florida Inc. Pursuant to Section 252(b) of the Telecommunications Act of 1996	)))))))	Docket No. 020960-TP

DIRECT TESTIMONY OF

DON ALBERT

AND

ALICE B. SHOCKET

ON BEHALF OF

VERIZON FLORIDA INC.

SUBJECT: ISSUE NOS. 41, 43, 45-49

JANUARY 17, 2003

CORRECTED: JANUARY 24, 2003

DIRECT TESTIMONY OF DON ALBERT AND ALICE B. SHOCKET

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Don Albert. My business address is 600 East Main Street, Richmond, Virginia 23219.

Q. BY WHOM ARE YOU CURRENTLY EMPLOYED?

A. I am currently employed by Verizon Services Corp. I am testifying in this arbitration on behalf of Verizon Florida Inc. ("Verizon").

Q. WHAT ARE YOUR CURRENT DUTIES AND RESPONSIBILITIES?

A. Currently I am Director – Network Engineering for Verizon Network Services. In this position, I am directly involved in the negotiation of interconnection agreements and the network implementation of alternative local exchange carrier ("ALEC") interconnection and unbundling arrangements, including dark fiber, throughout the Verizon footprint.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I received a Bachelor of Science Degree in Civil Engineering from Virginia Tech in 1977. I have more than 25 years of experience in the telecommunications industry as an employee of Verizon and its predecessor companies. During that time, I have held various positions of increasing responsibility in Network Operations, Network Engineering,

Network Planning, and Sales. I have been in my present position for five years.

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Alice B. Shocket. My business address is 125 High Street, Boston, Massachusetts 02110.

Q. BY WHOM ARE YOU CURRENTLY EMPLOYED?

A. I am currently employed by Verizon Services Corporation. I am testifying in this arbitration on behalf of Verizon Florida Inc. ("Verizon").

Q. WHAT ARE YOUR CURRENT DUTIES AND RESPONSIBILITIES?

A. I currently serve as Senior Specialist – Interconnection Services for the Verizon Services Group. In that capacity, I am responsible for developing and implementing dark fiber and local number portability throughout the Verizon footprint.

Q. PLEASE SUMMARIZE YOUR WORK EXPERIENCE.

A. I have more than 30 years of experience in the telecommunications industry as an employee of Verizon and its predecessor companies. During that time, I have held various positions of increasing responsibility related to customer services, regulatory matters, marketing, access, interconnection services, number portability, and, most recently, dark fiber. I received a Bachelor of Arts degree in Economics from Northeastern University.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. We are providing this testimony in support of the positions of Verizon on Issue Nos. 41, 43, and 45 through 49 in the arbitration between Verizon and DIECA Communications, Inc. d/b/a Covad Communications Company ("Covad"). These issues concern certain disputed provisions in the UNE Attachment to the proposed Interconnection Agreement that involve Verizon's provision of dark fiber as an unbundled network element ("UNE").

ISSUE NO. 41 — ACCESS TO PARTIALLY CONSTRUCTED FIBER

Q. WHAT IS THE DISPUTE WITH RESPECT TO ISSUE NO. 41?

A. Issue No. 41 of Covad's Petition concerns the definition of dark fiber in the Interconnection Agreement. It is our understanding that, under applicable law, fiber must be physically connected to Verizon's network and easily called into service before it is a network element that Verizon must provide to ALECs on an unbundled basis. Covad, however, is seeking access to what it calls "unterminated fiber" — that is, fiber that is not terminated at an accessible terminal in Verizon's network.

Q. PLEASE IDENTIFY OR DESCRIBE THE AREAS OF VERIZON'S NETWORK WHERE FIBER OPTIC FACILITIES ARE EMPLOYED.

A. Verizon uses fiber optic cables as a transmission medium in two different applications in its network. The principal application for fiber is in Verizon's interoffice facility ("IOF") network, which connects Verizon's

central offices to one another. The second principal use of fiber is in Verizon's loop network, where fiber is often employed in an outside plant feeder route to connect a Verizon central office to Digital Loop Carrier ("DLC") sites (where remote electronics are placed).

Q. WHAT TYPES OF FIBER OPTIC CABLE AND FIBER OPTIC CABLE SPLICING TECHNIQUE DOES VERIZON USE?

A. Currently Verizon typically places "ribbon" fiber optic cables because they are the most economical to construct and maintain. These cables are permanently spliced (*i.e.*, welded) together using mass-fusion splicing. A fiber optic cable sheath will usually contain one or more ribbons of glass fiber strands, with 12 glass fibers in each ribbon. Visually, this ribbon looks like 12 glass strands between two pieces of transparent adhesive tape. Before Verizon moved to use ribbon fiber optic cables, Verizon used fiber cables known as "loose tube" fiber cables. With loose tube fiber cables, a cable sheath contained a number of individual fiber "buffer tubes," which typically contained 12 individually coated or protected glass fiber strands.

Q. PLEASE DESCRIBE WHAT IS MEANT BY THE PHRASE "TERMINATED" FIBER OPTIC STRANDS.

A. In the context of this testimony, a terminated fiber optic strand is a strand that is connected to an accessible terminal at both ends. Accessible terminals typically include hardware such as Fiber Distribution Frames, fiber patch panels, and LGX equipment. These accessible terminals

specifically are designed to permit rapid and repeated connection and disconnection of fiber optic strands, as well as provide a location for initial acceptance testing and subsequent repair testing activities. More specifically, a terminated interoffice fiber strand is a continuous strand that is connected to a central office Fiber Distribution Frame at both ends. In contrast, a terminated loop fiber strand is a continuous strand that is connected to a central office Fiber Distribution Frame (at one end) and an accessible terminal (either at a Digital Loop Carrier field electronics site or at a customer premises) at the other end. Terminated fibers may be used by either Verizon or ALECs without any further construction activities. They have been tested (and accepted) as conforming to Verizon's engineering design at the time they were initially constructed (terminated on both ends). Terminated fibers are placed into service by Verizon by issuing internal optical orders, or ALEC service orders, and are activated (connected to their associated fiber optic electronics) by making fiber optic cross-connects.

Q. HOW WOULD VERIZON DESCRIBE AN INDIVIDUAL FIBER OPTIC STRAND IN A SHEATH THAT WAS NOT TERMINATED AT BOTH ENDS?

A. In general, situations in which fiber strands have not been terminated on both ends (what some ALECs call "unterminated" fiber) occur when loop fiber strands still are under construction, which, as noted later in this testimony, can take several years or more to complete. Verizon does not endorse the use of this term as it implies that Verizon has intentionally left

fiber in an "almost complete" state in an effort to "hide" it from ALECs. To the contrary, as described more fully below, fiber cables necessarily are constructed and extended over many years to accommodate growth and economical loop transport modernization opportunities. In our experience, ALECs have apparently applied the label "unterminated fiber" to at least three distinctly different network configurations.

Q. WHAT ARE THE THREE NETWORK CONFIGURATIONS THAT ALECS APPEAR TO HAVE DESCRIBED AS "UNTERMINATED" FIBER?

A. The first configuration appears to involve a loop fiber strand that is only terminated at one end (in a Verizon central office). The other end of the strand would stop out in the loop fiber network (typically at a "branch" splice location), where the entire complement of individual fibers in a cable sheath would *not* be spliced to another fiber optic cable. This configuration describes the most frequent occurrence of "unterminated" fiber optic strands in Verizon's network. As discussed later in this testimony, loop fiber optic cables are constructed and extended into new geographic areas in stages and in discrete sections, which can occur over several or more years. For example, a 144-strand loop fiber cable might run three miles out in a westerly direction from a Verizon central office to a branch location in the feeder route. Future combined needs along this entire route justify the placement of 144 fibers, but present needs might only require that 48 of the fiber strands (in the 144-strand cable) be spliced to a 48-strand fiber cable headed in a southerly

direction. The remaining 96 "unterminated" strands, in this example, would be awaiting the future placement and construction of additional fiber cables (that may head in a northerly or westerly direction) at which point some (or all) of the 96 "unterminated" strands would be extended (eventually towards a loop fiber accessible terminal) by splicing them to new/additional fiber optic cables. Thus, the 96 fibers in this example are not "unterminated," but are more accurately described as "under construction" because there is presently nothing on which to terminate these 96 fibers.

The second configuration referred to as unterminated fibers appears to involve a loop fiber strand that is only terminated at one end in the loop fiber feeder network (but not at the Verizon central office). This configuration occurs less frequently. The strand could be terminated at an accessible terminal at a Digital Loop Carrier remote terminal site, or at a customer premises, but something less than the full complement of fibers in the sheath would be spliced to the loop feeder fiber cable at the first splice (heading back toward the central office) coming out of the Digital Loop Carrier site. An example of this configuration would be a 24-strand fiber cable run into a Digital Loop Carrier Precast Concrete Hut, with all 24 fibers connected to a fiber patch panel in the hut, but with only 12 fiber strands spliced into the loop fiber feeder cable at the splice location where the 24-strand fiber cable intercepts the (larger) fiber feeder cable. These situations typically occur due to structure limitations (conduit and pole lines) entering the Digital Loop Carrier site, or a

customer premises, that dictate selection of an available larger sized cable because it may be difficult or impossible to come back later to augment the cable if more fibers are needed. If or when needed at some point in the future, Verizon could complete construction of the "unterminated" fibers in this example by placing and/or splicing new/additional fiber cables back toward the central office, which then would also be spliced to the "unterminated" fiber strands contained in the 24-strand fiber cable running into the Precast Concrete Hut.

Finally, the third configuration referred to as "unterminated" fibers appears to involve a loop fiber strand that is not terminated on either end. This configuration rarely occurs. An example would be a bridge crossing in the loop fiber feeder network, with limited conduit available going over the bridge. As noted in a previous example, limited or costly opportunities to return later to augment the size of the cable going over the bridge will dictate selection for initial placement of a larger fiber cable. Thus, Verizon might have a 72-strand loop fiber cable leading up to the bridge, and then a 144-strand fiber cable across the bridge, followed by another 72-strand loop fiber cable that continued further into the loop fiber feeder route beyond the bridge. On the bridge itself, 72 fibers would be terminated on both ends, but another 72 would not be spliced on either end.

Q. WHAT WORK WOULD VERIZON HAVE TO UNDERTAKE TO BUILD "UNTERMINATED" LOOP FIBER STRANDS INTO TERMINATED/ USEABLE FIBER STRANDS?

A. In each of the three configurations described above, Verizon normally would have to engineer, place, and/or splice additional loop fiber optic cables from the "unterminated" end(s) of the fiber optic cable to an accessible terminal(s), and then perform fiber strand acceptance testing as described above. It is not that the only construction remaining to terminate the fiber is simply to terminate fibers at one end at an accessible terminal, as Covad would have the Commission believe. Rather, Verizon would be required to perform additional splicing and placement of new fiber cables to extend the fibers from one accessible terminal to another.

Q. COVAD CLAIMS THAT VERIZON WILL "SIMPLY LEAVE THE FIBER UNTERMINATED UNTIL VERIZON WANTS TO USE THE FACILITY." COVAD PETITION ATTACH. B AT 16. WHAT IS YOUR REACTION?

A. As the foregoing discussion demonstrates, Verizon does not construct new fiber optic facilities to the point where the *only* remaining work item required to make them available and attached end-to-end to Verizon's network is to terminate the fibers onto fiber distributing frame connections at the customer premises. Verizon's new fiber optic facilities are constructed in stages, over a number of years. This involves major construction activities such as: (1) obtaining easements, permits, and right-of-way, (2) constructing pole lines, manholes, and conduit,

(3) placing multiple sections of new fiber cable, (4) burying fiber optic cables, (5) splicing fiber optic cables together, and (6) placing terminating equipment in central offices, huts, controlled environmental vaults, and customer premises. It is *not* simply a matter of terminating the fibers on terminating equipment at the customer premises.

In other words, Verizon does not fully construct fiber optic cable routes between two terminal locations and simply leave fibers "dangling" at the terminals.

Q. ARE "UNTERMINATED" FIBERS AS YOU DESCRIBE ABOVE PART OF VERIZON'S ASSIGNABLE INVENTORY OF FIBER?

A. No. Partially constructed fibers are not included in Verizon's assignable inventory of fiber. Therefore, they cannot be assigned to fill an ALEC dark fiber order, nor can they be assigned to a new Verizon lit fiber optic system.

Q. ARE PARTIALLY CONSTRUCTED, "UNTERMINATED" FIBERS UNES?

A. No. Based on the foregoing, fibers that are not yet terminated at both ends at an accessible terminal do not satisfy the FCC's definition of dark fiber. They are not "physically connected to facilities that the incumbent LEC currently uses to provide service," they cannot be used by ALECs or Verizon "without installation" by Verizon, and they are not "easily called into service."

ISSUE NOS. 43 and 45 — SPLICING VS. CROSS-CONNECTING FIBER

Q. WHAT IS THE DISPUTE REGARDING THESE ISSUES?

A. In Issue No. 43, Covad claims that the Agreement should clarify that Verizon's obligation to provide UNE dark fiber includes the duty to provide any and all of the fibers on any route requested by Covad regardless of whether individual segments of fiber must be spliced or cross-connected to provide continuity end to end. In Issue No. 45, Covad claims that Verizon should indicate the availability of dark fiber between any two points in a LATA without regard to the number of "dark fiber arrangements that must be spliced or cross connected together for Covad's desired route." Covad Petition Attach. B at 17.

These issues, as characterized by Covad, raise two distinct questions, which must be addressed separately: (1) whether Verizon should be required to splice fiber together to create new continuous routes for Covad, and (2) whether Verizon will cross-connect two existing, fully terminated dark fiber IOF strands for an ALEC at an intermediate central office without requiring Covad to collocate at the intermediate central office.

Q. CAN YOU PLEASE DESCRIBE THE FIRST ISSUE REGARDING SPLICING?

A. Yes. With respect to the first issue, the fiber optic strand must be a continuous (completed) uninterrupted path between two accessible

terminals. If Verizon must perform splicing work, the fiber is still under construction and not available as a UNE.

Q. WHAT IS THE DIFFERENCE BETWEEN SPLICING TWO STRANDS OF FIBER TOGETHER AND CROSS-CONNECTING THEM?

A. As explained above with respect to Issue No. 41, splicing is performed as part of the construction of the network and involves welding the fibers together. Cross-connecting fibers, on the other hand, involves placing an optical cross-connect jumper between two already fully spliced and *terminated* fiber optic strands. The cross-connect can be connected and disconnected at the accessible terminal without disturbing the fibers or opening a splice case.

Q. CAN YOU DESCRIBE THE SECOND ISSUE RAISED BY COVAD IN ISSUE NOS. 43 AND 45 REGARDING CROSS-CONNECTS?

A. Yes. The second issue raised by Covad in Issue Nos. 43 and 45 concerns whether Verizon should combine two separate, terminated dark fiber UNEs for Covad by cross-connecting them at a central office to create a new fiber route — *i.e.*, whether Verizon will provide an indirect fiber route running through intermediate offices. Under Verizon's original proposal, Covad would have to order dark fiber on a route-direct basis and combine the two separate, terminated strands at its collocation arrangement. This is conceptually different from the question whether fiber is "continuous" (*i.e.*, no splicing is required). Moreover, Verizon is willing to cross-connect fibers at intermediate central offices for Covad,

although it will not splice fiber to create a new continuous route for Covad.

In fact, Verizon has proposed new contract language for § 8.2.5 of the Interconnection Agreement that would allow Covad to order dark fiber on an indirect route basis, without having to collocate at intermediate central offices. Verizon's proposed § 8.2.5 now states:

> A "Dark Fiber Inquiry Form" must be submitted prior to submitting an ASR. Upon receipt of Covad's completed Dark Fiber Inquiry Form, Verizon will initiate a review of its cable records to determine whether Dark Fiber Loop(s), Dark Fiber Sub-loop(s) or Dark Fiber IOF may be available between the locations and in the quantities specified. Verizon will respond within fifteen (15) business days from receipt of the Covad Dark Fiber Inquiry Form, indicating whether Dark Fiber Loop(s), Dark Fiber Sub-loop(s) or Dark Fiber IOF may be available (if so available, an "Acknowledgement") based on the records search except that for voluminous requests or large, complex projects, Verizon reserves the right to negotiate a different interval. The Dark Fiber Inquiry is a record search and does not guarantee the availability of Dark Fiber Loop(s), Dark Fiber Sub-loop(s) or Dark Fiber IOF. Where a direct Dark Fiber IOF route is not available, Verizon will provide, where available, Dark Fiber IOF via a reasonable indirect route that passes through intermediate Verizon Central Offices at the rates set forth in the

Pricing Attachment. Verizon reserves the right to limit the number of intermediate Verizon Central Offices on an indirect route consistent with limitations in Verizon's network design and/or prevailing industry practices for optical transmission applications. Any limitations on the number of intermediate Verizon Central Offices will be discussed with Covad. If access to Dark Fiber IOF is not available, Verizon will notify Covad, within fifteen (15) Business Days, that no spare Dark Fiber IOF is available over the direct route nor any reasonable alternate indirect route, except that for voluminous requests or large, complex projects, Verizon reserves the right to negotiate a different interval. Where no available route was found during the record review, Verizon will identify the first blocked segment on each alternate indirect route and which segment(s) in the alternate indirect route are available prior to encountering a blockage on that route, at the rates set forth in the Pricing Attachment.

If no direct dark fiber IOF route is available between the A and Z points requested by Covad, Verizon will search for reasonable indirect routes without requiring Covad to submit additional dark fiber inquiries. This

contract provision thus eliminates Covad's concerns expressed in Issue No. 45. Reasonable limitations on this offering, however, are necessary.

Q. WHAT LIMITATIONS DO YOU PROPOSE?

A. Verizon's proposed contract language reserves Verizon's right to limit the number of intermediate central offices on an indirect route consistent with limitations in Verizon's network design and/or prevailing industry practices for optical transmission applications. There are certain technical limitations on the number of intermediate offices through which a fiber route may go without collocation. For example, Verizon's past experience with the deployment of fiber optic cables and electronics indicates that optical repeaters generally are required when a fiber circuit exceeds 20 miles. If repeaters and/or regenerators are required every 20 miles or so along a fiber cable to provision high-capacity services, it follows that some type of ALEC access point (*e.g.*, collocation facility) at a location approximately 20 miles from the originating point of the equipment (and at each subsequent 20 mile increment) will be required.

There may be other technical limitations that come into play. Verizon does not have a specific network limitation or "prevailing industry practice" in mind that necessarily would be used to determine that an indirect route is unreasonable. This language is a protective measure in the event that a limitation on the number of intermediate central offices was necessary for reasons that Verizon has not yet encountered in connection with dark fiber inquiries received in Florida, but could encounter in the future as a result of an unforeseen or unanticipated network or technical problem or implementation of a new industry standard. For example, in the future, it is possible that, in Verizon's

largest central offices, fiber optic distributing frame congestion or fiber optic tie cable congestion temporarily could preclude Verizon from providing cross-connections between specific pairs of fiber optic cables. The proposed language also is intended to provide Verizon with some flexibility to make judgments on an individual case basis, for instance, where a request for dark fiber would involve an inefficient use of scarce fiber resources. An example of an inefficient use of scarce fiber resources would be a request for a direct dark fiber circuit between two wire centers that are 20 miles apart, but where the only theoretically available indirect route between the two locations is 100 miles. For example, in requiring Verizon Virginia to cross-connect fiber at intermediate offices for an ALEC in the *Virginia Arbitration Order*, *see Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon Virginia Inc., and for Expedited Arbitratio*n, Memorandum Opinion and Order, CC Docket Nos. 00-218, *et al.*, DA 02-1731 (Wireline Comp. Bur. rel. July 17, 2002), the FCC's Wireline Competition Bureau did not indicate that Verizon must provide fiber along indirect routes through an unlimited number of intermediate offices, especially when it would result in inefficient use of scarce fiber cable resources or would require the use of optical repeaters to carry light end-to-end (which necessarily requires collocation by the ALEC at an intermediate office along the route).

In actual practice, however, Verizon anticipates placing few, if any, limitations on indirect fiber routes. If Verizon does place such a limitation, Verizon will discuss this limitation with Covad in order to permit Covad to make any necessary collocation decisions. If Covad disagrees with the limitation applied, it may invoke the dispute resolution provisions of the Interconnection Agreement to resolve the disagreement.

ISSUE NOS. 46 and 47 — DARK FIBER INFORMATION

Q. WHAT IS THE DISPUTE REGARDING ISSUE NO. 46?

A. In its proposed § 8.2.5.1, Covad demands that Verizon provide "maps of routes that contain available Dark Fiber IOF by LATA for the cost of reproduction." Covad Petition Attach. C at 24. Verizon, however, does not maintain such "maps" for its own use, and thus cannot provide such nonexistent "maps" for the cost of "reproduction" (there is nothing to "reproduce").

Q. WHAT IS THE DISPUTE REGARDING ISSUE NO. 47?

A. Covad, in its proposed § 8.2.8.1, has attempted to specify the type of information that Verizon must provide in response to a field survey request. Specifically, Covad's proposed § 8.2.8.1 provides that "Responses to field survey requests shall indicate whether: (1) the fiber is of a dual-window construction with the ability to transmit light at both 1310 nm and 1550 nm; (2) the numerical aperture of each fiber shall be at least 0.12; and (3) the maximum attenuation of each fiber is either 0.35 dB/km

at 1310 nanometers (nm) and 0.25dB/km at 1550 nm." Covad Petition Attach. C at 24. This is not the kind of operational activity that should be defined in a variety of different ways on an interconnection-agreement-by-interconnection-agreement basis, but should be consistent for all ALECs.

Q. WITH RESPECT TO ISSUE NO. 46, DOES VERIZON HAVE THE ABILITY TO PROVIDE THE TYPE OF INFORMATION THAT COVAD IS REQUESTING?

A. No. The availability of dark fiber at specific locations changes on a day-to-day basis depending on the needs of Verizon, ALECs, interexchange carriers, and other customers for lit fiber services, as well as ongoing construction activities. Verizon must review its records on a route-by-route basis to determine the availability of dark fiber. Therefore, Verizon cannot generate a snapshot picture of all available dark fiber in Florida at any given time. Instead, the most Verizon could do is create a map showing the dark fiber available at the time each line on the map was drawn. Such a map would become outdated during the process of creating it, and Covad could not assume that dark fiber shown as available on the map would be available when (and if) Covad later decides to place an order. Therefore, requiring Verizon to create blanket information to give to Covad identifying all available dark fiber in Florida would not only be unduly burdensome and extremely costly for Verizon, but the information would be useless to Covad even before it was received.

Like dark fiber, there is limited availability of other types of High Speed IOF and loop UNEs (*e.g.*, DS3s, OC3s, and OC12s, which are analogous to Dark Fiber in many respects). And, like dark fiber, there is no blanket statewide list of all locations where such UNEs are available. In both cases, publishing such a list makes no sense from a practical perspective.

Q. WHAT INFORMATION DOES VERIZON PROVIDE TO ALECS ABOUT DARK FIBER?

A. Verizon provides fiber information to ALECs in three different ways — dark fiber inquiries, wire center fiber maps, and field surveys. This variety of information satisfies ALEC needs for general network planning information; availability checks for specific spans/routes/locations; and the detailed engineering optical transmission design for the ALEC's fiber optic electronics. Wire center fiber maps provide street level information on Verizon's fiber routes within a wire center so that ALECs can determine the location of fiber routes in Verizon's network and, thus, where dark fiber might potentially be available. Dark fiber inquiries and field surveys, on the other hand, provide specific dark fiber availability between particular A and Z points on the maps at a given point in time. If an ALEC orders a field survey, Verizon will dispatch technicians to the specific location requested to verify the availability of dark fiber pairs and test the fiber's transmission capabilities. Although Verizon does not require field surveys before submitting an ASR for the fiber, such surveys are recommended, because Verizon cannot guarantee that fiber is

available from inventory records alone. Using these three options, an ALEC is provided with street level information on the fiber routes within a wire center area and specific dark fiber availability between the A and Z points. The dark fiber inquiry is provided for a fixed price and is the required first step in ordering a dark fiber circuit. The field surveys and wire center fiber maps, on the other hand, are optional engineering services available on request for time and materials. These three methods combined are more than sufficient to permit Covad to determine dark fiber availability and mirror the process that Verizon uses to determine fiber availability for its own lit fiber services. Each of these three methods is outlined in revised contract language that Verizon has proposed to Covad.

Verizon proposes to eliminate § 8.2.8 of the UNE Attachment and insert a new § 8.2.20, which states:

> § 8.2.20 Covad may request the following, which shall be provided on a time and materials basis (as set forth in the Pricing Attachment):
>
> § 8.2.20.1 A fiber layout map that shows the streets within a Verizon Wire Center where there are existing Verizon fiber cable sheaths. Verizon shall provide such maps to Covad subject to the agreement of Covad, in writing, to treat the maps as confidential and to use them for preliminary

design purposes only. Covad acknowledges that fiber layout maps do not show whether or not spare Dark Fiber Loops, Dark Fiber Sub-Loops, or Dark Fiber IOF are available. Verizon shall provide fiber layout maps to Covad subject to a negotiated interval.

8.2.20.2 A field survey that shows the availability of Dark Fiber Loop(s), Dark Fiber Sub-Loop(s) or Dark Fiber IOF between two or more Verizon Central Offices, a Verizon Central Office and a Covad Central Office or a Verizon End Office and the premises of a Customer, shows whether or not such Dark Fiber Loop(s), Dark Fiber Sub-Loop(s), or Dark Fiber IOF are defective, shows whether or not such Dark Fiber Loop(s), Dark Fiber Sub-Loop(s) or Dark Fiber IOF have been used by Verizon for emergency restoration activity and tests the transmission characteristics of Verizon's Dark Fiber Loop(s), Dark Fiber Sub-Loop(s) or Dark Fiber IOF. If a field survey shows that a Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF is available, Covad may reserve the Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF, as applicable, for ten (10) Business Days from receipt of Verizon's field survey

results. If Covad submits an order for access to such Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF after passage of the foregoing ten (10) Business Day reservation period, Verizon does not guarantee or warrant the Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF will be available when Verizon receives such order, and Covad assumes all risk that the Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF will not be available. Verizon shall perform a field survey subject to a negotiated interval. If Covad submits an order for a Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF without first obtaining the results of a field survey of such Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF, Covad assumes all risk that the Dark Fiber Loop, Dark Fiber Sub-Loop or Dark Fiber IOF will not be compatible with Covad's equipment, including, but not limited to, order cancellation charges.

ISSUE NO. 48 — LIMITING FIBERS LEASED ON A SINGLE ROUTE

Q. WITH RESPECT TO ISSUE NO. 48, WHAT IS VERIZON'S CONTRACT PROPOSAL?

A. Dark fiber is a scarce resource in Verizon's network. Therefore, Verizon has proposed contract language that would limit Covad to 25% of the available fiber, within any given segment of Verizon's network. This limit is a reasonable anti-warehousing provision that prevents one competitor from occupying all available fiber in a particular area and excluding entry by other carriers. This 25% limitation does not impose any practical impediment to Covad's ability to provide service to its customers. Fiber has huge bandwidth (provided, of course, that it has not been rendered unusable by excessive splicing or has too much loss or other degradation). Therefore, limiting Covad to 25% of available fiber on any given segment of Verizon's network does not present a practical limit on the range of services that Covad can offer to its customers.

In fact, such a limit would encourage Covad and other ALECs to utilize fiber more efficiently so as to maximize the resources available for all telecommunications companies in Florida. Verizon's contract language is patterned after the 25% cap on available dark fiber approved by the Texas Public Utility Commission ("Texas PUC") in 1996. *See Petition of AT&T Communications of the Southwest, Inc. for Compulsory Arbitration to Establish an Interconnection Agreement Between AT&T And GTE Southwest, Inc. and Contel of Texas, Inc. – Arbitration Award*, Docket No.

16355, at 32-33 (Tex. PUC Dec. 13, 1996). It is our understanding that the FCC, in ¶ 354 of the *UNE Remand Order*, expressly approved of the 25% limitation established by the Texas PUC. *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*"), *petitions for review granted*, *United States Telecom Ass'n v. FCC*, 290 F.3d 415 (D.C. Cir. 2002), *petition for cert. pending*, *WorldCom, Inc. v. United States Telecom Ass'n*, No. 02-858 (U.S. filed Dec. 3, 2002).

Q. COVAD CLAIMS THAT IT IS "CONCERNED WITH ITS ABILITY TO VERIFY THE ACCURACY OF VERIZON'S REPORTING AND METHOD OF CALCULATION WITH RESPECT TO A 25% LIMIT ON DARK FIBER." COVAD PETITION ATTACH. B AT 18-19. WHAT IS YOUR REACTION?

A. We do not understand Covad's concerns about the calculation of the 25% limit. The calculation of the 25% cap is easy and straightforward. If a fiber route consists of a 24-strand cable, Covad may lease up to 6 fibers on that route (24 x 0.25 = 6). Similarly, if a fiber route consists of a 144-strand cable, Covad may lease up to 36 fiber strands on the route (144 x 0.25 = 36). Up to these limits, fiber is available on a first-come, first-served basis. Clearly, even in smaller cables, the 25% cap poses no threat to Covad's ability to provide service to its customers. Although Verizon cannot verify that an ALEC has ever asked to lease more than

25% of the total fiber in a cable as dark fiber without extensive research, we personally know of no examples where this has occurred.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.