BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of	:	
Petition of INTERMEDIA COMMUNICATIONS OF FLORIDA, INC. for expanded interconnection for AAVs within LEC central offices.	:	DOCKET NO. 921074-TP

FIRST DAY - MORNING SESSION

VOLUME I

Pages 1 through 166

PROCEEDINGS:	HEARING
BEFORE:	COMMISSIONER SUSAN F. CLARK COMMISSIONER LUIS J. LAUREDO COMMISSIONER JULIA L. JOHNSON
DATE:	Monday, September 13, 1993
TIME:	Commenced at 9:30 a.m.
PLACE:	FPSC Hearing Room 106 Fletcher Building 101 East Gaines Street Tallahassee, Florida
REPORTED BY:	JOY KELLY, CSR, RPR Chief, Bureau of Reporting SYDNEY C. SILVA, CSR, RPR PAMELA A. CANELL Official Commission Reporters

APPEARANCES:

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J. JEFFRY WAHLEN, and LEE L. WILLIS, Ausley, McMullen, McGehee, Carothers and Proctor, Post Office Box 391, Tallahassee, Florida 32301, Telephone No. (904) 224-9115, appearing on behalf of ALLTEL Florida, Inc.

PETER M. DUNBAR, of the Pennington, Haben, Wilkinson, Culpepper, Dunlap, Dunbar, Richmond & French, P.A., Post Office 10095, Tallahassee, Florida 32302, Telephone No. (904) 222-3533, appearing on behalf of Florida Cable Television Association, Inc., and Time Warner AxS of Florida, L.P.

JOSEPH A. McGLOTHLIN, McWhirter, Grandoff & Reeves, 315 S. Calhoun Street, Suite 716, Tallahassee, Florida 32301, Telephone No. (904) 222-2525, appearing on behalf of Florida Interexchange Carriers Association.

KIMBERLY CASWELL, Post Office Box 110, MC 7, Tampa, Florida 33601, Telephone No. (813) 228-3087, appearing on behalf of GTE Florida Incorporated.

DAVID B. ERWIN, Young, Van Assenderp, Varnadoe & Benton, P.A., Post Office Box 1833, Tallahassee, Florida 32303-1833, Telephone No. (904) 222-7206, appearing on behalf of Indiantown Telephone System, Inc., Northeast Florida Telephone Company, Quincy Telephone Company, and Southland Telephone Company.

RICHARD D. MELSON, Hopping Boyd Green & Sams, Post Office Box 6526, Tallahassee, Florida 32314, Telephone No. (904) 222-7500, appearing on behalf of MCI Telecommunications Corporation.

J. PHILLIP CARVER, c/o Marshall M. Criser III, 150 S. Monroe Street, Suite 400, Tallahassee, Florida 32302, Telephone No. (904) 222-1201, appearing on behalf of BellSouth Telecommunications, Inc. d/b/a Southern Bell Telephone and Telegraph Company.

C. EVERETT BOYD, JR., Ervin, Varn, Jacobs, Odom & Ervin, Post Office Drawer 1170, Tallahassee, Florida 32302, Telephone No. (904) 224-9135, and CHANTHINA R. BRYANT, appearing on behalf of Sprint Communications Company Limited Partnership.

MICHAEL W. TYE, AT&T Communications of the Southern States, Inc., 106 East College Avenue, Suite 1410, Tallahassee, Florida 32301, appearing on behalf of AT&T Communications of the Southern States, Inc.

KENNETH A. HOFFMAN, Messer, Vickers, Caparello, Madsen, Lewis, Goldman & Metz, P.A., 215 South Monroe Street, P. O. Box 1876, Tallahassee, Florida 32302, Telephone No. (904) 222-0720, and

JOHN P. FONS and LEE L. WILLIS, Ausley, McMullen, McGehee, Carothers and Proctor, Post Office Box 391, Tallahassee, Florida 32301, Telephone No. (904) 224-9115, appearing on behalf of United Telephone Company of Florida.

LAURA L. WILSON, Post office Box 10383, Tallahassee, Florida 32302, appearing on behalf of the Florida Cable Television Association.

CHARLES J. BECK, Office of Public Counsel, c/o The Florida Legislature, 111 W. Madison Street, Room 812, Tallahassee, Florida 32399-1400, Telephone No. (904) 488-9330, appearing on behalf of the Citizens of the State of Florida.

PRENTICE P. PRUITT, FPSC Division of Appeals, 101 East Gaines Street, Tallahassee, Florida 32399-0850, Telephone No. (904) 488-7464, Counsel to the Commission.

CHARLES MURPHY and TRACY HATCH, FPSC Division of Legal Services, 101 East Gaines Street, Tallahassee, Florida 32399-0850, Telephone No. (904) 487-2740, appearing on behalf of the Commission Staff.

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P R O C E E D I N G S

(Hearing convened at 9:45 a.m.)

COMMISSIONER CLARK: Call the hearing to order. Would you read the notice?

MR. MURPHY: We're here pursuant to notice for a hearing in Docket No. 921074, which addresses the Intermedia petition for expanded interconnection for AAVs within LEC central offices.

COMMISSIONER CLARK: Take appearances.

MR. ERWIN: Yes. My name is David B. Erwin, of the firm Young, Van Assenderp, Varnadoe & Benton, 225 South Adams Street, Tallahassee, Florida, and I'm appearing here on behalf of Northeast Florida Telephone Company, Southland Telephone Company, Indiantown Telephone System and Quincy Telephone Company.

MR. CARVER: Phillip Carver on behalf of Southern Bell, 150 West Flagler Street, Miami, Florida. Also representing Southern Bell today is David Falgoust.

MS. CASWELL: Kim Casell, for GTE Florida, One Tampa City Center, Tampa, Florida 33601.

MR. McGLOTHLIN: Joe McGlothlin, 315 South Calhoun Street, Tallahassee, for the Florida Interexchange Carriers Association or FIXCA.

MR. FONS: John P. Fons with the law firm of

Ausley, McMullen, McGehee, Carothers and Proctor, appearing on behalf of Central Telephone Company of Florida and United Telephone Company of Florida. Also appearing on behalf of both those companies is Lee L. Willis of the same law firm.

MR. WAHLEN: Jeff Wahlen of Ausley, McMullen, McGehee, Carothers and Proctor, P. O. Box 391, Tallahassee, Florida 32301, appearing with Lee L. Willis on behalf of the ALLTEL Florida, Inc.

MS. WILSON: Laura Wilson, Post Office Box 10383, Tallahassee, Florida 32302, appearing on behalf of the Florida Cable Television Association.

MR. DUNBAR: Peter Dunbar, of the Pennington Haben firm on behalf of Time Warner AxS, 306 North Monroe, Tallahassee, Florida 32301. Also David L. Swafford, Class B Practitioner, appearing on behalf of Time Warner AxS.

MR. HOFFMAN: Kenneth A. Hoffman and Floyd R. Self, with the Messer, Vickers law firm, Post Office Box 1876, Tallahassee, Florida, 32302. I'll also enter an appearance on behalf of Jodie L. Donovan, 1 Teleport Drive, Suite 301, Staten Island, New York, 10311, all on behalf of Teleport Communications Group, Inc.

MR. WIGGINS: Patrick K. Wiggins and Kathleen Villacorta, law firm of Wiggins and Villacorta, Post

Office Drawer 1657, Tallahassee, Florida 32302, on behalf of Intermedia Communications of Florida, Inc.

MR. BOYD: I'm Everett Boyd of the Ervin, Varn, Jacobs, Odom and Erwin law firm, Tallahassee. I'm appearing on behalf of Sprint Communications Company Limited Partnership. Also appearing on behalf of Sprint is Chan Bryant of Sprint's regional office at 3065 Cumberland Circle, Atlanta, Georgia.

MR. TYE: Michael W. Tye, 106 East College Avenue, Suite 1410, Tallahassee, Florida, 32301, appearing on behalf of AT&T Communications of the Southern States, Inc.

MR. MELSON: Richard Melson, of the law firm Hopping Boyd Green & Sams, P.O. Box 6526, Tallahassee, appearing on behalf of MCI Telecommunications Corporation.

MR. BECK: Charlie Beck and Earl Poucher, Office of the Public Counsel, appearing on behalf of Florida's citizens.

MR. MURPHY: Charles Murphy and Tracy Hatch on behalf of the Commission Staff.

MR. PRUITT: I'm Prentice Pruitt, counsel to the Commissioners.

COMMISSIONER LAUREDO: This is a record, I

think, number of lawyers being here. Ms. Wilson, welcome under your new role, good luck.

MS. WILSON: Thank you, Commissioner.

COMMISSIONER CLARK: Mr. Murphy, what do we take up next?

MR. MURPHY: As a preliminary matter, Staff would like to stipulate the surveillance reports of the LECs who are here into the record for the limited purpose of calculating revenue impact. We do not have copies at this time, they are being made.

COMMISSIONER CLARK: Well, maybe we ought to wait until you have them?

MR. MURPHY: Very well. And then there are the other stipulations which begin on Page 60 of the Prehearing Order. (Pause)

COMMISSIONER CLARK: You are recommending that we accept the proposed stipulations?

MR. MURPHY: Yes, Commissioner.

COMMISSIONER CLARK: All right. Should we do that now?

MR. MURPHY: Yes.

COMMISSIONER CLARK: Do I have a motion that we accept the proposed stipulations?

COMMISSIONER LAUREDO: I move we accept.

COMMISSIONER JOHNSON: Second.

COMMISSIONER CLARK: All right. Without objection, the proposed stipulations starting on Page 60 are approved.

MR. MURPHY: Staff would ask for official recognition of several FCC orders: No. 92440, released on October 19, 1992; 93680, released on June 9, 1993; 93658 released on June 9, 1993; 93726 released on June 18th, 1993; and two which we received on Friday, 93378 and 93379. They were released on September 2nd, 1993. If the parties need copies of the more recent ones, we will provide them at a break.

COMMISSIONER CLARK: And you're moving we take official recognition of those FCC orders?

MR. MURPHY: Yes, ma'am.

COMMISSIONER CLARK: Is there any objection to that?

COMMISSIONER LAUREDO: No, ma'am. I move it.

COMMISSIONER CLARK: Show those orders listed as being officially recognized for purposes of this proceeding.

MR. MURPHY: Commissioner, there are several exhibits which Staff proposes to move which are subject of notices of intent to request confidential treatment. They will not be included in composite exhibits and we will, in their place, distribute redacted versions. In

the event that someone wants to do cross examination on those exhibits, we would need a temporary protective order to be granted, or at least we would move for one to be granted.

COMMISSIONER CLARK: It is your recommendation that we take that up at the time we need to?

MR. MURPHY: Yes, Commissioner, I just wanted you to be aware of it.

Also, there are several exhibits which are voluminous that are the interstate tariffs of the companies. We have not prepared copies for everyone of those, there are just a few copies of those rather than cut that many trees. Those are CBP-3, BP-2 --

COMMISSIONER CLARK: Mr. Murphy, are you going to take them up as we get to the witnesses?

MR. MURPHY: We can mention them at that time.

COMMISSIONER CLARK: Let's do that, so we get them in order.

MR. MURPHY: Very well. And then Staff would simply ask that the witnesses, when they take the stand, indicate they have been sworn.

COMMISSIONER CLARK: Okay.

COMMISSIONER LAUREDO: Let me ask you

quickly. The stipulations that we have just agreed, the text of that is the same that was reflected in the draft, which is the paper where I have all my notes, and stuff, right? There hasn't been any change in the body of the proposed stipulations in the draft that's to be approved?

MR. HATCH: There may be some minor textual changes to some of those stipulations. Also, there's fewer of them in the final prehearing order than there was in the original draft. We did not get full stipulations on everything that --

COMMISSIONER LAUREDO: Those that were stipulated, the language reflected in the draft is not necessarily the language --

MR. HATCH: That's correct, there could be some changes in there, yes, sir.

COMMISSIONER CLARK: Okay. That's it?

MR. McGLOTHLIN: Commissioner Clark, an additional preliminary matter. With the approval of Stipulation No. 10, FIXCA is in a position to withdraw the testimony of Joseph Gillan, which addresses only that issue. And FIXCA and the Interexchange Access Coalition would ask to be excused from participation at the hearing. We would prefer to remain parties to the case but we have no witnesses.

COMMISSIONER CLARK: All right. So you're withdrawing Mr. Gillan's testimony?

MR. McGLOTHLIN: Yes.

COMMISSIONER CLARK: Okay. We'll show that prefiled testimony withdrawn and you're excused from the proceeding.

MR. McGLOTHLIN: Thank you.

MR. TYE: Commissioner Clark, in conjunction with the withdrawal of the prefiled testimony of Joseph Gillan, AT&T will withdraw the prefiled rebuttal testimony of Mike Guedel. Mr. Guedel's direct testimony will stand as filed.

COMMISSIONER CLARK: All right. We'll show that prefiled testimony withdrawn. Yes, Mr. Gillan's testimony and the rebuttal testimony of Mr. Guedel.

MR. MELSON: And, Commissioner, with the approval of the same stipulations, MCI would like to request to be excused from further participation in the hearings. We also would like to remain a party and may file a brief but we will not participate today.

COMMISSIONER CLARK: That will be fine. You're excused.

MR. MELSON: Thank you.

COMMISSIONER CLARK: Is there anyone else that would like to be excused? (Pause) Are there any

other preliminary matters? Okay.

Mr. Wiggins, I believe yours is the first witness?

MR. WIGGINS: Yes, ma'am.

COMMISSIONER CLARK: If you would have him come to the stand? And then everyone else who is going to testify, if they would likewise stand up and be sworn at the same time.

MR. WIGGINS: I call John Canis to the stand.

COMMISSIONER CLARK: Everyone appearing as witnesses, if you would please stand up and be sworn in at this time.

(Witnesses collectively sworn)

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JONATHAN EDWARD CANIS

was called as a witness on behalf of Intermedia Communications of Florida and, after being duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WIGGINS:

Q Would you state your name and address for the record, please?

A My name is Jonathan Edward Canis. I live at 1633-B 13th Street Northwest, Washington, DC, Area Code 20009.

Q Did you cause to be prepared and filed in this docket 41 pages of direct testimony?

A Yes, I did.

Q Do you have any changes or corrections to make to that testimony?

A I have a few changes to be made in the transcript of the deposition.

Q Well, that's -- I'm sorry, we're ahead of ourselves. On the prefiled testimony?

A On the prefiled testimony, no, no changes.

Q If I asked you the questions that were asked in the prefiled testimony, your answers would be the same as submitted?

A Yes, they would.

MR. WIGGINS: I move that the prefiled direct testimony be inserted into the record as though read.

COMMISSIONER CLARK: Show the prefiled testimony inserted into the record as though read.

Q (By Mr. Wiggins) Just to be clear, you had no exhibits filed with this direct testimony, correct?

A That is correct.

DIRECT TESTIMONY OF JONATHAN E. CANIS

Q. Please state your name and business address.

A. Jonathan E. Canis, Suite 300, 3000 K Street, N.W., Washington, D.C. 20007.

Q. Please provide your educational background.

A. I received my B.A. from Rutgers University with highest honors. I hold a J.D. from the Syracuse University College of Law, and a Masters in Telecommunications Management, which was conferred jointly by the Syracuse University School of Business Administration and the Newhouse School of Communications.

Q. Please provide your employment history since graduating from law school.

A. I am an attorney with the firm of Swidler & Berlin, Chartered. I have been associated with Swidler & Berlin since October 1988. Prior to that time, I was an associate in the telecommunications practice of Bishop, Cook, Purcell and Reynolds in Washington, D.C. In that capacity, my responsibilities included extensive work in local exchange carrier ("LEC") tariffs and rates on behalf of information service provider clients. I also participated extensively in the Federal Communications Commission's ("FCC") Docket CC No. 88-2, which established the FCC's rules governing "Open Network Architecture." Between 1984 and 1987, I worked as an attorney with the Federal Communications Commission in the Tariff Division and the Accounting and Audits Division. In that position, my responsibilities included reviewing LEC and interexchange carrier ("IXC") tariffs and rates, determining the methodology for adjusting the

allowed rate of return of the Bell Operating Companies, and establishing the FCC's rules governing the allocation of joint common costs between regulated and unregulated LEC businesses telecommunications practice at Swidler & Berlin.

Q. Please describe your telecommunications practice at Swidler & Berlin.

A. At Swidler & Berlin, I represent a number of clients, including IXCs, large users of telecommunications services and alternative access vendors ("AAVs") -- otherwise known as competitive access providers ("CAPs") -- in proceedings before the FCC and numerous state regulatory commissions. My responsibilities include participation in a broad range of policy-oriented rulemaking proceedings, assisting clients in various business transactions and negotiations, and monitoring -- and when appropriate opposing -- LEC and/or IXC tariffed service rates.

My specific experience regarding collocation issues includes the following: I was lead counsel for an AAV client in the New York Public Service Commission ("NYPSC") proceeding that established the first LEC-tariffed collocation arrangement in the country. That involvement included the drafting of pleadings in the NYPSC's rulemaking proceeding, as well as protracted negotiations with representatives of New York Telephone to establish the terms and conditions of its collocation tariffs and related contracts. Currently four LECs in the United States have tariffed physical collocation arrangements for intrastate services: New York Telephone, New England Telephone, Centel

of Illinois and Bell of Pennsylvania. I negotiated each of these four collocation tariffs on behalf of an AAV client. I have also participated actively in the proceedings concerning the virtual collocation tariffs that have been filed by Illinois Bell and Bell of Pennsylvania. On behalf of various AAV clients, including the Association for Local Telecommunications Services - the national AAV trade association -- I have participated -- and continue to participate -- extensively in the FCC's collocation proceeding.

Q. Have you been involved in any other proceedings in which states have considered the FCC's Expanded Interconnection Order?

A. I have represented competitive access providers in proceedings in Ohio, Pennsylvania, Delaware, West Virginia, Indiana and North Carolina. In Ohio, I continue to represent a coalition of five AAVs -- Cablevision Lightpath, Fibernet, MetroComm, Metropolitan Fiber Systems, and Ohio Linx in collocation-related proceedings. For Indiana I testified on collocation issues on behalf of City Signal and Indiana Digital Access.

Q. On whose behalf are you testifying today?

A. I am testifying on behalf of Intermedia Communications of Florida, Inc., to which I will hereafter refer to Intermedia. Intermedia currently provides competitive access services in Florida, as authorized by this Commission.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the functions served by collocation, the similarities and differences between physical collocation and

virtual collocation and to describe the collocation debate and its resolution in other states and at the Federal Communications Commission. I will also demonstrate the positive economic impact that could result from the adoption of a physical collocation policy like that contained in the FCC's Expanded Interconnection Order.

Q. Please describe the policy goal which resulted in the FCC's consideration and adoption of the Expanded Interconnection Order.

A. The FCC and those states that have considered issues of enhanced interconnection to LEC networks have all been motivated by the same policy goal -- the promotion of effective competition for local telecommunications services. These regulatory initiatives have been spurred by the recent development of the competitive access services industry.

In the mid-1980s, the declining cost of fiber optic cable and technological innovation in microwave-based and fiber-based transmission equipment made it possible for a small group of entrepreneurial companies to compete directly with LECs for the provision of local access services. These companies established fiber or microwave networks that typically serve large business, institutional and governmental customers in metropolitan markets across the country. The AAVs, such as Intermedia, provide three general types of telecommunications links: (1) direct links from one customer premises to another; (2) links between a customer premises and an IXC point of presence ("POP"), to provide the originating or terminating tail of an

interstate or intrastate, interexchange, service; and (3) links between IXC POPs, to hand off traffic from one IXC to another, or to offer a single IXC the ability to aggregate or reroute its traffic without expanding its network.

AAV services typically involve high-capacity digital facilities for the transmission of data and voice traffic, and run the gamut from low-capacity data lines used for credit card verification to Fiber Distributed Data Interface service, which connects local area networks at 100 Mbps. Moreover, AAV services provide the highest operating standards available, and include state-of-the-art features such as full circuit redundancy, which protects against catastrophic service outages, and guarantees uninterrupted service 99.999% of the time. AAVs have pioneered the development of such services and network configurations, and LECs have only recently begun to follow suit. Because AAV's offer protection against service outages, many customers require "vendor diversity" for critical communications services; i.e., they purchase redundant services from both LECs and AAVs.

The AAV industry has grown substantially over the past several years, and now includes over 40 different companies operating in over 60 metropolitan areas across the country. Nevertheless, the provision of competitive access services remains a nascent industry -- nationwide, AAV gross revenues represent less than 1% of the market for access services, which remains dominated by LECs.

The factor that most significantly inhibits AAV growth is the limited reach of their networks -- currently, AAVs are forced to serve a niche market of customers physically connected to their networks. As a method of expanding the reach of AAV services, several states (starting with New York), and the FCC have mandated or approved expanded interconnection arrangements, through which AAVs may cost-effectively connect their traffic to the LECs' networks, thereby gaining the ability to provide service to any customer located on the ubiquitous LEC network.

Q. What benefits have the FCC and other commissions identified with the expansion of local telecommunications competition?

A. The state public utility commissions and the FCC have identified a wide range of public interest benefits that will accrue from the increased competition for local services that collocation will stimulate. These benefits include more rapid deployment of new technology, system redundancy and increased protection against disastrous service outages, increased service innovation and greater customer choice, and price competition that will reduce the cost of telecommunications services to all customers. The importance of these benefits cannot be underestimated to communication dependent businesses. For example, information intensive businesses and health-care and educational institutions are and will continue in the future to be dependent upon a modern telecommunications infrastructure.

Indeed, Intermedia has already demonstrated that competition brings substantial public interest benefits: Intermedia introduced redundant fiber ring network architecture to Florida, which has only recently been copied by LECs. Intermedia's entry into Florida markets has also resulted in the introduction of new services, superior service quality, and lower service rates for telecommunications users. For Intermedia -- or any competitive service provider -- to succeed, it must offer potential customers competitive pricing, superior quality, and responsive, user-friendly service. Intermedia has grown to date because it offers business users in Florida these three elements. Departure from a physical collocation standard will severely limit Intermedia's ability to provide favorable pricing, high quality and ease of administration to its customers. Regulation which artificially inhibits or restricts carriers from employing the type and quality of service technology that is available in other jurisdictions can only harm communications users in Florida. The Commission must not inadvertently establish a regulatory scheme which will inhibit multiple vendors from providing the greatest variety of competitive services possible to end users. In order for Florida to maintain an innovative, state-of-the-art communications infrastructure, it is crucial that all networks be interconnectable to each other on a mutually equitable and efficient basis. These objectives cannot be achieved through virtual collocation, because such arrangements are not the operational, economic or technical equivalent of physical collocation.

Full and effective competition for local telecommunications will not develop in the midst of substantial regulatory uncertainty or inefficiency. Yet uncertainty and inefficiency would result if the Commission were to adopt a policy favoring virtual collocation, or giving the LEC discretion to select the form of collocation it will provide. Such a decision would yield uncertainty because, as discussed later in this testimony, virtual collocation greatly increases the risk of litigation over cost and discrimination issues. A virtual collocation or "LEC choice" policy would also be highly inefficient because it would be inconsistent with the physical collocation policy that governs interstate revisions, and would require AAVs and other collocators to build unnecessary and duplicative collocation arrangements, and to artificially segregate their interstate and intrastate traffic.

States that fail to guarantee effective interconnection and invite costly litigation over collocation terms and conditions -- as a virtual collocation policy will do -- risk driving some of the most innovative and progressive forces in telecommunications out of the market. AAVs, which pioneered the deployment of "disaster-proof" fiber ring technology, would likely enter or expand their networks in states with less burdensome regulatory environments; other parties that are now considering entry into the local services markets -- such as interexchange carriers and cable operators -- would look to invest in areas with greater competitive opportunity and regulatory certainty; large telecommunications-intensive businesses would look

to other states where competition has been more effective in reducing the rates for telecommunications services and increasing service options.

Q. Please describe briefly what collocation actually entails.

A. Through collocation, equipment necessary to terminate an interconnector's traffic is placed within the LEC central office ("CO"). This equipment typically includes: (1) optical line terminating multiplexers ("OLTMs") which terminate a fiber optic transmission and convert it from an optical to an electrical signal that may be processed by the LECs' switches; (2) other multiplexers, which typically include "3-1 multiplexers" which break down a single DS3 (45 Mbps) transmission into 28 individual DS1 (1.544 Mbps) circuits, and "1-0 multiplexers" which break DS1 transmissions down into 24 voice-grade (64 kbps or less) circuits; and (3) digital access and cross-connect systems ("DACS"), which reconfigure voice grade channels within a DS1 transmission, and are used to "groom" traffic (to route traffic over existing facilities in the most efficient manner possible). To terminate the interconnector's traffic within the CO, the interconnector brings its fiber optic cable up to a manhole near the central office, or mounts a microwave receiver on the CO roof. From those points, LEC personnel bring connecting cable into the CO, where it is attached to the collocated terminating equipment. Finally, individual circuits derived from the interconnector's equipment are cross-connected to LEC services to complete the transmission on the LEC network. The

interconnector monitors and controls the traffic between its network and the equipment collocated in the LEC CO.

Q. Do these functions differ for virtual vs. physical collocation?

A. No. The functions described above are identical under either physical or virtual collocation arrangements.

Q. How do these forms of collocation differ?

A. The two forms of collocation differ in two respects. First, under physical collocation, the interconnector's personnel are given access to the LEC CO in order to install and maintain the collocated equipment, while under virtual collocation, the interconnector personnel are excluded from the CO and the interconnector's equipment is installed, repaired and maintained by LEC personnel. Second, under physical collocation, the LEC typically sets aside a portion of unused CO space for interconnectors, and provides each interconnector with its own space (usually an area 10 feet square and 8-10 feet high) in which to place its equipment. Under virtual collocation, the LEC may also take this approach, or it may dedicate individual equipment bays near its main or intermediate distribution frames to an interconnector's use.

Q. Where was collocation first ordered?

A. The New York Public Service Commission ("NYPSC") issued an order adopting a collocation policy on May 16, 1989.

Q. What influenced the NYPSC in adopting this policy?

A. The NYPSC's initial and subsequent orders that established collocation as a means of stimulating competition for local telecommunications services were heavily influenced by the New York City Mayor's Office and representatives of communications-intensive industries in New York. The primary concern of these parties was to ensure that the New York metropolitan area retained a state-of-the-art telecommunications infrastructure in order to prevent communications-dependant industries such as stock brokerages and financial service institutions from relocating in neighboring states.

Q. Did the NYPSC mandate physical collocation?

A. No. The NYPSC stated that the interconnection must be technically and economically comparable to actual collocation and the terms must be reasonable," and ordered New York Telephone ("NYT") to negotiate reasonable terms and conditions with parties seeking collocation. The NYPSC later extended this requirement to all other LECs operating in New York.

Q. What was NYT's response to that order?

A. NYT responded to the NYPSC order by filing its first collocation tariff, called the Optical Transport Interconnection Service ("OTIS"), which provided for virtual collocation.

Q. Was that tariff implemented?

A. Partially. The filing immediately was challenged by potential interconnectors, which argued that the service failed to meet the "comparability" standards established by the NYPSC. The NYPSC allowed the OTIS tariff to take effect,

but required that representatives of NYT and the interconnectors form a Task Force to negotiate a resolution to the interconnectors' complaints. As discussed below, the New York Telephone virtual collocation tariff was withdrawn within a year.

Q. What were the results of the NYPSC mandated negotiations?

A. The Task Force convened a series of formal meetings and informal communications that stretched from June 1990 to January 1991. The Task Force was chaired by a member of the NYPSC staff, who acted as an arbiter. The negotiations were successful in eliminating many of the remaining differences among the parties. NYT gradually modified its position on many of the substantive economic comparability issues. In November, 1990, it formally announced its intention to allow for physical collocation of competing carriers within its central office buildings.

NYT's "OTIS II" physical collocation tariff finally took effect in May, 1991 -- two years after the NYPSC mandated collocation. From that two-year period of formal complaints, task forces and informal negotiations, physical collocation emerged as the only standard that satisfied the interconnectors' needs and the NYPSC's comparability and reasonableness standards. Significantly, NYT in its Comments to the FCC in the Expanded Interconnector Proceeding stated that it found that "[w]hile virtual collocation arrangements may be appropriate for some LECs, the NTCs [NYNEX Telephone Companies] have found that physical collocation provides a more suitable

solution to the needs of the NTCs and their customers." Confirming this is the fact that NYNEX has not opposed the mandatory physical collocation provision in the FCC's Collocation Order.

Q. What is the status of collocation in New York?

A. At least two AAVs currently are providing intrastate services over collocation arrangements in at least 14 NYT COs. Rochester Telephone became the second LEC in New York to file a collocation tariff. The Rochester tariff also provides for physical collocation, and took effect on October 1, 1991.

Q. Have other states considered collocation tariffs?

A. Yes.

Q. Please describe collocation tariffs in states other than New York.

A. Central office collocation arrangements have only been tariffed in three states outside of New York. In Massachusetts, New England Telephone adopted an OTIS tariff that largely mirrors that established by New York Telephone. The New England collocation service, like OTIS II, provides physical collocation, and took effect on August 14, 1991. At present at least two AAVs are providing intrastate service over collocation arrangements in eight New England Telephone central offices in the Boston metropolitan area.

In Illinois, Centel filed a tariff providing for physical collocation on May 8, 1992. The Centel service, called the Centel Facility Interconnect Service ("CFIS"), establishes straightforward and non-burdensome security practices that permit AAV personnel access to the Centel COs to install and maintain

their equipment. Although CFIS has only been offered for a few months, three different interconnectors have already obtained collocation in at least one Centel CO.

In contrast to the collocation tariffs established in New York and Massachusetts, and by Centel in Illinois, Illinois Bell filed an intrastate tariff providing virtual collocation in Illinois. The Illinois Bell Tariff establishes an Optical Interconnection Service, and took effect on April 7, 1991. Although the Illinois Bell tariff has been available for twenty months, I am aware of only one AAV currently providing service over virtual collocation arrangements in three Illinois Bell COs.

Bell of Pennsylvania has recently filed a trial collocation tariff with a limited duration of one year. Filed to settle a AAV complaint, the collocation service provides both physical and virtual collocation in different central offices. The tariff took effect on November 30, 1992.

Both New Jersey Bell and Pacific Bell have established a single virtual collocation arrangement apiece as customer-specific contracts. These arrangements are each limited to a single customer and a single business application, and are not generally available to the public.

In addition, a number of other states have completed proceedings requiring either virtual or physical collocation for intrastate service. To date, no LEC has filed collocation tariffs pursuant to those proceedings.

Q. Please briefly describe the FCC's Expanded Interconnection proceeding.

A. The FCC's Expanded Interconnection order is the culmination of a process that began in 1989. Initiated in response to a 1989 AAV petition for rulemaking, the FCC's proceeding involved two separate notices of proposed rulemaking, and produced thousands of pages of comments, data and affidavits filed by nearly 70 parties. These comments included hundreds of pages devoted to the relative merits of physical versus virtual collocation submitted by interested parties. The FCC released its final orders concerning collocation standards on June 9, 1993, and required LECs to provide physical collocation in most instances.

Q. Can a virtual collocation arrangement provide the operational, economic and technical equivalent of physical collocation?

A. No. Under a physical collocation arrangement, the AAV has unfettered discretion in deciding how and when equipment will be deployed and, most importantly, in setting performance standards for its services and for its personnel. These decisions define the type and quality of the service an AAV provides. In contrast, under virtual collocation, AAVs will be denied the ability to control some of the most fundamental aspects of their business.

This problem reflects a fundamental and unavoidable flaw in virtual collocation: virtual collocation insinuates the LEC between an AAV and the service the AAV provides. In effect, virtual collocation perpetuates the bottleneck that has resulted in LEC domination of the local exchange market. To date, AAVs have crafted an attractive competitive alternative to LEC

services by deploying innovative new technologies, increasing service reliability, and offering greater responsiveness to customer needs. Under physical collocation, AAVs will retain the ability to offer these competitive alternatives to a vastly increased number of customers. Under virtual collocation, however, the LEC's own performance standards will become the de facto standards for AAV services. Customers located on the LEC network will have to accept LEC provisioning and repair intervals, even though the AAV industry has evolved in part because end users demanded higher operating standards and quicker installation times. Equally important, virtual collocation will impose highly inefficient conditions on collocators, including training costs, equipment carrying costs, and overtime charges, and litigation costs that simply are not incurred in a physical collocation environment. These inefficiencies will needlessly inflate AAV service rates, masking AAV operational economies, and denying the end user the ability to make economically rational and efficient choices.

Q. Are there additional costs associated with virtual collocation arrangements?

A. Yes. In addition to these operating and economic inefficiencies, virtual collocation invariably will lead to excessive levels of litigation, unnecessarily burdening the resources of both the Commission and the industry. Because the LEC is a competitor of collocated AAVs, it has a vested interest in seeing that AAV efficiency and service standards do not exceed its own. Because, under virtual collocation, the LEC is interposed between the AAV and its

equipment located within the central office, the LEC has the ability (and incentive) to act on this interest by failing to provide AAVs with timely and competent installation, repair and maintenance of collocated equipment. Virtual collocation is therefore the telecommunications equivalent of placing the fox in charge of the henhouse, and invariably will engender charges of sabotage, price gouging and discrimination by AAVs against LECs, requiring stringent Commission oversight of LEC responses to AAV service requests.

Q. Is virtual collocation the operational equivalent of physical collocation?

A. One of an AAV's strongest selling points is its ability to respond to a customer's unique needs, and to offer the type of individualized service and timely performance that LECs cannot (or do not) provide. For example, most LECs require two weeks or more to install a new DS1 or DS3 service to a customer. AAV on average "turns up" new service to customers on its existing network in a matter of several days. Moreover, in response to customer emergencies, it is not unusual for an AAV to install a new DS1 or DS3 service overnight.

Under virtual collocation, an AAV's ability to provide this extraordinary level of service would be eliminated. Because AAV personnel would not have access to the AAV's terminating equipment within the LEC central office, the AAV would have to rely on the LEC to provide LEC personnel to make the necessary additions to, or modifications of, the AAV's interconnected facilities in order to turn up the requested service. Because the LECs do not provide

their own customers with the level of responsiveness available from AAVs, they cannot install and repair AAV equipment in the time required to maintain AAV standards. Indeed, even if LECs were capable of providing AAVs with the superior level of service standards demanded by AAV customers, they would have to discriminate against their other customers to do so. No LEC has stated its willingness to comply such standards under a virtual collocation arrangement. As a result, the quality of service that competitive AAVs may provide via virtually collocated facilities will unquestionably be diminished.

Under virtual collocation, AAVs are constrained in their ability to upgrade, modify, or expand their networks. In a physical collocation environment, an AAV may install new equipment, or remove old equipment, as it deems appropriate. Under virtual collocation, such network changes must be scheduled with LEC personnel, who ultimately determine when such changes may take place. Similarly, physical collocation arrangements provide a significant advantage to AAV technicians by giving them direct access for testing and monitoring of the AAV's services.

Q. Are there concerns other than timing which affect the operational equivalence of virtual and physical collocation?

A. Yes. For example, under physical collocation, all of an AAV's equipment is located in one 10x10 foot space, which provides adequate room for both initial deployment of an AAV's facilities and for subsequent expansion of its equipment. In contrast, under virtual collocation there is no guaranty that all

AAV equipment will be installed in the same place. If a LEC disperses AAV equipment racks throughout its central office, the AAV may be denied the opportunity to expand or modify equipment efficiently, or may be required to bear the expense of cabling and repeaters that would be unnecessary if they were able to expand their operations within a centralized operating area.

Even after initial installation, when and if the equipment requires servicing, the limited number of LEC personnel familiar with the equipment will undoubtedly lead to further delays. The fact that these few individuals may have had no hands-on experience with the equipment, except for a training course weeks or months earlier, would most likely adversely affect the quality and promptness of service efforts. It is doubtful that LEC employees, no matter how skilled, will be as capable at servicing unfamiliar equipment as would be the AAV's own employees who deal with that equipment on a daily basis. This is especially true in instances in which multiple AAVs are collocated; LEC personnel cannot reasonably be expected to remain current on the technical intricacies of all of the equipment a number of different AAVs will choose to use based upon their different networks. Indeed, this is exactly what New York Telephone experienced in negotiating its OTIS II tariff.

During the course of these negotiations, it became apparent that virtual collocation as it was evolving in New York presented extremely complex operational and administrative problems. Although the interconnector could select the equipment functionality and remotely monitor and control that

equipment, ownership as well as the responsibility to purchase, install, and maintain equipment remained with NYT. Since interconnectors could choose equipment with which NYT's personnel were not familiar, and seek to impose repair and maintenance standards different from those NYT imposed on itself, NYT concluded that physical collocation, whereby the interconnector would provision its own service, and own, install, and maintain the equipment, was a better option for all concerned parties in New York.

Related arguments were raised before the FCC in its Expanded Interconnection proceeding. In that proceeding, Metropolitan Fiber Systems, Inc. ("MFS") argued that, based upon information obtained from Pacific Bell and Illinois Bell, the cost of training LEC personnel to operate interconnector-specified equipment could be estimated at approximately $60,000 to $70,000 per wire center initially, plus an additional $40,000 per year per wire center for yearly refresher courses. These estimates were based on training eight LEC employees (two per shift, plus two additional to assure coverage during vacations, illnesses, etc.) at each wire center. MFS also estimated that these training expenses would have to be incurred again any time the interconnector chose to add a new brand or model of equipment to its network.

Ameritech responded to the MFS argument by indicating that it would provide its personnel with only minimal training and thus could not reasonably be able to ensure that its personnel would be entirely familiar with AAV-

designated equipment. Ameritech further stated that trouble conditions might require the AAV's personnel to assist LEC personnel in performing tests.

Thus, in the event of a serious problem, Ameritech will allow AAV personnel to enter the central office and work on its terminating equipment.

Notwithstanding the question of what constitutes a "serious" problem and who makes the decision that a "serious" problem is imminent, as a practical matter, if AAV personnel can enter the central office and work on AAV-designated equipment when a "serious" problem arises without jeopardizing the LEC network, there is absolutely no reason why AAV personnel should not be able to enter the central office for regular (preventive) maintenance. Indeed, failure to allow AAV personnel to work regularly in the central office will ensure confusion in the event of an extraordinary problem and will limit the AAV's ability to respond to an emergency. This results in total overall degradation of the standards AAVs can maintain.

In addition to these concerns, other disputes are inevitable. One obvious example relates to provisioning intervals. In the event that an AAV determines that the LEC is not installing, maintaining or repairing its equipment in a timely manner, how would the dispute be resolved? Will the Commission be forced to hold an evidentiary hearing every time an AAV believes that a LEC is providing it with inadequate service? Will the AAV or the LEC have to provide customer-specific information to prove the speed with which they turn up service? Clearly the two competitors are not in a position to act as judge

and jury in such disputes. Rather, the Commission would be called upon to adjudicate these disputes on an ad hoc basis, and such litigation would place an enormous burden on the resources of the Commission and the AAVs. Such costly and burdensome litigation would be wholly obviated if physical collocation is adopted as the norm.

Q. Is virtual collocation the economic equivalent of physical collocation?

A. No. The operational problems discussed earlier raise the related problem of determining who should bear the economic costs associated with virtual collocation. First, as noted, if an AAV desires to use a particular brand or model of equipment that the LEC does not routinely use in its own network, it will be necessary for the LEC to train some of its personnel to operate and maintain that equipment. Regardless of who bears the cost of such training, inevitably there will be other operational costs that the AAV -- and ultimately the end user -- will have to bear. For example, the installation of the equipment could be delayed by weeks or months, until the LEC completes the training of the requisite number of employees without disrupting its other operations.

Moreover, such a training requirement would be highly inefficient, and would impose grossly excessive costs on collocating AAVs. In contrast to AAVs' efficient use of manpower, a LEC could require training for its personnel in every office in which an AAV is collocated, and presumably would need trained staff available on the morning, afternoon and evening shifts. Clearly, if

a single AAV collocates in several LEC central offices, it will be required to train a significant number of LEC personnel in order to have a qualified maintenance and repair staff available 24 hours a day. This is not only an enormous waste of time and money, it also unreasonably inflates the AAV's service rates, rendering the AAV less able to compete. It also provides a benefit to the LEC, who will acquire personnel with additional skills and training, at no expense.

Who should bear the cost of this training? In order to introduce new technology, the AAV will already have borne the costs of educating its employees about the new technology, thus it would be unfair and unreasonable for the AAV to also have to bear additional costs associated with educating LEC employees. This is especially true when the LEC will be able to utilize that training for its own purposes as well. On the other hand, with multiple interconnectors the LEC may incur training costs which ultimately prove unrelated to any service competitively provided by the LEC. It would be unreasonable to force the LEC (and ultimately its ratepayers) to incur such costs, which are not useful in the provision of LEC services.

Moreover, with regard to the installation, repair and maintenance of AAV-designated equipment, what specific labor costs should the AAV or the LEC be obligated to bear? LECs traditionally incur higher labor costs than do interconnectors. Thus, LECs will seek to impose their tariffed labor rates, which are based upon a calculation which includes actual labor cost as well as

overhead and rate of return. If LEC rates apply, the LEC labor involved in installing and maintaining AAV equipment will become a profit-making enterprise for the LEC. Obviously, this is not the economic equivalent of physical collocation and provides the LEC with a disincentive for providing the AAV with efficient service.

Another example relates to overtime. As a growth industry AAVs have, of necessity, been required to arrange employment agreements which are structured to avoid or reduce overtime costs to the maximum possible extent. In contrast, LECs have no incentive to minimize the use of overtime in attending to AAV equipment. As before, the competitive relationship between LECs and AAVs raises difficult administrative questions that invariably will result in needless litigation. It is abundantly clear that there is no reasonable method for resolving the inevitable disputes which will arise between LECs and AAVs, absent the Commission's micromanagement of the collocation relationship. For example, regardless of what general labor and overtime rate applies, who decides in a particular circumstances whether the LEC was justified in charging an AAV for overtime work which could reasonably have been conducted during regular business hours? If in a particular instance, there is limited labor available, and overtime expenses must be incurred, it is only reasonable to expect that the LEC will seek to impose all overtime expenses on its competitor rather than splitting the overtime labor between LEC and AAV projects. When is that a reasonable (or unreasonable) practice?

From the LEC's perspective, it would be reasonable to charge the AAV for all such expenses, because absent the AAV the LEC would not incur the charge. On the other hand, from the AAV's perspective, it cannot be held responsible for the extraordinary costs that result from a shortage of LEC labor.

Another example relates to the need for redundant training. In the event of LEC employee turnover, who pays the cost of training new LEC employees? Under what conditions is turnover reasonable or unreasonable? These are questions that the LEC, as a monopoly provider, has never had to answer. Moreover, how do the parties prove their contentions? Will the Commission review LEC and AAV operating practices to determine their reasonableness? It seems obvious that the Commission does not have the resources to apply to this type of conflict.

A more specific problem relates to spare parts. Under Illinois Bell's Optical Interconnection Service tariff, for example, the interconnector is required to pay Illinois Bell a recurring monthly charge for maintaining spare parts for the interconnector-designated equipment. Not only does this eliminate the AAV's ability to achieve lower equipment cost by procuring its own spare equipment directly, but over time the monthly rental rates paid by the AAV will exceed the actual cost of the spare parts, thereby unreasonably and unnecessarily inflating the AAV's cost for collocation. Moreover, where an AAV interconnects with multiple LECs, multiple spare part recurring costs will be imposed on the AAV. This is clearly inefficient, because in the absence of

virtual collocation the AAV would be able to maintain a centralized -- and limited -- supply of spare parts. This is the equivalent of requiring a trucking firm to maintain a separate supply of spare parts in each county it serves.

As this discussion well illustrates, the problem with virtual collocation is not simply that the LEC has the incentive to provide AAVs with unreasonable service; virtual collocation raises unsolvable, structural problems arising from the fact that the LECs are not equipped economically to install and maintain the AAV network. Virtual collocation invariably imposes any LEC's inefficiencies on the collocated AAVs.

This is precisely the reason that the FCC mandated physical collocation but gave the parties the option of negotiating virtual collocation. Only when the AAV has the ability to utilize physical collocation does the LEC have the necessary incentive to negotiate a virtual collocation agreement which may be economically equivalent to physical collocation and will not present the need for extensive regulatory involvement.

Q. Is virtual collocation the technical equivalent of physical collocation?

A. No. Under virtual collocation the AAV is not free to exercise reasonable technical control over its own network, nor is it free to update its network in response to technological developments. For example, under virtual collocation the AAV has no opportunity to supervise the LEC's maintenance and repair activities, and therefore is entirely at its competitor's mercy for the quality of its service. Indeed, because of this inability to maintain and

supervise its own equipment, it is possible for an AAV's network to be degraded as a result of faulty or incompetent installation, maintenance or repair by LEC personnel, without the AAV becoming aware of such operating practices until a serious problem arises.

Indeed, even if LECs provide their normal quality of service in maintaining and operating AAV facilities, they would degrade the quality of AAV service considerably. For example, AAVs typically provide uninterrupted service 99.99% of the time. The LECs' generally fail to meet this standard, as illustrated by Southern Bell's direct direct high capacity service, which provides an error-free rate of only 98.75%. For industries critically dependant on uninterrupted communications, such a difference is considerable. In fact, on an annual basis, a 98.75% service rate could mean total service disruptions amounting to a full 4.56 days.

Another serious concern relates to the dissemination of proprietary information. As noted, under virtual collocation, the AAV is forced to coordinate with the LEC every time it desires to upgrade or replace equipment on its network. This inhibits technical innovation, because an AAV cannot introduce new equipment into its network without first disclosing it to its principal competitor -- the LEC. Moreover, the AAV must also give the LEC the opportunity (and possibly pay the LEC) to train LEC personnel on that equipment. In other words, under virtual collocation when an AAV desires to upgrade its network, the AAV must first inform its principal competitor, pay that

competitor to train its own personnel to work on that equipment, and wait until the training has been accomplished. This will clearly inhibit introduction of new technology by the AAV. Clearly this process is far more time consuming and costly than replacing or upgrading equipment under physical collocation, in which case the AAV would simply obtain the equipment it prefers and install that equipment in its secure, partitioned portion of the central office. In addition, because virtual collocation would make it unduly burdensome for an AAV to replace equipment, even when no special innovation is involved, AAVs likely will be slower than otherwise to reconfigure their networks.

Q. What concerns have LECs raised in connection with physical collocation?

A. In opposing physical collocation before the FCC and elsewhere LECs raised the specter that under physical collocation network integrity will suffer and that they would have insufficient control over interconnector personnel.

Q. Have these concerns ever been expressed before?

A. Yes. These are the identical "concerns" which were raised a decade ago by AT&T in an attempt to prevent MCI and other interexchange carriers from interconnecting with its interstate network, and were later found meritless in the Execunet decisions, which allowed MCI to compete directly against AT&T. Before that, these arguments were raised in an attempt to prevent customers from connecting independently-manufactured customer premises equipment to the Bell network. Similarly, these arguments were ultimately dismissed in the Carterfone decision, which established the right of independent manufacturers

of customer premises equipment to interconnect their equipment with the Bell Atlantic network. As has been demonstrated by practical experience over the last twenty years and as demonstrated below, these allegations are baseless.

Q. Will physical collocation compromise the security of LEC central offices?

A. No. The Commission should not presume that only LEC employees have access to LEC central offices and wire centers. As a normal business practice, LECs regularly provide central office access to outside contractors, who are issued photo IDs and are permitted free and regular access to the most sensitive of central office equipment. There is no demonstrable reason why AAV personnel should not be afforded similar access based upon similar security conditions. Indeed, this is the conclusion drawn by New York Telephone, and is incorporated into its Collocation License Agreement. I have attached to my testimony excerpts of various collocation license agreements which freely address this concern. Thus, for example, in New York, the AAV is responsible for supplying NYT with a list of employees and approved vendors. NYT issues such personnel color-coded photo identification cards which permit access to the partitioned collocation space. It is as simple as that.

Moreover, a LEC truly concerned about control over AAV personnel is free to take the additional step of designating separate secured interconnection areas which do not permit AAV personnel access to common areas. This would reasonably serve the dual purpose of protecting the LEC from any imagined security problems while still permitting physical collocation.

As the FCC has stated, the cost of preparing the secured area could be charged to the interconnectors. It is my understanding that Illinois Bell is beginning to do this now in anticipation of interstate collocation, by designating for AAV use an elevator that is programmed to open only on the floor in which AAV equipment is collocated.

Q. Have the LEC's raised other concerns about physical collocation?

A. Yes. As a general matter the LECs have raised an assortment of concerns that allegedly arise under physical collocation. For instance, LECs have raised the specter that, under physical collocation, strikes by AAV employees would interfere with LEC operations. This is an unrealistic concern, because most LECs are heavily unionized and most AAVs are not; in fact LEC strikes pose a far greater threat to collocated AAVs. This is evidenced by the fact that NYT's collocation license agreement ("CLA") has a provision designed to protect AAVs in the event of the a NYT strike, which provides that in the event of work stoppages NYT will provide AAVs with access to a separate entrance where possible.

LECs have also argued that under physical collocation they will be unable to exclude undesirables from central offices (undesirables being defined as personnel who have violated central office safety codes in the past), and that they will be unable to enforce fire codes and other operational standards on AAV personnel. These fears are unfounded and simply illogical -- AAV employees will adhere to the same conduct and safety codes that

subcontractors adhere to, and LECs will maintain the same control over their central offices that they maintained before physical collocation.

Lastly, LECs have evidenced concern that under physical collocation LEC personnel will be required to restrict their communications in common areas to protect the confidentiality of proprietary information from their AAV competitors. LECs have every right to be concerned over their personnel discussing trade secrets in public areas, but this concern should exist regardless of whether collocation is offered in a given central office. Any subcontractor that currently performs work for a LEC -- and has ready access to the LEC central office -- could obtain employment with a competitor. Thus, this theoretical concern over unintentional disclosure of sensitive information exists with any non-LEC employees, and is not confined to AAV personnel. And again, considerable IXC and AAV experience with collocation has not identified this issue as a legitimate concern. Moreover, the LECs ignore the other side of this equation: as demonstrated above, under virtual collocation AAVs not only have to advise the LEC of the new equipment they intend to install, they also have to pay to have LEC personnel trained in the use of that equipment. Thus, virtual collocation requires the actual disclosure of AAV proprietary information to LECs, which should outweigh any LEC hypothetical concerns. Finally, if LECs build secured interconnector areas, as Illinois Bell appears to be doing, this alleged concern is eliminated.

LEC concerns over AAV personnel in central offices are extreme, illogical, speculative, and overstated. These concerns were raised at length before the FCC, which found them unsupported and unconvincing.

Q. Will physical collocation threaten network integrity?

A. No. In marked contrast to the hypothetical concerns raised over the last several years by LECs who have no experience with physical collocation, actual experience in New York and Massachusetts reveals that alleged concerns over network security under physical collocation are baseless and that physical collocation presents no threat to LEC network integrity.

In the first place it should be obvious that any disruption of the LEC network (or the AAV network) as a result of AAV activities would likely destroy the reputation -- and thus economic viability -- of the AAV. Thus, in order to protect the integrity of both AAV and LEC networks, AAVs routinely follow the same established technical equipment standards followed by the LEC. Moreover, AAVs are not adverse to following the installation and operating standards mandated by a particular LEC for a particular central office, provided that the LEC adheres to such standards itself.

Indeed, this has been the case in New York and Massachusetts. For example, the New York Telephone Collocation License Agreement requires AAVs to follow not only the Bellcore equipment standards, but also particular NYNEX and NYT installation and operating standards. For example, not only must all interconnector entrance facilities and splices comply with "Bellcore

Generic Specification For Optical Fiber and Optical Fiber Cable" but all interconnector equipment must be on NYT's list of approved products or comply with the "Bellcore Network Equipment Building System Generic Equipment Requirement." In addition, all interconnectors must comply with NYNEX "Information Standards For Central Office Installation And Removal Procedures," and "NYT's Central office engineering, environmental and transmission standards as they relate to fire, safety, health and environmental safeguards, or interference with NYT's service or facilities." Likewise, AAVs in Florida would voluntarily comply with the equipment or installation standards and operation manuals established and followed by the Florida LECs.

These same network integrity arguments were debated at length before the FCC, and the FCC concluded that they were groundless. In the Expanded Interconnection Order the FCC concluded that collocation of AAV-designated equipment would not harm the local network or diminish its reliability since the FCC would require interconnectors to comply with all network integrity and operational safeguards being developed by the FCC's "Network Reliability Council." Further, the FCC found that "[i]n the unlikely event" AAV operating practices "represented a significant and demonstrable technical threat to the LEC network... the LEC would be allowed to proscribe for use of such... practices." Despite this cautionary warning the FCC concluded that they expected such problems to be "rare." Id.

Q. Will the FCC's order prevent a LEC from using its central office space for its own interstate or intrastate services.

A. No. The FCC specifically provided in its order that a LEC may obtain a waiver from the physical collocation requirement if it demonstrates that there is inadequate space for physical collocation in a particular central office in which interconnection has been requested. The FCC expressly recognized that a LEC's need for central office space to provide interstate or intrastate services in the future would constitute a legitimate basis for obtaining a waiver.

Q. How will this affect LEC's future space needs?

A. To the extent those needs are presently known and planned for, the FCC order again specifically provides for a waiver. With respect to future planning, a LEC must simply consider interconnection needs in planning additional space, just as it is required to consider needs for other services in its construction planning.

Q. Will physical collocation prevent a LEC from closing down or consolidating central offices?

A. No. All of the LEC physical collocation tariffs and contracts currently in effect include language that expressly reserves the LEC's right to terminate a physical collocation arrangement if it requires the space for any reason -- including closing down or consolidating its central offices. The FCC's order would not disrupt such provisions.

Q. Based on your understanding of the FCC's order, the comparability of physical and virtual collocation and the benefits to be derived from collocation, what policy do you recommend the Commission adopt?

A. For the reasons discussed above, I urge the Commission to require Florida LECs to provide physical collocation for interconnectors.

Q: Should the Commission require all Florida LECs to provide physical collocation?

A: I recommend that the Commission require only Tier I LECs to offer collocation as a tariffed, generally available service. Other LECs may control central offices that are critically important to competitors, however. The Commission should therefore review requests for collocation in non-Tier 1 LEC central offices on a case-by-case basis. If AAVs or other potential collocators have a bona fide interest in collocating in such central offices, and if the LEC has the technical capability to accommodate collocation, the Commission should approve it. Such ad hoc adjudication of collocation in non-Tier 1 LEC central offices would extend the benefits of increased competition to smaller LECs.

Q: For which central offices must the LECs tariff physical interconnection?

A: In the federal collocation proceedings, the FCC forged a compromise that limited the number of COs in which interconnection had to be tariffed, thereby minimizing the need for LECs to establish CO-specific rates. Under the initial FCC plan, LECs were required to tariff each CO for physical collocation, even if there was little likelihood that collocation would be requested in a particular

office. The LECs opposed this approach, stating that they would be required to survey and establish rates for COs for which no demand for collocation was likely. In response, the FCC announced a compromise position, under which a LEC initially would tariff only the top 10% of the COs in its service area. These tariffed COs would be the ones at which collocators likely will seek to collocate.

Recognizing, however, that potential collocators might wish to collocate at some offices other than the ones initially tariffed, the Commission established a period within which potential collocators could request the tariffing of additional COs. Under this compromise position, the LECs need not tariff offices where there is unlikely to be an immediate need for collocation; however, upon request, collocators can achieve expanded interconnection in any CO where they foresee competitive opportunity. This accommodation of competing interests is quite rational, and I recommend that the Commission adopt the same approach.

Q: Should collocators allow LECs and other parties to interconnect with their networks?

A: Intermedia is willing to provide reciprocal interconnection arrangements for LECs or other parties, upon similar terms and conditions as those established by the LECs.

Q: Should the Commission require all special access and private line providers to file tariffs?

A: The Commission appropriately requires LECs to tariff their services since these carriers have both the ability and incentive to cross-subsidize their competitive services with their noncompetitive services. For competitive access providers, on the other hand, whose services are priced according to the dictates of the market, a tariffing requirement is superfluous. These providers have no captive customer base from which they can exact monopoly profits. Furthermore, as recognized by the Commission in its Alternative Access Vendor Order, No. 24877, AAV customers are generally sophisticated users who do not need expansive Commission protection. Thus, the Commission declined in its AAV Order to require tariffing by AAVs. The considerations that informed that decision still hold true today.

Q: Do the LECs need additional pricing flexibility to be able to compete under expanded interconnection?

A: No. The Commission already has granted LECs substantial pricing flexibility -- allowing them to offer contract serving arrangements and individual case basis pricing, under which the LECs may price their services at nearly any level they desire, so long as they meet the LECs' average variable costs. This degree of flexibility allows the LECs to meet the competitive challenge posed by AAVs, but imposes certain limits on that flexibility to help ensure that LECs do not unfairly cross-subsidize their competitive services.

Q. What is the relation of the FCC's Expanded Interconnection Order to this Florida proceeding?

A. The FCC order only deals with interconnection for interstate services. Every state is free to determine a collocation policy for intrastate services. State regulators are free to establish mandatory collocation policies for intrastate traffic within their states, or to prohibit collocation for intrastate services altogether. As a practical matter, however, once a physical collocation arrangement is established for interstate services, it would not be efficient to establish a conflicting collocation standard for intrastate services. Because the FCC has required Tier 1 LECs in Florida to provide physical collocation in most cases for interstate services, I believe that it is not desirable from a public policy perspective to establish an inconsistent standard for collocation for intrastate services.

Q. If Florida adopts a physical collocation standard, does this mean that a virtual collocation agreement is never permissible?

A. No. If the Commission adopts the FCC standard, virtual collocation arrangements would be authorized when either there is insufficient space for physical collocation or the LEC and AAV voluntarily agree that a virtual collocation arrangement is best. Although the FCC believed that physical collocation was necessary to right the competitive imbalance created by the LEC's control of its central offices, its Order expressly allows for virtual collocation arrangements in these two instances.

Q: It is, then, your opinion that a physical collocation standard would offer significant procompetitive benefits to the citizens of Florida?

A: The interests of the Florida public will best be served by a Commission policy that promotes competition for local services to the fullest extent possible. The LECs' interest is diametrically opposed to this public interest: they have every incentive to impede expanded interconnection while they hurriedly seek to upgrade their existing networks with technology developed by the AAVs -- technology that, significantly, the LECs long ignored.

Intermedia pioneered the use of fiber ring networks in Florida, inaugurating the first such network in Orlando in 1988. GTE, however, just announced plans to install fiber-optic networks, costing $240 million, in parts of Florida, among other places, which duplicate the architecture of the network deployed by Intermedia 5 years ago. The import of the LECs' sudden conversion is clear: they sense the inevitability of expanded interconnection and thus seek, through regulatory and legislative delay, to hold the AAVs at bay while they solidify control over their captive customers, a task made easier by the massive resources they can devote to updating their networks.

Once GTE deploys these fiber rings, it will enjoy unrestricted interconnection and access to its own monopoly network. In addition, its sales force will have unrestricted access to customer information and be able to resell GTE's monopoly services. This is clearly an unfair advantage in providing what is also clearly a competitive service.

In addition, however, to LEC attempts to delay the advent of expanded interconnection while they play catch up with the AAVs, the LECs have also urged, as a second defense, adoption of a collocation standard that poses the least threat to their entrenched interests: a virtual collocation standard. Not surprisingly, this collocation standard is also the one least likely to promote effective competition in the intrastate market. The ability of AAVs to compete effectively for local services is contingent upon their ability to gain expanded interconnection within the central offices owned and controlled by the LECs. Under a virtual collocation standard, however, the LECs have the every incentive to use their strong bargaining position to impose excessive rates and burdensome and restrictive terms and conditions on any collocation arrangement they establish. Under such circumstances, little or no procompetitive benefit is realized.

Furthermore, the LECs' ability and incentive to provide ineffective virtual collocation to AAVs cannot be overcome by Commission mandate -- the amount of litigation and regulatory micromanagement that would be required would exhaust the resources of both the Commission and the AAVs. As I have testified, the considerable experience gained with collocation in other states, and the voluminous record compiled in the FCC's collocation proceeding fully demonstrate that only a mandatory physical collocation standard can place interconnectors on competitively equal footing with the

LECs. As a result, I urge the Commission to adopt the mandatory physical collocation standard embraced by the FCC.

Q (By Mr. Wiggins) Okay. Did you have a summary of your direct testimony that you filed?

COMMISSIONER LAUREDO: You mean do you want --

Q Do you have a summary this morning, Mr. Canis, to --

A Well, I have an oral.

Q Exactly.

A Yes, I do.

Q Good. The questions get harder, actually. (Laughter) Would you give the oral summary?

A Thank you.

Good morning, Commissioners. On behalf of Intermedia Communications of Florida, I would like to applaud the Public Service Commission for examining this issue of critical importance to competition for local telecommunications services.

Over the last few years, as competition has begun to emerge for local services, the public benefits of such competition have become clear. Competition has resulted in reduced prices for services, the introduction of innovative new services and greater responsiveness to consumers' needs, superior levels of performance, and increased choice for consumers.

The movement towards stimulating competition for local services is new, it was spearheaded by the

New York Public Service Commission in 1989. The Federal Communications Commission at the end of last year took a major step mandating collocation as a means of stimulating competition, and over the last year a number of other states have begun to consider collocation as a means of stimulating competition.

While only a handful of jurisdictions have adopted rules governing collocation or have approved negotiated collocation arrangements, this experience provides compelling evidence regarding what policies will best stimulate competition.

First, it is absolutely abundantly clear that physical collocation is superior in all respects to virtual collocation.

Secondly, the lack of bargaining leverage for collocators requires that a regulatory body must ensure that reasonable rates, terms and conditions are established for collocation.

We ask that, in establishing the collocation policy for Florida, this Commission take the experience from other jurisdictions into account and establish guidelines that will ensure that the Florida ratepayers realize as fully as possible the benefits of competition.

Thank you.

MR. WIGGINS: The witness is available for cross examination.

COMMISSIONER CLARK: Okay. Mr. Erwin?

CROSS EXAMINATION

BY MR. ERWIN:

Q Mr. Canis, I just have a few. In your experience, what is the threshold level for the smallest local exchange companies where you are aware of any interconnection taking place for special access?

A Right now, the only interconnection, expanded interconnection, that has taken place has taken place through intrastate collocation arrangements that have been established in New York, Illinois and Massachusetts. Even to the extent that interstate collocation has taken place, it's only taken place through interim tariffs that were in effect in those three states.

In those cases the LEC that has provided collocation has been -- well, they have been Centel of Illinois, Illinois Bell in Illinois, New York Telephone in New York, and New England Telephone in Massachusetts.

Q So you're talking about rather large local exchange companies, is that correct?

A That's correct.

MR. ERWIN: That's all I have.

COMMISSIONER CLARK: Mr. Carver?

MR. CARVER: Yes, just a few questions.

CROSS EXAMINATION

BY MR. CARVER:

Q Good morning, Mr. Canis.

A Good morning.

Q My name is Phil Carver, I represent Southern Bell. Regarding physical versus virtual collocation, physical collocation takes up more central office space, does it not?

A I can only answer that question somewhat equivocally. Currently, in the way collocation has been currently provided, and, again, it has been, to date, all collocation arrangements have taken place through intrastate collocation arrangements and not through the FCC's rules, which have only recently taken effect. In those states where physical collocation has been negotiated, the standard that's been adopted by the parties involved has been to allocate an area of space 100 square feet, ten-by-ten, within those central offices.

The only LEC that I'm aware of that provides tariffed virtual collocation services is Illinois Bell in the Chicago area. Now, I have not been privy to the

central office so I don't know what their arrangement is, and I don't know, in fact, how much space is actually dedicated to the exclusive use of equipment dedicated to the collocator. It really depends on the arrangement that is made in the -- by either the engineering staff of the LEC or through a negotiated process between the collocator and the LEC that will determine the ultimate amount of space that is, in fact, dedicated to the collocator's use.

So the short answer is I cannot unequivocally answer your question because those standards really haven't been established fully yet.

Q Well, generally speaking, based on your experience with collocation, doesn't physical take more space than virtual, all things being equal?

A Theoretically, it may. Now, again, I have never been in a central office in which a LEC has provided collocation. That, as a representative of CAPs, that's one of my major complaints. So I really can't say what kind of floor space, Illinois Bell for instance, has allocated to the exclusive use of a collocator.

I can tell you this: Under virtual collocation, it is theoretically possible for a LEC to mix different central office equipment, and this would

be OLTMs, optical line terminating multiplexers, other multiplexers, cross-connect panels. It is possible for a LEC to mix and match different collocator's equipment on the same bay, which is an equipment rack.

In doing so, if the LEC did so, it would, in fact, require less square footage than the 100 square feet typically allocated to a physical collocation arrangement. However, mixing and matching that kind of equipment, different collocator's equipment on the same equipment rack would also yield considerable inefficiencies and increase the cost to the collocator.

One other consideration that I would like to mention is that while 100 square feet has been the de facto standard that's evolved in the provision of physical collocation, there is no cut and dry requirement that a minimum 100 square feet be available. It is, in fact, very possible that through negotiations a collocator would be willing to accept a smaller amount, say, 25 square feet.

So I will say that, in theory, it is possible for virtual collocation to take up less floor space than physical, but that is not necessarily the way things have worked out in practice.

Q Okay. Theoretically, if the space available in the central office for physical collocation becomes

exhausted, is it your position that other requests for collocation should then be met by offering a virtual collocation arrangement?

A Yes, it is.

Q In that scenario, the collocators who, in effect, get there first and get a physical collocation arrangement are going to have a very definite advantage over those who come in later and are forced to accept a virtual collocation arrangement, are they not?

A Not necessarily. It really depends on how the virtual collocation arrangement is structured.

Q Let me just ask you this: In your summary I think you referred to physical collocation as being vastly superior, I think was the way you referred to it, to virtual collocation?

A That is correct.

Q So my question then is those collocators that get that vastly superior method of collocation are going to be in a better situation than the ones who don't get it. Would you agree with that?

A Not necessarily. It is possible that virtual collocation arrangements, if negotiated, and under the FCC's rules and the rules adopted by most states that have approved collocation arrangements, they specifically allow for interested parties to negotiate

virtual collocation arrangements.

It is possible that a collocated party may accept a virtual arrangement and accept either financial incentives to accept some of the trade-offs that come with the disadvantages of virtual -- the disadvantages attendant to virtual collocation.

So it is possible that a collocator accepting virtual collocation may be willing to be compensated for some of those disadvantages inherent in that position. I would also state --

Q Before you go on let me --

A Let me finish my response. I would also --

Q I think you've answered my question.

A Well, I don't think I have entirely. I would also want to make perfectly clear that your question is entirely hypothetical.

In New York City where we've had collocation going on for about two years now, physical collocation, New York City is also the one area in the country that has the highest level of competitive access providers activity; and currently provides the greatest amount of physical collocation in any city in the United States. New York City is also the area where it is most congested in terms of building space and population density.

Despite all of these factors, New York Telephone has not once had to reject a request for physical collocation because it lacked available central office space.

COMMISSIONER CLARK: Are you through?

WITNESS CANIS: I am.

COMMISSIONER CLARK: Would you answer his questions from now on and let your attorney conduct your redirect?

WITNESS CANIS: Yes, Commissioner.

COMMISSIONER CLARK: Go ahead.

COMMISSIONER LAUREDO: May I ask just a very brief question so I can follow you? In your petition you're not -- I deducted from your answer that you are not necessarily asking specifically for the 100 square feet standard space?

WITNESS CANIS: That is correct, Commissioner.

COMMISSIONER LAUREDO: Thank you.

COMMISSIONER CLARK: Go ahead, Mr. Carver.

Q (By Mr. Carver) To tell you the truth, I kind of forgot what your answer to my question was so let me just ask it again.

Theoretically, it's your belief that physical collocation is a, quote, "vastly superior to virtual

collocation all things being equal"?

A That is correct.

Q So that in a particular central office where the space for physical collocation becomes exhausted and other collocators then come in and have to accept a virtual arrangement, the ones who get physical collocation are going to be at a distinct advantage over the ones who get virtual collocation, all things being equal, correct?

A I would say that the parties taking virtual collocation may be disadvantaged in a number of respects. And those include operational aspects in the ability to turn up service within a certain period of time, and also economically because virtual collocation is inherently more expensive than physical collocation.

The economic disadvantage may be offset by economic arrangements, pricing arrangements in a virtual collocation arrangement. I will state that it is likely that the operational disadvantages for virtual collocation could not be overcome.

Q Let me ask this: Assuming that the result of this docket is that collocation is ordered for special access and private lines, would it be Intermedia's intention to try to obtain physical collocation in whatever central offices you can throughout the state?

A I believe it would, yes.

Q Let me ask you a couple of questions regarding tariffs. Is it your position that for special access and private line services that the LECs should continue to submit tariffs that alternative access vendors should not be tariffed?

A Yes, it is.

Q Given that scenario, the one that you recommended, if a market began to develop for a new product and both the LEC and an AAV or more than one AAV were trying to develop a product to meet that market demand, the fact that the AAVs do not have to submit tariffs would allow them to be much more responsive and to get out of product much more quickly; isn't that true?

A I really am not familiar enough with the tariffing process in Florida to be able to tell you what the regulatory delay attendant to the tariff review process might entail. In other jurisdictions, with which I am familiar, I will say that competitive access providers typically are able to introduce services on a very expeditious basis.

Q And as to the LECs, do you know in Florida what the minimum amount of time is between an approval of a newly filed tariff?

A No, I do not.

Q Do you know that in Florida any interested party protests the approval of the tariff and it goes to hearing and there is an entire process there? Are you aware of that procedure?

A I assume that that kind of procedure was available, yes.

Q When was Intermedia's petition filed in this matter?

A I'll have to refer to my counsel for the specific date.

COMMISSIONER CLARK: I guess the witness doesn't know.

MR. CARVER: That's all I have. Thank you.

CROSS EXAMINATION

BY MS. CASWELL:

Q Good morning, Mr. Canis. My name is Kim Caswell from GTE Florida.

A Good morning.

Q Would you please refer to Page 37 of your direct testimony?

A I don't have a copy of my direct testimony here. (Pause)

Q That was Page 37.

A Yes.

Q Starting at Line 7, the sentence that begins with "furthermore," can you read that sentence as well as the sentence that follows that one?

A "Furthermore, as recognized by the Commission in its Alternatives Access Vendor Order No. 24877, AAV customers are generally sophisticated users who did not need expansive Commission protection. Thus, the Commission declined in its AAV order to require tariffing by AAVs. The considerations that inform that decision still hold true today."

Q So the Commission has not required tariffing for AAVs because their customers have generally been large sophisticated the users, right?

A That's true.

Q And they are generally more aware of competitive choices in alternatives than smaller users would be; is that also correct?

A I think that's safe to say that that is true.

Q With expanded interconnection, an AAV will be able to provide service to any customer on the ubiquitous network; isn't that true?

A That's correct.

Q And hasn't ICI, in fact, expressed its intention of marketing to small and medium users if expanded interconnection is granted by this Commission?

A Yes, it has.

Q And ICI has also stated that medium to small customers are not generally aware of which, if any, services are competitive?

A I'm sorry. Could you repeat that question?

Q ICI has also stated that medium to small customers are not generally aware of which, if any, services are competitive; is that true?

A I don't know if I would classify that statement in that way.

Q Okay. Are you familiar with Intermedia's response to a Staff data request of June 22, 1993? Do you have that with you?

A I'm just checking.

MR. WIGGINS: Would you identify the specific number.

Q (By Ms. Caswell) Okay. There's no number. The title of your response is "Notice of Service of Intermedia Communications of Florida, Inc., Response to Staff's Data Request." The Staff's data request was June 22, 1993, and your response was filed August 4, 1993.

MR. HATCH: It may solve some confusion, Commissioners, that data request was in the competitive services docket. It was not specifically part of this

docket. It's in a different proceeding.

MS. CASWELL: I have the same proceeding number on mine.

MR. WIGGINS: Maybe there's a typo.

MS. CASWELL: Maybe we can just stipulate this into the record if that's --

COMMISSIONER CLARK: You want this to be an exhibit?

MS. CASWELL: Yes.

COMMISSIONER CLARK: Exhibit No. 1. Would you give us the title?

MR. WIGGINS: But he is not going to have that in front of him.

MS. CASWELL: I'm not going to ask any more questions on it. We'll just stipulate it into the record. That will be sufficient.

MR. DUNBAR: Wait, Commissioner. Could we see it before it goes into the record?

MS. CASWELL: Sure.

MR. DUNBAR: I mean, I don't know that we'll have any objections, but maybe we could have some copies made and the rest of us could look at it.

COMMISSIONER CLARK: If you're just going to stipulate it in the record, why don't you get some copies. And I'll tell you what, we'll identify it as

Exhibit 1 as soon as you've copied it and delivered it to the parties, then you can move to have it entered into the record.

MS. CASWELL: I can do that at lunch.

COMMISSIONER CLARK: But may I please have a title first? A short title.

MS. CASWELL: How about "ICI Response to Staff Request of June 22," if that's short enough?

COMMISSIONER CLARK: All right. Go ahead.

Q (By Ms. Caswell) Okay. Mr. Canis, going back to our line of questioning here. You have stated that ICI has expressed its intention of marketing to small and medium users. Doesn't this fact undermine the Commission's only justification for not tariffing AAV services in the pre-expanded interconnection environment?

A I think there are other reasons for not expanding.

Q You are familiar with the Commission's order that you cite in your proceeding and in your testimony; is that correct? I think you've referred to it several times in this proceeding.

A I'm generally familiar with the order. I don't have it with me, and, you know, I can't say that --

Q And do you think that order sets forth

justifications other than the one that we've just spoken about?

A No, I do not.

Q Mr. Canis, I think you also pointed out in your testimony that you feel that current mechanisms afford LECs sufficient flexibility to respond to competitive challenges; is that true?

A Yes, that's true.

Q Are you aware that in the 1991 AAV proceeding before this Commission ICI explicitly did not oppose other measures that would help the LEC respond more quickly to competitive challenges?

A Yes, I'm aware of that.

Q Does ICI provide packet transport service?

A Not to my knowledge.

Q So you're not aware that ICI has, in fact, stated that it does provide packet transport service?

MR. WIGGINS: Objection. First of all, that assumes something that's not in the record. Secondly, it's beyond the scope of direct because I don't think I've seen anything as direct testimony having to do with packets or packet transmission.

MS. CASWELL: It's relevant because I think we're trying to find out what --

COMMISSIONER CLARK: I don't think that's his

objection.

MR. WIGGINS: The objection was that your question assumes something that was not in the record.

MS. CASWELL: Well, it's in the exhibit that I think probably will be entered into the record, but I'm not going to pursue that line.

COMMISSIONER CLARK: I guess I don't have to rule on the objection. The question is withdrawn?

MS. CASWELL: I'll drop my question.

Those are all the questions I have. Thank you, Mr. Canis.

COMMISSIONER CLARK: Mr. Tye.

CROSS EXAMINATION

BY MR. TYE:

Q Mr. Canis, I'm Mike Tye and I represent AT&T.

Mr. Canis, in your summary you indicated that the lack of bargaining leverage that the AAVs have with the LECs in this situation makes regulatory intervention necessary; is that correct?

A That is correct.

Q Is that because the LECs have substantial market power with respect to the provision of local access services?

A It's because they exercise -- they exercise market power, and it's also because they own and

typically have exclusive control of the central offices within which collocators seek to collocate.

Q So, in effect, they have a monopoly?

A I would agree, yes.

Q Does any other party or potential collocator have either that market power or that monopoly status?

A Not to my knowledge, no.

MR. TYE: Thank you, sir. No further questions.

COMMISSIONER CLARK: Mr. Fons.

MR. FONS: I have some questions.

CROSS EXAMINATION

BY MR. FONS:

Q Mr. Canis, my name is John Fons. I'm representing United and Centel in this proceeding.

What is your relationship to Intermedia on whose behalf you are testifying?

A In this proceeding I am acting as expert witness for Intermedia.

Q And on what subject matters are you appearing as an exhibit witness on behalf of Intermedia?

A On issues relating to collocation.

Q And are those issues that are based upon your background as an attorney?

A Well, I am an attorney so --

Q Let me put it another way. Do you have any operational experience with the telephone company with an alternative access vendor, an IXC or any entity that is operating a telecommunications business?

A Well, I represent a number of different competitive access providers. And on the behalf of several different CAPs or AAVs, I have negotiated collocation arrangements with several different local exchange carriers.

Q And you functioned as an attorney in those situations?

A That is true.

Q But you do not have any operational background; you've never worked for a telecommunications company operations?

A That's correct. That's correct.

Q In your direct testimony you indicate that -- well, let me ask it this way: Are you familiar with Intermedia's operations here in Florida?

A Generally, yes.

Q Are you familiar with the type of network Intermedia has?

A Generally, yes.

Q And what type of network does Intermedia have?

A Intermedia operates a series of fiber ring networks using a counter-rotating ring structure with full redundancy and route diversity to provide private line services and special access services.

Q So this is an optical fiber network?

A That is correct.

Q And it would have fiber optical or optical fiber electronics associated with that network?

A Yes, it would.

Q Are you familiar with what types of electronics Intermedia uses?

A In a general way. I'm familiar with the types of equipment. I'm not familiar with the specific makes and models.

Q There are a lot of manufacturers of fiberoptic electronics?

A There are several, yes.

Q When you say "several," can you give me a general number?

A No, I wouldn't presume to do that. I'm aware of at least a few.

Q And these electronics are used both by AAVs, like Intermedia, or telephone companies like United and Centel; is that correct?

A That is correct.

Q So it's pretty much state-of-the art, off-the-shelf type equipment?

A Yes.

Q Intermedia is not operating some electronics that United and Centel don't have available to them?

A Well, it's possible. It is not at all -- and again, I don't know specifically the situation with Intermedia's networks.

I can say it is not at all uncommon for AAVs to use different types of equipment in their networks, that is different makes and had models and different capacities than are used by the LECs in their service areas. As a matter of fact, to my knowledge that is the rule rather than the exception that the LECs and AAVs do not use the same equipment.

Q But they use the same type of equipment?

A The same type, yes.

Q And is there much difference between the manufacturers? I mean, does any manufacturer have a state-of-the art electronic that beats the hell out of everybody else's electronics?

A Well, different types of equipment can have substantially different capabilities. For instance, some forms of OLTMs will allow for remote loop-back testing and others will not. So depending, there are a

whole series of features and functions attendant to those different types of equipment that do make a very substantial difference.

Q Do you know what type of electronic equipment that United and Centel use in their central office for fiberoptic terminations?

A No, I do not.

Q Do you know specifically what types Intermedia uses in its offices?

A No, I do not.

Q Is it possible that Intermedia and United and Centel are using the same manufacturers in some instances?

A It may be possible.

Q And currently is Intermedia's network -- networks in Florida, where are they located?

A In several cities. Frankly, I would not, without reference to testimony, want to list all of them, but I know Tampa, Orlando, Miami.

Q And in those three instances you've just enumerated, Tampa, Orlando and Miami, is the Intermedia network interconnected with the local exchange network?

A Not to my knowledge.

Q And currently Intermedia is providing what types of services to its customers?

A Private line and special access services.

Q And would you define for us what you mean by "private line service"?

A I won't say I'm familiar with the full range of services that Intermedia may be offering. I do know they include high capacity DS-1 and DS-3 special access and private line services.

Q Are those DS-1 and DS-3 high capacity private line services any different in their operation than the DS-1 and DS-3 high capacity, private line and access services offered by the local telephone companies in those areas where you operate?

A I believe so, yes.

Q In what respects are they different?

A To my knowledge, in Florida the LECs do not operate fully redundant and fully diverse fiber ring configured networks while Intermedia does.

The advantage of fiber ring networks is that they allow a full diversity and redundancy so that in case one, let's say a typical disastrous service outage, if a backhoe in construction happens to hit one of their transmission pipes, the transmission is not lost; rather it's recovered immediately and rerouted through their redundant facilities.

It is my understanding that the LECs in

Florida do not currently operate these kinds of automatically redundant networks, although I do believe that GTE has recently announced that it intended to construct such.

Q Do you know whether or not Centel operates a fiber ring in the Tallahassee area?

A I don't know.

Q And this redundancy that you're talking about, that's based upon the ring architecture, is it not?

A Yes. There are other ways to achieve redundancy but ring architecture is certainly a very good way of doing that.

Q And currently the AAVs in their ring architecture, if I'm Customer A and I have several locations in a metropolitan area, your ring architecture would allow me as Customer A to reach my several locations?

A I'm sorry, could you repeat that question?

Q In your ring architecture, and I'm Customer A, if I have several locations in a metropolitan area, your ring architecture will allow me to reach my have several locations in that metropolitan area?

A If you're on our network, yes.

Q Okay. I assumed, of course, that you were on

your network or reachable.

A Okay.

Q Currently, is Intermedia allowing Customer A to deliver traffic not only to its other locations but to, say, Customer B that might also be on your network?

A Yes. That is my understanding.

Q So I, as Customer A, can deliver traffic to Customer B on your network?

A That is my understanding.

Q Are you familiar with Chapter 364?

A Of?

Q The Florida Statutes?

A No, I'm not.

Q Do you know whether or not under Chapter 364 Intermedia is allowed to transport traffic between Customer A and Customer B for intrastate traffic?

MR. WIGGINS: Objection. He just answered that he was not familiar with Chapter 364, Mr. Fons. And now you're going on to essentially make an argument through a question that's premised on his understanding of Chapter 364.

MR. FONS: I'll withdraw the question.

COMMISSIONER CLARK: Go ahead.

Q (By Mr. Fons) On Page 7 of your testimony, Mr. Canis, you indicate on Line 5, or Line 4, you have

a sentence that reads "Intermedia's entry into Florida markets has also resulted into introduction of new services, superior service quality and lower service rates for telecommunications users." Do you see that?

A Did you say that was Page 7?

Q Page 7 of your direct testimony, yes.

A And what lines?

Q Lines 4 through 6.

A Yes, I do.

Q And the superior service quality that you mentioned on Line 5, is that a comparative superior? Is that an absolute superior? What's the basis for your contention that Intermedia offers -- has introduced superior service quality?

A It goes to two different functions.

First, is the availability of -- well, what is called disaster-proof networks. That is fully redundant and fully diverse networks that allow for the recovery of a circuit in case one of the transmission pads is damaged.

The second goes to responsiveness to customer needs. Intermedia frequently will -- well, Intermedia prides itself on its ability to respond to customer needs to turn up new service on very, very short time frames. And in both of those aspects I believe the

type and the quality of service, the responsiveness, is superior to that typically available to customers through local exchange carriers.

Q So you're comparing your service to the LEC service when you make that statement about superior service quality; is that correct?

A That is correct. Although I would say that to the best of my knowledge the counter-rotating ring structure is technically the most advanced and is really superior in absolute terms, at least with today's technology.

Q And are you indicating that, therefore, the signal that the customer gets on your network is better than the signal that a customer would get on a LEC network?

A I'm not an engineer, but it is my understanding that signal quality provided over an all-fiber network is superior to signal quality that may be provided over copper facilities. So to the extent that we're comparing services provided by Intermedia to copper-based services provided over copper facilities by a LEC, my understanding is that the signal quality would be superior.

Q How about a LEC that provides fiber services to its customers, would your AAV service quality in

that instance be better than the service quality of the LEC?

A My understanding, and again I'm not an engineer -- but my understanding is that signal level and signal quality is superior over fiber facilities. So to the extent that LECs used the same type of fiber facility, I assume that the signal quality would be similar.

Q So if a LEC had a fiber ring serving customers, all other things being equal, that the LEC quality that it would provide its customers would be similar to or the same as the quality that an AAV can provide?

A Well, again, we're talking about three different measures of quality. The first being the signal strength and signal quality, and I think we just discussed if both the AAV and the LEC provide services over the same fiber facilities, the signal quality should be similar.

We also talked about the ability to recover a signal in cases of a disastrous service outage. And again, if the LEC were to construct a counter-rotating-ring-architecture kind of a network, I think it would provide similar protection against catastrophic outages.

We also talked about responsiveness to customer needs. To the best of my knowledge, even in areas where LECs have constructed fiber ring networks, their provisioning intervals, that is the time it takes them to turn up new service, are still inferior to the level of customer responsiveness that AAVs are able to provide.

Q But that provisioning responsiveness, that's something that's correctable, is it not?

A I guess so, yes.

Q So let's assume for the moment that the LEC has put in a fiber ring and that it has met the three criteria that you have given, disaster protection, responsiveness and the quality of the signal itself. If the LECs are offering the same thing that the AAVs are offering in that scenario, on what basis will the AAVs compete with the LECs?

A The AAVs initially entered the market for local communication services because there was a need, valuable need perceived by customers that was unmet by the local exchange carriers. Intermedia and other AAVs pioneered the use of all digital all fiber.

Q Mr. Canis, please --

A On these networks

Q -- would you please answer my question.

My question was, on what basis will you compete with the LECs if the LECs meet all of the three criteria we talked about previously?

A The need for customers for new communication services and improved communications service is an ongoing thing. Five years ago the level of service that was available was not adequate. I'm sure that five years from now the kind of service that even Intermedia provides now will not be adequate.

Technology is changing so quickly and customer needs are expanding so quickly that I think there will always be opportunities for an innovative entrepreneurial company to provide the kind of services and to find a market for the kind of services that it can uniquely provide.

Q Will Intermedia and the other AAVs compete with the LECs on the basis of price?

A I would assume that price would be one of the components, yes.

Q And assuming all other things being equal, the quality of the service, would price then be the determinant?

A Not necessarily, no.

Q What else would you -- what else would a customer look at other than quality and price in making

a determination as to who will serve its telecommunications needs?

A Diversity.

Q And what do you mean by diversity?

A Customers that are sophisticated users of communications can really seek protection against any nature -- service outage of any nature at all.

Q I thought that was already covered, though, as one of the criteria that we had talked about, the disaster protection.

A Not at all. There are a number of customers, and I'm thinking particularly of financial institutions: the New York Stock Exchange for instance, hospitals, other sophisticated users that include into their specifications, when they bid for a project, vendor diversity, because vendor diversity is the ultimate form of diversity and the ultimate protection against system outage.

Q So you're talking -- when you're talking about diversity, you're talking about vendor diversity, not diversity of the network?

A No. Well, there are different types. There is route diversity, there's geographic diversity and there's vendor diversity, and all of those are critically important to sophisticated communications

users.

Q And in that situation the customer may have two carriers, two vendors providing the same service?

A Absolutely.

Q Today, the Intermedia network you've indicated is not interconnected with the -- any LEC network; is that correct?

A To the best of my knowledge, that's correct.

Q And the purpose of this proceeding is to address the issue of interconnection; is that correct?

A That is correct.

Q And the name of the docket is "Expanded Interconnection." What does that mean?

A Generally, it means collocation. It is synonymous with some form of collocated interconnection.

Q And what will be achieved by this interconnection?

A It will allow alternate access vendors or competitive access providers to compete on a level playing field against LECs by providing them with the same kind of interconnectivity to the LEC network that the LEC provides its own facilities.

Q But today we've established that the AAVs don't interconnect with the LEC network. What purpose

will be served by having interconnection with the LEC network?

A Right now, without interconnection, without expanded interconnection, an AAV can only provide service to customers that are physically located on its network. Its market, then, is constrained by its ability to construct its network to build up to new customers.

Under expanded interconnection, an AAV would be able to provide its services to a broader range of customers.

Q In what respect? How would the AAV be able to do that?

A An AAV could take service that, say, originates on its network, hand it off to the LEC, so that service would terminate at a point on the LEC's network, or vice-versa.

Q Okay. So now, today, we have a stand-alone AAV network that only can serve its customers that are physically connected to that network; is that correct?

A That's correct.

Q But with expanded interconnection, now those customers can communicate with customers on the LEC network?

A Correct.

Q In that situation where a customer on the AAV network is now connected with a customer on the LEC network, how do you take care of redundancy in that situation? (Pause)

A Let me clarify your question. Are you talking about redundancy on what leg of the transmission?

Q That's the question I'm asking you.

A Okay. Redundancy for the LEC's -- or for the AAV's customer could be obtained in a number of ways. First, they could obtain guaranteed redundancy services from the LEC. This is typically done by paying additional fees for optional redundancy services, such as alternate serving wire center service or other kinds of diversity services that a LEC may provide.

Diversity may also be obtained if the LEC constructs a diversely routed and redundant network, similar to the type of network used by the AAV.

In addition, the customer could obtain diversity by asking the AAV to provide redundant collocated links through collocation arrangements in different LEC central offices, so that you essentially have redundancy in your LECs central offices. So there are a number of different ways that full end-to-end diversity could be guaranteed.

Q Can a customer get redundancy from a LEC today?

A Sometimes, yes.

Q Sometimes?

A Right.

Q I mean, I thought you just described in your answer to my previous question that, when the AAV interconnects with the LEC, that the issue of redundancy which I asked you about would be accomplished by the customer getting redundancy from the LEC on the LEC portion. So the customer can get redundancy from the LEC today?

A If the LEC offers it, yes.

Q Do you know whether United or Centel offer redundancy today?

A I don't know specifically what kind of redundancy offering they might offer. I assume they offer some form of redundancy to some customers.

Q Again, once expanded interconnection takes place, how will the customer get responsiveness where the customer is getting a portion of his service from an AAV and a portion of his service from the LEC?

A Typically, what we see is the LEC provisioning intervals become something of a bottleneck. If, for instance, the AAV can turn up

service in 24 hours and typically the LEC takes, say, three weeks to turn up service, that could constitute a bottleneck.

The AAV may take some steps to alleviate that. For instance, an AAV could buy what's called a DACS, could use a DACS machine, a digital cross-connect system, that would enable it to reroute its services through the -- within the LEC's central office. It could also buy DACS-based services, such as customer-controlled reconfiguration from the LEC, which would allow rapid reconfiguration of circuits.

In addition, an AAV could simply buy excess capacity from the LEC if it anticipated that its customers would need that kind of access capacity.

So there are at least some ways that an AAV could take steps to get around the provisioning bottleneck that's usually represented by LECs services.

Q So that in situations where the AAV has interconnected with the LEC, the LEC will not see any degradation of its service because the service is being provided jointly by the AAV and the LEC?

A I'm sorry, you said the LEC would not see any degradation?

Q I'm sorry, I mean the customer will not see any degradation from --

A It may, it may not. Again, there may be instances in which essentially the LEC bottleneck for its leg of the service just cannot be overcome. And those would, in that case, provide some degradation from the level of service that the AAV typically provides. Although, as I mentioned before, there are some steps you could take to alleviate that problem.

Q Assuming that those problems could not be overcome, what advantage would there be to the AAV or the customer in that situation to be interconnected with the LEC?

A They would still have guarantees of full diversity, redundancy, superior service quality for that portion of their transmission that is under the LEC -- under the AAV's control.

Q In those situations in which there is interconnection between the AAV and the LEC, will the AAV be able to provide any services different than what the LEC is capable of providing?

A Well, I don't know if I entirely understand your question. But let me take a shot at it.

Q I'll be happy to rephrase it if you don't understand it.

A Okay, if you would, please.

Q What I'm asking you is: In the

interconnection situation, will the AAV be able to provide any different services than the LEC is able to provide to the end user?

A Yes. And essentially, when you talk about services like network management and things of that nature, these are a full range of services that are provided by the AAV under the control of the AAV's central monitoring and control function.

To the extent that you are using the LEC's network merely to terminate a service that originates or is enhanced on the AAV network, the ability to provide that service would not at all be affected by terminating it on the LEC network.

Similarly, even if you are required to purchase LEC services -- for instance, let's say a LEC offers a high capacity services in quantities of one and five DS-1 circuits and you can't get anything in between. If the AAV wanted to provide something in between, it could do that. It could purchase as an agent for the customer access capacity on the LEC network but still provide a fundamentally different type of service or service that at least appeared different to the customer because it was originated on the AAV network.

So there are a number of different ways where

the product offering of the AAV would remain substantially different from the LEC's, even though it terminated or originated on the LEC network.

Q You're talking about packaging in that situation, are you not?

A No, not necessarily. Well, network management would be a form of packaging, yes.

Q How about from a technical standpoint. Would there be any services that an AAV could technically offer that, because they're interconnected to the LEC, the LEC could not technically offer and, therefore, customer could not get that service?

A Not being an engineer, I am really not able to respond fully to that question.

Q And if the AAV is terminating traffic that's originated on its network on to the LEC network, won't the signal have to be handed off to the LEC network in a fashion that the LEC network can handle?

A Yes.

Q So the electronics would have to be consistent, would they not?

A They would have to be compatible at the point of handoff.

Q Right. But that's the critical point here, isn't it?

A Not really. Not when you're talking about value added services.

Q Well, but we're talking about the expanded interconnection taking place at the LEC's central office. So you are hooking up the AAV electronics to the LEC electronics. Isn't that correct?

A Right. I guess what I'm getting at is, if you're making a distinction between a total service package and the mere termination of transmission, then you're talking about substantial differences here.

For instance, on an AAV network, you could take service and put on all kinds of bells and whistles. You could include data overvoice, full network management services, bundled packages, special features, and you could generate that and control that on the AAV network.

If all you're doing is just handing that off to the LEC for termination on the LEC network, the LEC doesn't have to have similar processing capability; it's just a straight transmission. So we really have to talk about what kind of service you're talking about.

Q Well, I'm talking about private line services that the AAV is offering to customers.

A In that case, you have straight transmission

of digital, typically high-capacity services. The AAV's network can be different, it can use different types of equipment from the LEC's network; but at the point of handoff where you actually interconnect within the central office has to be compatibility, yes.

Q Will the customer see any different quality of service in those situations in which it has jointly provided service -- and I'm use using "jointly provided" in a literal sense, not in a technical sense -- jointly provided service involving both the LEC and the AAV than the customer would see of it was only using an AAV?

A You know, this goes back to the discussion that we had before. There are a lot of different components involved in a service. If you're talking about signal quality, redundancy guarantees, customer responsiveness and then value added services, you have to look at all four of those aspects of a service differently.

I would say -- and, again, I can only say that it depends. If the AAV has an all-fiber network and is handing off to fiber facilities provided by the LEC, there would be no degradation in signal quality. If it was handing off to copper facilities maintained by the LEC, then, yes, there likely would be, and that

would not be transparent to the customer. The customer would be advised that for that leg of the transmission, there would be less of a service quality guarantee.

The same with redundancy. If there was full redundancy on the AAV network but not on the LEC network, the customer would have to be advised that redundancy would only be provided on the AAV section. If the LEC's network were fully redundant, that would be transparent to the customer.

In terms of provisioning, we mentioned before that there are different steps that the AAV may be able to take that would ensure that it would be able to maintain its provisioning intervals if they were superior to the LECs.

There may be other cases where the customer would have to accept a lesser standard for provisioning because of the LEC's standard.

And, finally, when you're talking about bells and whistles, network management, value added services, if all you're doing is terminating that circuit on LEC's facilities, then that, too, would be transparent to the customer. The customer wouldn't see any degradation in the quality or type of service provided by the AAV.

Q Do you think the customer will demand a

different price for the situation where the service is degradated because the AAV is interconnected with the LEC network?

A That is possible.

Q How does Intermedia establish its prices today for the services it provides on its stand-alone network?

A I have no knowledge of that.

Q On Page 7 again, that same line where you talked about superior service quality, you say "lower service rates for telecommunications users." First of all, which telecommunications users get lower rates?

A Well, price competition brought on by AAVs has led to a dramatic reduction in high capacity service rates for, as far as I understand, all customers.

Q Can you give me an instance where United Telephone Company of Florida is providing lower high-cap rates because an AAV might be in its service area?

A I'm not familiar specifically with LECs' pricing practices in Florida.

Q Okay. Well, I'm just curious about Florida. I know you've appeared in New York and Illinois and other places, but we're trying to establish what's

going on in Florida.

A I can tell you in terms of Florida, for interstate traffic, all of the LECs have reduced their DS-1 rates by as much as 50% and in some cases as much as 80% over the last five years, in direct response to competition brought on by AAVs.

Q Good. That's what competition is supposed to be about, isn't it?

A Certainly is.

Q In your response, though, or your statement on Page 7, when you say "lower service rates," you're talking about lower service rates for the AAV as compared to the LEC?

A No. I think I just mentioned that the effect of competition is to put downward pricing on rates across the board.

Q So this isn't a comparative between the LEC and the AAV in this situation?

MR. WIGGINS: Would you mind repeating the question? He may have understood it but I didn't.

MR. FONS: Okay, sorry.

Q (By Mr. Fons) In other words, this is not a comparison. When you say "lower rates," you're not saying AAV rates are lower than LEC rates?

A They may be but they may not be.

Q So you're able to charge currently a premium for the AAV services because in your view the AAVs offer superior service quality than the LECs are providing?

A As I said before, I am not familiar with Intermedia's ratemaking practices. I can tell you that in my experience with other CAPS that providing a premium for diversity redundancy is not uncommon.

(Pause)

COMMISSIONER LAUREDO: May I ask a question?

COMMISSIONER CLARK: Mr. Fons, while you're taking a break, Commissioner Lauredo would like to ask a question.

MR. FONS: Surely.

COMMISSIONER LAUREDO: I'm trying to understand before we move up to another issue. This is one of the areas that I'm struggling to understand or at least to quantify in some objective way the statements that throughout your testimony and others refer to lower prices.

And my question in my typical simplistic way: It's lower price to whom? And if I struggle to try to identify that, I see on Page 7, or Page 4, for example, of your testimony, Line 17, you refer that the AAVs serve large business institutions or government

customers and metropolitan market areas across the country.

On Page 7, you refer to the Company has grown because it provides services to, quote, "business users." That's Line 9. And I can go on and on.

I'm not being argumentative, I'm just trying to see if maybe you can help me by perhaps giving me an example. Let's say, for example, New York, which is the example which you log through the testimony, by which the regular plain old telephone user in the New York City area has seen lower rates because of physical collocation?

WITNESS CANIS: Well, no, Commissioner. When I talk about price competition, I'm talking about the range of services that the AAVs are providing. And, in fact, it is for that category of services and for that category of users that price competition really accompanies AAV entry into a market.

Q All right. So then your reference to competition and its resulting market forces downward pressure on prices refers to what we may call the sophisticated user or the big user, the business user -- I don't know some of the terminology -- and you are not implying that it would bring down prices to the regular plain old telephone?

WITNESS CANIS: Well, I would say generally, to the extent that this proceeding is focusing on private line and special access services, those are the services that we're focusing on at this point. And I agree that my references here to price competition driving down prices for services refers to the high-capacity services that are typically used by business users.

I would posit, however, that price competition works pretty universally; and to the extent that competition is introduced for different services, it would similarly have the effect of reducing prices.

But, specifically, my testimony here is referring to the services immediately at hand in this proceeding.

COMMISSIONER LAUREDO: I just have a history which, of course, gets me -- you're not from this town, but gets me in trouble every once in a while. I'm just trying to step back look at the big picture and I'm very open on this issue; it's very compelling arguments from both sides; but my focus is trying to figure out how the whole system will be impacted.

And I think a short paraphrase for your answer is that what you're talking about here is then to the so-called big users.

Let me tell you how it's even more complicated in my mind, maybe you can help me. Some of the very eloquent arguments you make about efficiency and just your service providers, the AAVs, talks somewhere in your testimony about -- and I'll get to some more questions on that later -- the higher cost that you would have to absorb by having virtual collocation. You know, you're talking about servicing and redundancy of training, all that kind of stuff.

Do you, in your mind, make a connection between those higher costs and this vague concept of universal service that the LECs have to provide, that they have to provide other services that by which, for some socially mandated -- rightfully or wrongfully -- policy they have to carry on?

Is there a correlation between those higher costs and these higher --

WITNESS CANIS: No, Commissioner. When I'm talking about the additional costs associated with virtual collocation, I'm really talking about costs that are imposed on AAVs that are really artificial. They don't ordinarily exist. The LECs don't currently have those kinds of costs and the AAVs under physical collocation wouldn't have those kinds of cost.

So when we talk about the costs associated

with virtual collocation, it's, to my mind, really just a highly inefficient and highly artificial way of increasing the cost to the AAV, but it doesn't really reflect on any of the inherent costs of running a network. These are over and above those kinds of costs. And we can talk about those in specifics if you'd like.

COMMISSIONER LAUREDO: All right. So your reference is -- and forgive me for not having a handy reference to the page. Where you use an example of actual just labor cost?

WITNESS CANIS: Yeah.

COMMISSIONER LAUREDO: And the allocation of overtime and, I guess, a fixed labor cost that maybe is because of contractual agreements, et cetera --

WITNESS CANIS: Exactly.

COMMISSIONER LAUREDO: -- that are higher. You have a more independent or a more lean operation.

WITNESS CANIS: Uh-huh.

COMMISSIONER LAUREDO: But you don't see any relationship between those higher costs that you would have to be a victim of and the so-called "social burden" that the LECs carry vis-a-vis this concept of universal service. You don't make that connection?

WITNESS CANIS: That's correct. And if we

look at the overtime cost issue, our argument here is not that the interconnected CAP should never be charged to overtime. It's just that we have a history of very acrimonious relations between LECs and AAVs -- and that's understandable. They're competitors.

We want to avoid a situation where, understanding that that kind of relationship exists, we eliminate the ability for the LEC to over-allocate overhead costs, overtime costs, to the AAV. We're not talking about trying to avoid a reasonable sharing of overhead costs -- overtime costs, we're just talking about there may be an incentive for the LEC to shift all of its overtime to the competitor in order to forestall competition. And this is true with other areas.

You know, we talked about increasing capital costs. Well, the LECs get good deals when they go and buy their own equipment. We get good deals when we go and we buy our equipment because we're both big volume purchasers. However, what we have seen in Indiana in Ameritech is, under their virtual arrangement, they just take the equipment at the cost we would buy it and mark it up 30%.

That's a completely artificial cost; it doesn't affect any real LEC cost and the only thing it

does is increase our cost of doing business. So --

COMMISSIONER LAUREDO: Because in virtual collocation you do not have control of the purchasing of the equipment you need? I didn't see that in your testimony, I'm sorry.

WITNESS CANIS: We may not. And it gets a little difficult when you talk about virtual collocation, because arrangements may differ substantially.

For instance, in the original New York Tel virtual collocation arrangement, CAPs did not have control over purchasing their equipment. New York Tel said, "You tell us what you want and we'll buy it for you and you pay our price."

Ameritech is different. Ameritech says, "You buy your equipment at the best price that you can do it; you lease it to us; we'll mark it up 30% and lease it back to you."

I don't know, maybe they consider that a processing fee or something, I don't know. But the bottom line is what we're talking about here is artificial costs, artificial ways of inflating the AAV's cost of doing business. And these are not costs that are normally borne by the LECs in the normal course of their conducting their business.

COMMISSIONER LAUREDO: Would you perhaps, so I don't hold up counsel, think -- you're going to come back for rebuttal?

WITNESS CANIS: Yes.

COMMISSIONER LAUREDO: -- through a little bit more philosophically, maybe coming from the New York experience, if you can. And if not, if there isn't any specific qualitative result there of just how you can logically, so it can help me walk through the regular plain old telephone user put in a very philosophical way --

WITNESS CANIS: Yes.

COMMISSIONER LAUREDO: -- but would benefit from lower cost if we move with this petition or this philosophy?

WITNESS CANIS: Certainly.

COMMISSIONER LAUREDO: Thanks. (Pause)

COMMISSIONER CLARK: Mr. Fons, how much more do you have?

MR. FONS: I probably have 10, 15 more minutes.

COMMISSIONER CLARK: Why don't we take a break and come back at a quarter after.

(Brief recess.)

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COMMISSIONER CLARK: Mr. Fons.

Q (By Mr. Fons) Yes. Earlier, Mr. Canis, I was asking you some questions. You indicated that the LECs have reduced their prices for certain private line services as a result of the appearance of the AAVs. Is that a proper characterization of your testimony?

A Yes. I was referencing, specifically, the rates -- rate changes affected by LECs in their federal tariffs including BellSouth, and to the best of my knowledge, United as well.

Q That was interstate tariffs?

A Interstate, yes.

Q You don't know about intrastate?

A Frankly, I assume that there was some that were similar that would put pressure on intrastate, but I don't know for certain.

Q And would you describe what we just talked about as being the LEC reaction to the marketplace?

A Yes, I would.

Q So the LECs are susceptible to what's going on in the marketplace as the AAVs are; is that correct?

A I really don't know how you intend to use the word "susceptible." The LECs certainly are responding to market entry by the AAVs, yes.

Q And the LECs are going to have to respond

pricewise to what prices the AAVs introduced to the marketplace; is that correct?

A Competitors have a number of different options. Cutting prices is one: competeing on quality is another.

Q But we've already established that the LECs did reduce their prices in response to the appearance of the AAVs in the marketplace in Florida; is that correct?

A I believe that is the case, yes.

Q You've indicated on Page 37 in response to a question "Do the LEC need additional pricing flexibility to be able to compete under expanded interconnection" that, "No, they should not be granted any additional flexibility than they already have." And you've indicated the paraphrasing, what you're saying, that the LECs have available to them contracts, serving arrangements and an individual case basis for pricing; is that correct?

A That is correct.

Q Do you know what rules and regulations this Commission has established with regard to the use of contract service arrangements?

A No, I do not.

Q Do you know whether or not the -- then you

don't know under what instances a contract service arrangement can be used?

A That is correct.

Q Then how do you know that this constitutes pricing flexibility for the LECs?

A I know generally that LECs do have ICB contracting available to them. I was working under the assumption that this is not -- is broadly applicable and was working from that assumption.

Q If your assumption was wrong, that it's not broadly applicable, would that change your statement?

A It may, yes.

MR. FONS: I have no further questions.

COMMISSIONER CLARK: Ms. Wilson, do you have any questions?

MS. WILSON: No questions.

COMMISSIONER CLARK: Mr. Dunbar.

MR. DUNBAR: Thank you, Commissioner.

CROSS EXAMINATION

BY MR. DUNBAR:

Q Mr. Canis, my name is Peter Dunbar on behalf of Time Warner.

If you still have your direct testimony there, could I ask you please to turn to Page 36. And on line 16 of that page there is a question and then

your response appears on line 18?

A Uh-huh.

Q Throughout your direct testimony you've made you've underscored the significance of the market power of the local exchange companies. Do I understand you in this response to be indicating that if someone collocates into a LEC network they should be required to give that interconnection in return?

A No, that is not -- that is not the intention of that statement.

Q Simply then is the purpose of that statement then simply to indicate that Intermedia is willing to do that?

A Yes. The purpose is that -- of that statement indicates that Intermedia will consider bona fide requests for collocation from LECs or from other parties.

Q Are you familiar with Mr. Kouroupas' direct testimony?

A I've read it, yes.

Q Let me paraphrase some of that or read some of that from Page 22 of that testimony beginning on line 4. "As monopoly providers of essentially bottleneck facilities, LECs need to be required to provide physical collocation to interconnectors;

however, nondominate competitive carriers need no such requirement." Would you disagree what that statement?

A No, I would not.

MR. DUNBAR: I have no further questions. Thank you, Commissioners.

MR. HOFFMAN: I have no questions.

COMMISSIONER LAUREDO: May I --

COMMISSIONER CLARK: Is there any one other party who would like to ask questions who doesn't have a seat at the table? Okay.

COMMISSIONER LAUREDO: Just to clarify Mr. Dunbar's question on Page 16, the question refers to other parties and in your answer you are company specific. And since you don't work for that company, that still has a way of committing -- that's a statement that has been approved by the owners of Intermedia?

WITNESS CANIS: I'm sorry, Commissioner. Can you direct me to a --

COMMISSIONER LAUREDO: Yes, on Page 36 the question that Mr. Dunbar referred to. The question was general, but your answer is as to the company you represent today and it's a commitment. And since you're not an employer or executive for the Company, I wonder whether that has the same weight as, or are you

speaking for the Company?

WITNESS CANIS: Yes, Commissioner, I am. And I can also tell you that Intermedia is a member of the National Trade Association of Competitive Access Providers. It's known as ALT. And that is the position it took before the FCC, and when similar questions were raised.

COMMISSIONER LAUREDO: Thank you.

COMMISSIONER CLARK: Staff.

CROSS EXAMINATION

BY MR. MURPHY:

Q Mr. Canis, I'm Charles Murphy on behalf of the Staff.

Have you received a copy of exhibits JC-1, JC-2 and JC-3?

A Yes, I do.

Q Have you had a chance to review them?

A I haven't reviewed -- I've briefly reviewed these documents, yes.

Q Are they accurate to the best of your knowledge and belief?

A Yes, they are.

MR. MURPHY: Commissioner, Staff would ask that the exhibits be numbered for identification.

COMMISSIONER LAUREDO: Where are these?

MR. MURPHY: Those are in order by witness. They should be the top three in the Commissioners' pile, the court reporter's pile and Mr. Pruitt has a stack of them as well.

COMMISSIONER CLARK: Okay. I have JC-1, 2 and 3. And you want them marked as exhibits?

MR. MURPHY: Yes, Commissioner.

COMMISSIONER CLARK: JC-1 will be Exhibit 2, JC-2 will be Exhibit 3 and JC-3 will be Exhibit 4.

MR. MURPHY: Do you need names in addition to the abbreviated version?

COMMISSIONER CLARK: Sure.

MR. MURPHY: No. 2 would be "Response to Staff's First Set of PODs." No. 3 would be "Responses to Selected Interrogatories." No. 4 would be "Deposition Transcript."

COMMISSIONER CLARK: We'll show those as identified.

(Exhibit Nos. 2 through 4 marked for identification.)

COMMISSIONER CLARK: Go ahead.

Q (By Mr. Murphy) Mr. Canis, how should the Commissioner handle Tier 1 versus Tier 2 LEC?

A Our recommendation is that all Tier 1 LECs should be subject to a mandatory requirement to provide

physical collocation. For Tier 2 LECs we recognize that they may be differently situated from the Tier 1's and may not be in a position to provide collocation in all central offices. Nevertheless, we believe that to extend the benefits of competition to as many as broadly as possible to the Florida ratepayers, if collocation is feasible within Tier 2 LEC central offices, they should be required to provide collocation as well.

For that reason we recommend that Tier 2 LECs be subject to a general obligation to respond to bona fide requests for collocation in their central offices; and, if, in fact, they are unable to provide collocation as requested, we would ask that the Commission be willing to act as an arbiter on a case-by-case basis to determine whether collocation is feasible and should be provided.

Q Assuming that expanded interconnection is ordered in Florida, should the Commission require the LECs to file rate elements in their intrastate expanded interconnection tariffs, which mirror rate elements in their interstate tariffs, or should there be a difference?

A Generally, I believe that they should mirror the interstate rates. Frankly, if the Commission felt

strongly about requiring a higher level of unbundling or rate desegregation, we would not object. However, I do believe that it is imperative that the LECs do tariff all of their collocation charges, and also terms and conditions, and that those charges be broken down as much as possible and fully cost justified.

By mirroring the rate structure that these LECs have adopted on the interstate level, I believe that would aid the Commission and the general public in reviewing these rates, the intrastate rates, in determining their reasonableness. So, yes, I would recommend that the Commission requires mirroring.

Q Do you also agree with the FCC standard of allocating space on a first-come-first-serve basis where space is available?

A Yes, I do.

Q What should happen if a LEC indicates that a given CO has no space available for collocation?

A In this respect, I would respectfully ask this Commission to depart somewhat from the position taken by the Federal Communications Commission.

The FCC established that LECs are not required -- it would be granted waiver from providing physical collocation if they have an adequate space in their central office; and, of course, we do not

disagree with that. The issue, though, is the evidentiary standard necessary to support a LEC claim that inadequate central office space exists. The FCC requires that LECs makes a showing, usually through a signed affidavit by one of their engineers, that indicates the total square footage within the central office, how that square footage is used; that is, the percentage or the amount that's used to provide regulated services, other services, the unused space and space that is reserved for future regulated services. And, frankly, we feel that that is a fine set of standards and that the LEC should be required, at a minimum, to make that showing.

However, we would go one step beyond that and request that this Commission establish some form of independent verification. Our concerns, and to the extent that the FCC has granted waivers from physical collocation because based on LEC allegations that inadequate central office space existed, these waivers more often than not take place in very large, downtown central offices that are of critical importance to competitive access providers. Therefore, it raises the concern that the LECs may not be entirely forthcoming about the availability of space within their central office. And our concern is that the LEC might

misrepresent that they have inadequate office space to provide physical collocation as a means of imposing what we consider the inferior virtual collocation arrangements on competitive access providers.

For that reason, we would ask this Commission to approve or to mandate some form of independent verification, whether it be done by an AAV representative, a member of the Commission Staff or an outside contractor. But just some sort of independent verification that, in fact, inadequate space exists to permit physical collocation.

Q In the event that an AAV is located in a central office and finds it necessary to expand -- it needs additional space, how should this eventuality be handled?

A It is imperative from the AAV's perspective to be able to efficiently and effectively expand its facilities. It is not -- we are anticipating that as competition increases, as the market increases for competitive services, collocated CAPs will have a need to expand their collocation space within the central office.

I would recommend that this Commission sanction some practices that have already been put in place on the intrastate tariffs of other LECs that

provide collocation. Specifically, I would recommend the approach taken by New England Telephone in Massachusetts. When they build physical collocation arrangements, as we've mentioned before, they do it in ten-by-ten foot increments. And they usually atypically have a lot of central office space available. So rather than building central offices -- collocation cages one right next to the other, they leave a ten-by-ten foot space right next to the cage. This means that as they build out, we have room for a whole other cage immediately in between each of the collocation cages that are being constructed.

This allows a CAP to move into immediately adjacent space if it has to expand its facilities. By doing so, we minimize the cost of additional cabling and repeaters that might be necessary if the first cage was on one end of the central office and the second cage was on the other end of the central office.

Now, of course, we understand that this kind of spacing arrangement is only -- would only be provided on an as-available basis and that if collocation demand was great enough so that available space had to be taken up, then the LECs could go back in and build those cages in those in-between spaces. But we do believe that is essential to allow for the

efficient expansion of collocated spaces into immediately adjacent space whenever possible.

I would like to make one further observation, and we touched on this briefly before when we were talking about virtual collocation. Under virtual collocation, there are no real restrictions on how a LEC may configure a collocator's equipment. And typically you'll see an equipment bay, which is about the size of a large bookshelf, about three feet wide and seven feet high, and these individual pieces of equipment, multiplexers, OLTMs, which are about the size of maybe a briefcase or a litigation bag, and they are just put in shelves.

Even under virtual collocation, if you would have a very insufficient situation, if a collocator says, "Give me one OLTM," they put the optical line terminating multiplexer on one rack, "and then fill that rack up with other equipment from other collocators." Then, if the collocator says, "Look, I need to expand. I need another OLTM," the LEC might say, "Well, we have another space available on the other side of the office." There you may require another 120 feet of cabling, which can be expensive and is usually charged on a monthly recurring basis, plus repeaters, which unreasonably add to the costs of

expansion.

So I would recommend that this Commission adopt some kind of a standard. Also for virtual collocation that would guarantee, where feasible and where space is available, the right of an interconnector to expand its facilities in an immediately adjacent space.

COMMISSIONER JOHNSON: Charles, let me ask a couple of questions. I'm getting a little confused. Earlier, I think Mr. Carver had asked you if you thought that virtual collocation required less space than physical collocation. And it took you a while to get an answer, and I don't even know if I remember what your answer was particularly based on the discussion now. Does virtual collocation require less space, use less space than physical, and if so, why?

WITNESS CANIS: As a general matter, the answer is yes, but it's a matter of degree. Let me just kind of sketch out what a typical arrangement looks like. And this part is true, whether it's physical or virtual. We have an equipment bay, which as I said just looks like a metal bookshef. It's about three feet wide, maybe two feet deep and typically seven feet high. And on those are placed different types of equipment, and, typically, these are

mulitplexers, OLTMs. And, again, these are the size of maybe a briefcase or a little bit bigger, maybe a litigation bag. And these are just stacked all the way up.

Now, and this is true, that arrangement is true whether this physical or virtual. You still need a bay and you still need to put that equipment in that size. Now, under -- the standard has kind of grown up now through negotiations with different LECs in different states. For physical collocation, the LEC typically designates a ten-by-ten foot space and builds like a little chicken wire or enclosure, a little cage enclosure. And the LEC -- the collocated party, the AAV or other party, is free to put its bay in there. And a ten-by-ten space you may have room for a couple of bays and maybe a desk or a storage area or something.

For virtual collocation that ten-by-ten foot area is not necessary. You may just have the stand-alone bay. So if you adopt a physical collocation standard that requires a ten-by-ten foot area, that is larger than what you're normally going to require in a virtual collocation arrangement. But keep in mind that a bay itself two-by-three takes up six square feet. And, of course, you have to have access

to it so we add a few more square feet. You're talking about probably 25 square feet or 20 square feet for an equipment bay even under virtual collocation.

Now, some of the LECs argue that virtual collocation takes up even less space than that, and instead of looking at the bay they just say, "The only space that's taken up is the size of this briefcase or litigation bag."

And that is where we have a real problem because if that is the case, if they just put one of those multiplexers over here, chances are you're going to need another multiplexer later on. And if they put one multiplexer here and then fill up that bay, they're going to say, "Well, if you need to expand, you have to go over here, maybe you have to go downstairs, maybe we're going to have to build now 200 feet of lateral cable and a couple 100 feet of risor cables, add a couple of repeaters in there," and all of a sudden you're paying, you know, another $200 a month.

So I would say to be efficient, even in a virtual collocation arrangement, you would have to dedicate a bay, a full equipment rack to an interconnector's use. So even under virtual, I think as a practical matter, you're dedicating about 25 square feet to an interconnector's use, so compare that

with 100 square feet, if you have an physical arrangement with a 10 on by 10-foot cage. But, again, we would be willing to accept smaller cages if we had to.

Again, trying to boil all that down, yes, physical does take up more space than virtual but really it's a matter of degree. If you define virtual collocation as only the space taken up that briefcase-size multiplexer, it's going to create real problems for CAPS and it's going to really impose additional costs.

COMMISSIONER JOHNSON: In either case, whether we're dealing with virtual or physical collocation, there will be a question of space capacity and what can be done.

WITNESS CANIS: Exactly.

COMMISSIONER JOHNSON: Does your testimony address -- because I don't recall reading where you addressed the issue of how -- is it a first come, first serve?

WITNESS CANIS: Uh-huh. We recommend first come, first serve. To my knowledge all of the interconnection arrangements that have been negotiated on the state level as well as the standards adopted by the Federal Communications Commission have all adopted

a first-come-first-serve standard, and we believe that's a fair and equitable way to go about it.

COMMISSIONER JOHNSON: In the other states that you addressed in your testimony, New York for instance, have there been any problems with respect to running out of capacity?

WITNESS CANIS: No.

COMMISSIONER JOHNSON: As of yet?

WITNESS CANIS: No. And to the best of my knowledge now, New York Telephone offers collocation in between 12 and 16 of its central offices. And to the best of my knowledge, as of last week, when I talked to a couple of CAPs who are collocated in New York, no one has been denied physical collocation because of lack of space.

COMMISSIONER JOHNSON: Let's assume that we look into the future a bit and we allow physical collocation. What happens when there is a capacity problem? How should we address that?

WITNESS CANIS: Typically, the standards that have been adopted in other jurisdictions, and I think this makes sense, is that you provide physical collocation until space is exhausted, then you provide virtual collocation until space is exhausted, and after that, you just don't provide it anymore. If it's not

possible, you don't do it.

It is possible that in order -- if in the future we're talking about a real excessive demand and there are a lot of people who want to get into that central office, you may talk about other arrangements, like allowing existing collocaters with a ten-by-ten foot space to maybe sublease part of that space or, you know, maybe even voluntarily give up part of that space to accommodate others. I think there are other ways you can do this. And again we're getting into a situation now where there are no hard and fast rules. Everyone is kind of making this up as they go along and doing what makes sense.

What I can tell you, though, with the experience that I have had in negotiating collocation arrangements in four different states, central offices more often than not -- as a matter of fact, always to my experience, have very large amounts of space available. Again, in New York physical collocation has been available for two years and they are nowhere near exhausting the space in different COs.

COMMISSIONER JOHNSON: Thank you.

COMMISSIONER LAUREDO: Let me just follow up on Commissioner Johnson's questions. If I -- I understand the three-by-seven cabinet that you referred

to will accommodate more than one AAV, correct? The actual equipment, the physical interconnector is roughly the size of a litigation bag; is that correct?

WITNESS CANIS: Well, that's correct, Commissioner. And keep in mind now that in a typical collocation arrangement you may have a number of different pieces of equipment. For instance, you may have what we're calling the OLTM, is where you terminate your fiberoptic line.

Now, in order to break that down and to provide lower levels of service, you may need a multiplexer as well, so in that case you have got a rack with one litigation bag and one briefcase, basically.

In a typical collocation arrangement you're not talking about just one piece of equipment but perhaps several.

COMMISSIONER LAUREDO: Okay. But my question -- let's say several. I don't want to get too detailed here, but I want to get a sense of the spacing. Okay.

It is theoretically possible that on the three-by-seven cabinet more than one interconnection can be accomplished?

WITNESS CANIS: Yes, that's correct.

COMMISSIONER LAUREDO: In the worst scenario

one three-by-seven cabinet would accommodate one AAV's total interconnection requirement. Would that be a correct statement?

WITNESS CANIS: Well --

COMMISSIONER LAUREDO: I mean, you would have two or three of the so-called litigation bags?

WITNESS CANIS: Yeah. I think that's right. But, again, from my experience that is what a typical collocation arrangement now looks like.

There are some --

COMMISSIONER LAUREDO: That's interesting because I made a note back at the beginning that you said that you have negotiated several collocation agreements, but you have not been inside any of them. Did I take those notes incorrectly?

WITNESS CANIS: No. No, that's true. I haven't been in any LEC central offices.

COMMISSIONER LAUREDO: Okay. So we're going a little bit on what you can also visualize because you haven't had a lot of access to the physical plants.

WITNESS CANIS: Well, that's true.

COMMISSIONER LAUREDO: My question, then, follows is that it is theoretically possible that each -- all you need if you were to have physical collocation is the three-by-seven cabinet?

WITNESS CANIS: Yes.

COMMISSIONER LAUREDO: Which is a total of 21 square feet. And the petition asked for -- for an isolated 100 square feet area.

WITNESS CANIS: That's correct.

COMMISSIONER LAUREDO: So, theoretically further, if we were to segregate, just so that we can avoid a lot of planning problems and growth of other AAVs, a 100-square foot area, which one company is requesting, can theoretically can accommodate four companies.

WITNESS CANIS: That is possible, yes.

COMMISSIONER LAUREDO: So if your concern was the so-called competitive advantage, secrecy and all those other things you articulate, you could share -- that problem would still exist before AAVs would have a key to that one cage.

WITNESS CANIS: Oh, yes.

COMMISSIONER LAUREDO: So now it's no longer the LECs that you have a problem with, you have a problem with your three other competitors.

WITNESS CANIS: You know, frankly, Commissioner, the whole issue of that security is an issue that the LECs have raised.

I can tell you that AAVs routinely collocate

with interexchange carriers, like AT&T, MCI, Sprint and also with large users, and the typical arrangement there is just an open bay, stuck in the corner of a room someplace, and you have access to it. You don't typically see -- where friendly parties are working together, you don't have this adversarial relationship, you don't see the need for heavy-duty security and cages and all that kind of thing.

COMMISSIONER LAUREDO: Oh, I thought you were advocating -- I'm sorry, I misunderstood. You're advocating a secure cage.

WITNESS CANIS: Not necessarily, no. I can tell you that the ten-by-ten foot cage is something that really grew out of New York Telephone's negotiations. They were the first ones in the country to establish a physical collocation arrangement and they kind of chose that. It came up in negotiations. They said, "Well, how is ten by ten?" We said, "That's fine. That's more than enough space for us."

COMMISSIONER LAUREDO: Let me see -- let me see if I -- walk me through it. I'm trying to understand.

What really is your concern? Is it to have a -- you just said you don't have any security problems, so you don't mind having your equipment in an area

where the LECs and other AAVs have access to your equipment, true?

WITNESS CANIS: For every collocation arrangement that has ever been tariffed, the LECs have provisions in there that they have the right to go in at any time in any respect.

COMMISSIONER LAUREDO: It didn't mean the right to go in. I mean to physically bump into your equipment, to physically see what you just bought and brought in, to physically -- and perhaps engage in some sort of competitive spying.

WITNESS CANIS: No. It's really not a problem for these reasons: First, we have to interconnect with their equipment, so sooner or later they are going to know what we have in that central office, anyway, so there are no real secrets in that regard.

Secondly, our personnel, just like their personnel, are highly trained professionals. We don't really worry about sabotage or even, you know, klutzy repairmen bumping into these things and shutting them down.

And, again, I have been in LEC central offices in the past, but I haven't toured a collocation arrangement, and I have been many nodes from

competitive access providers. And you just see open banks, kind of looks like a library, just stacks of shelves with room to walk in between and access to the different areas. That's the way that the LECs work. That's the way that we work.

Now, it's the LECs requirements and concerns about security within their central offices that have really driven this whole issue of identify a whole separate area, build the cages and have it in a area that can't be accessed -- that is cut off from access to any other part of the central office. That's really a LEC concern; that's not an AAV concern.

COMMISSIONER LAUREDO: So you do not have any need for either hundred square feet or a cage. All you really want is to have physical versus virtual interconnection and to have somebody from your Company with a tag to be able to go in and touch it, feel it.

WITNESS CANIS: That's the bottom line.

COMMISSIONER LAUREDO: Okay. It doesn't come across in the testimony.

WITNESS CANIS: I'm sorry. And, you know, it is an unusual situation.

COMMISSIONER LAUREDO: But it's physically -- it's unusual but it needs to be physically described for us to make a judgment.

WITNESS CANIS: Yeah. And, you know, I apologize for not getting that across more clearly.

The way things have just happened, though, the collocation standard established by New York Telephone has kind of been adopted as a de facto standard by the industry. But, as I mentioned, we're really making this up as we go along and it doesn't have to be that way.

COMMISSIONER LAUREDO: By the way, you do not see a qualitative difference, a competitive qualitative difference between a -- you allude to it in your testimony to the access, to the central office equipment by a supplier of that LEC as versus an individual from a competitor.

WITNESS CANIS: That is exactly right.

COMMISSIONER LAUREDO: And why is that?

WITNESS CANIS: The bottom line here is that when people go into a central office, they are highly trained professionals. We just wouldn't have the them working on our equipment if they weren't. And just like the professional consultants or engineers that are hired by LECs, these people know what they are doing, they have codes of conduct, they have electrical codes and Bellcore standards that they adhere to. And for that reason, you know, when the LECs talk about

security issues, they kind of paint a picture of some kind of maniac who is running around the central office sabotaging their equipment. Collocation is a fact of life. It happens every day. Most of the LECs at this table are collocated with customers or with individual users or with interexchange carriers.

COMMISSIONER LAUREDO: You don't have any problem with security and with sharing and with them touching and looking at your equipment.

WITNESS CANIS: Not at all. Not at all.

COMMISSIONER LAUREDO: Thanks.

COMMISSIONER CLARK: Go ahead Mr. Murphy.

Q (By Mr. Murphy) Mr. Canis, just for the record I'd like to clarify something. There's been some discussion of CAPs. What is a CAP?

A A CAP is the term coined by the -- well, it stands for competitive access provider. It is essentially the same as AAV, and I'm used to using the word "CAP" because that was a term coined by the trade association, ALTS, Association for Local Telecommunications Services. So if I switch back and forth, I apologize. But they are synonymous.

Q Thanks. What is the status of physical versus virtual collocation at the FCC?

A The FCC has established standards that

mandate physical collocation in all central offices except in two instances: One is where a voluntary, negotiated arrangement for virtual collocation has been negotiated between a collocater and the LEC; and two is where the LECs demonstrate to the FCC's satisfaction that a central office lacks adequate space to provide physical collocation.

Q Do you think that that should be mirrored in Florida?

A I do.

Q It's our understanding that the FCC is investigating LEC rate, terms and conditions for expanded interconnection. Is that correct?

A That is correct.

Q What is your understanding of the status of this investigation?

A All of the LECs' tariffs, federal tariffs for collocation, have been suspended and are now being investigated by the FCC and any ongoing amendments or changes to those tariffs are automatically suspended and incorporated into that investigation.

The LECs were ordered to provide detailed direct cases to provide additional data to support their proposed rates and terms and conditions. Those were filed, I guess, about two weeks ago and comments

are due on the 20th of this month. Reply comments are due on the 30th.

It is likely that -- and again, this is my opinion. It is likely that the FCC will take maybe seven months or so, or perhaps longer, to resolve this investigation and come out with a final order that either approves the LECs' tariffs rates, terms and conditions, or prescribes rates, terms and conditions.

Q How should the decision at the FCC on these issues affect what the Florida Commission does regarding rates, terms and conditions on the intrastate level?

A As we have mentioned before in this proceeding, the FCC's order does not require any specific action to be taken by this Commission. I would ask, however, that this Commission use some of the experience and some of the data that are available through the FCC's proceeding in establishing its own policy for collocation.

My own feeling is that there has been so much litigation -- it's a very hotly contested litigation now over the reasonableness of the rates, terms and conditions that the LECs have tariffed for collocation on the federal level. And that to the extent that this Commission required mirroring or some form of

uniformity to allow direct comparison between rates, terms and conditions that are published on the intrastate level and those published on the interstate level, it would greatly add to the ability of this Commission and interested parties to compare the two different types of tariffs and I believe that it would assist the Commission and the public in determining whether the intrastate collocation rates, terms and conditions are reasonable.

Q One more question regarding the FCC.

You've indicated that, regarding collocation, you believe that the Florida Commission should mirror the FCC. What problems would be created if there were differences regarding collocation at the inter- and intrastate levels?

A Depending on how widely any rules adopted by this Commission may depart from the FCC's, it could lead to substantial diseconomies.

For instance, if at the most extreme level this Commission adopted a mandatory virtual collocation policy that was completely at odds with the mandatory physical collocation standards adopted by the FCC, it may require collocators to build a whole -- that have a federal collocation arrangement already built to build a whole new arrangement for intrastate services. And,

again, I think this would be just from an engineering as well as an economics standpoint highly inefficient.

I believe that to the extent that this Commission is able to conform or to make uniform its standards for collocation so that they are harmonious with the FCC's, it would greatly increase the efficiency and economy with which collocators could achieve collocation.

Q Would you briefly describe a typical AAV network and what services this type of network allows an AAV to provide.

A There are a whole range of AAVs and many use different types of technologies. For instance, there are microwave-based AAVs that use radio-based antennas, roof-mounted antennas to provide their services.

For the AAVs that are going to be obtaining collocation, though, the typical AAV is a fiber-based AAV. The typical arrangement and one that is becoming very common among AAVs -- certainly, the majority of AAVs use this configuration -- is a counterrotating fiber ring. Basically, they set up their network in a circular configuration and they have two major backbones, so it's kind of one circle within another circle.

On the outside the circuit kind of, the

signal travels this direction or in a clockwise direction; on the other, it travels in the opposite direction or in a counterclockwise direction. And what this means, there's a primary and a secondary transmission path, and they both carry the same signal simultaneously. That means if you have your typical backhoe incident where somebody cuts your cable, that automatically triggers a response in the monitoring office. They shift from the primary link, which has been just cut, to the secondary link; the service is recovered instantaneously.

In terms of the types of service offered, there is an extraordinary range, an extraordinary variety, depending on the types of services that AAVs are permitted to provide in any given jurisdiction. New York recently permitted collocated AAVs to provide the full range of service, basically anything from residential dial tone to high-capacity services.

The Federal Communications Commission has now established rules mandating physical collocation for all special access services. The initial collocation arrangements will just deal with high-capacity DS-1 and DS-3 services, but LECs are obligated to provide collocation for all special access services.

The FCC, in an order released a week ago last

Friday, also required that the LECs file tariffs for switched access collocation. Those tariffs have to be filed on November 15th and are now scheduled to take effect on February 18th of next year.

Among different states, there are different restrictions as to what kinds of services AAVs may provide; but basically, we see AAVs capable of providing the full gamut of telecommunications services.

Q And in Dr. Beauvais' testimony he refers to expanded interconnection as simply a cheaper interconnection to the LEC network by non-LEC providers. Do you agree with this characterization?

A No, I really don't. It's not just a question of cheapness, it is a question of parity along a whole possible criteria: operational, technical, as well as economic, administrative.

Essentially, physical collocation and virtual collocation are means of allowing AAVs or interexchange carriers or large users to interconnect with the LEC network on the same terms and conditions that the LEC interconnects with its own facilities. It is this kind of parity across all those operational, economic, engineering and administrative lines that is necessary if true competition is to exist.

Q You may have answered parts of this, but what I would like for you to do is to contrast how you provide service currently as an AAV to how service will be provided with expanded interconnection. How will this change your world?

A Right now, AAVs can provide service only to customers that are physically located on their network. And to the extent that new customers come on that are located somewhat off network, they have to construct facilities that physically attach those customers to their backbone network. This necessarily restricts the universe of customers that are available to take service from AAVs.

Under collocation, AAVs will be able to interconnect their services to the LEC's central office. In doing so, they will be able to connect to their networks service that originates or terminates anywhere on the LEC network. And this necessarily will increase substantially the number of customers that may avail themselves of AAV services.

Q Is there a difference in the way you provide service to a large customer, a typical customer, versus an IXC?

A Physically, the arrangements are identical. The equipment used is similar. The one major

difference is in volume or capacity. Typically, the largest IXCs use very high volumes, DS-3 or multiple DS-3 volumes; and we find in general individual users use smaller capacities.

When you get to smaller IXCs, there's really no difference between them and end-user customers.

COMMISSIONER LAUREDO: May I ask a clarification on the previous answer you gave? In answering the difference in service, I think you alluded that you would, in essence, your company would have or I interpret it to have it to expand its service potential. Because now you can go outside of your own network, which you invested capital to do.

WITNESS CANIS: Yes, sir.

COMMISSIONER LAUREDO: Would it be fair to deduct from that that the objective of that move would be to become another local exchange company?

WITNESS CANIS: I think ultimately Intermedia, like virtually any CAP, would like to provide the full range of services that this Commission authorizes. However, since its inception, Intermedia has grown providing special access and private line services on the inter- and intrastate level. That is certainly the meat and potatoes of our business now, and that is the real focus for these achieving

collocation in the near term.

In the long term, I think Intermedia is going to be quite aggressive in looking to expand its operations to provide whatever kind of services this Commission deems it appropriate.

COMMISSIONER LAUREDO: The reason I asked you, and I'm not prejudging, is I've had, since I have been a Commissioner, a frustration with procedures and the way we make decisions. And ironically today the Miami Herald published a letter that I wrote about two weeks ago pursuant to an editorial they made about the -- entitled "When Monopolies Collide," about the emergence of convergence, I guess, of cable companies and telephone companies.

And I allude in that letter my frustrations that we lack the ability here to do the vision thing. We don't think about where we want to be ten years from now and work back from that, we just kind of fall into an incremental building of many decisions, usually very narrow technically as well as legally.

And I think you alluded to that twice today as I asked you broader questions to try to bring it back.

But aside from the testimony and all the stuff we will decide narrowly on this case, you are

conceding to me that there's a broader move here, and that is that there are companies like yours that would like to, in essence, get into the local telephone business somewhere down the line and this is a step in that direction.

WITNESS CANIS: I think that's true.

COMMISSIONER LAUREDO: Okay. I think sometimes it's, you know, it's important to starkly point out things that --

COMMISSIONER CLARK: I think Mr. Guedel says that, this is sort of the first step.

WITNESS CANIS: Well, also, Commissioner, if I may, the technology here is emerging at such a wonderful speed that right now the distinctions that may exist between special access and switched access are really starting to go away. And while maybe 10, 20 years ago the distinction between the two types of services was technically based -- it was based on the kind of facilities, the capacity -- now, everything is moving to fiber; everything is moving to digital equipment. And in doing so, you are able to provide the full range of services, everywhere from voice grade to video.

COMMISSIONER LAUREDO: I understand. I'm not saying that I agree or disagree. I just kind of

sometimes like to say things in plain English on the record so that we can kind of keep our eye on the big picture. And that's all I really wanted to accomplish.

WITNESS CANIS: No, I absolutely agree and --

COMMISSIONER LAUREDO: This is a very important directional issue, notwithstanding the narrowness of what we have to decide. That's all I really wanted to accomplish.

COMMISSIONER CLARK: While you have been interrupted, Charlie, I wanted to ask you about one of the virtues that you identify with respect to the AAV is the redundancy and the fact that through your fiber loop you can reroute service.

WITNESS CANIS: Uh-huh.

COMMISSIONER CLARK: What happens whether you now propose to connect to your customers through local exchanges companies' facilities? Your redundancy is as good as what the local exchanges company's redundancy is for those customers you connect in that manner?

WITNESS CANIS: Well, it kind of depends. First, we mentioned earlier that the LECs are starting to build redundant facilities. And usually it's a service option that they available in their tariff. So it's possible that if we have one LEC network and it interconnects with one LEC central office, if that LEC

has a redundant network, then we can provide redundancy on that full circuit from one customer to the other. If, under that scenario, though, the LEC does not have redundancy, you're right, we can only guarantee redundancy on our network. However --

COMMISSIONER CLARK: So the --

WITNESS CANIS: Oh, I'm sorry.

COMMISSIONER CLARK: So the redundancy there is what the LEC will be providing?

WITNESS CANIS: No. Well, yeah, whether it exists --

COMMISSIONER CLARK: When you interconnect to your customers through the LEC facilities, the redundancy will depend on what the LEC provides as redundancy?

WITNESS CANIS: For that leg of a transmission. However, let's just take it a step further.

We're looking at one LEC network, one -- I'm sorry, one AAV network, one LEC CO and one customer. Let's assume that that AAV obtains collocation in two LEC central offices and that customer can now have the option of connecting with both those LEC central offices. Even if the LEC facilities are not redundant, he can now go through from the customer location to two

LEC COs to the redundant LEC network -- AAV network. Therefore, you can get that form of redundancy even by using a nonredundant LEC network if the AAV is collocated in multiple central offices.

COMMISSIONER CLARK: He could likewise get the redundancy from the LEC.

WITNESS CANIS: Uh-huh.

COMMISSIONER CLARK: He just has to connect to the two LEC central offices.

WITNESS CANIS: Right. If they have that capability, yes.

COMMISSIONER CLARK: So the idea that you're providing redundancy is not going to be true in this kind of service?

WITNESS CANIS: It may not be true in all cases, it may not be true that you are going to have a complete redundant circuit all the way.

COMMISSIONER CLARK: Well, in fact, it won't be true unless it's the LEC that's providing the redundancy.

WITNESS CANIS: That's correct.

COMMISSIONER CLARK: Okay.

WITNESS CANIS: Now, keep in mind, though, that there are different ways to obtain redundancy from the LEC service.

COMMISSIONER CLARK: Yeah, but the customer can -- I mean, he can use the LEC to do what he would do if he had the AAV. I mean, you're sort of a superfluous party in that.

WITNESS CANIS: Well, I hardly think we're superfluous. You know, I think --

COMMISSIONER CLARK: In that transaction. I mean, I'm just getting to the point where you say that one of the virtues is redundancy, but that's not true when you interconnect through the LEC's facilities.

WITNESS CANIS: It's like this. If the AAVs now offer fully redundant, state-of-the-art, top-of-the-line services and the LECs do not, to the extent that you're making that connection over the LEC network, you're going to have to accept their limitations.

COMMISSIONER CLARK: Right.

WITNESS CANIS: However, -- and that's how things stand right now. However, if we look down the road a few years where all of a sudden we start to see very broad interconnection between LEC networks and AAV networks -- so maybe you have multiple AAVs, you may have multiple AAVs interconnecting in different offices, you may have LECs interconnecting in AAV sites, or at least able to pass their traffic off to

collocated AAVs in different central offices -- all of a sudden what you're doing now is evolving the survivability and redundancy of the entire network. It is not just a question of, is this link better or is that link better?

Right now on interstate services, for long distance travel, if AT&T's -- and, you know, I know we have different IXCs here, I'm just picking one for example. Let's say AT&T's network goes down, they have a line cut. They offload as much of their traffic as they can to MCI and to Sprint. Why? Because they're fully interconnected at multiple points.

What you have is an evolving, survivable network. And it's not something that we're going to have immediately, but collocation is a step toward that end.

COMMISSIONER CLARK: What you're saying is the more players you have the more wire you'll have in the ground and the more opportunity for redundancy?

WITNESS CANIS: Yes. And the more interconnectivity that you have among different networks, the greater the overall survivability, yes.

COMMISSIONER CLARK: Okay. Go ahead.

Q (By Mr. Murphy) We were talking about various types of services provided by AAVs, and we were

contrasting collocation versus not collocation. Under the two scenarios, what is the difference in charges to the AAV by the local exchange company?

A In a noncollocated environment the only way an AAV can interconnect with the LEC network is buy the same kind of services that any end user provides. These are typically a channel termination charge.

Those charges include not only interconnection -- connection services or functions within the central office but they also include transmission and transport from the LEC's CO to the customers' premises. Now, for AAVs they already provide their own transmission; they don't need to buy more transmission from the LEC.

So under the current tariffed structure, in a noncollocated environment, they have to buy a whole series of functionalities that they neither need nor want.

In a collocated environment, the LEC is able to, at its own -- the AAV is able to, at its own cost, provide its own equipment, its own cabling, just as it does when it builds its own network and to achieve collocation using just the functionality that it needs on a cost-efficient basis.

Q Is it possible -- we've talked about these

differences in general terms. Is it possible to quantify them in a hypothetical, even as a late-filed, specifically the differences in charges between the two scenarios?

A Right now, typically -- and I'll talk about the federal level because interstate rates are those that I'm most familiar with.

A typical DS-1 channel termination costs, let's say, $125 a month. Now that -- there can be a lot of variations there but that's a pretty safe number I think to use as an average.

Right now, under the rates currently filed with the FCC, and these are rates, by the way, that the AAVs feel are highly excessive, and that the FCC now has under investigation. But, still, even using those what we consider to be excessive rates, if you break down the total recurring and nonrecurring charges for collocation through the LEC's federal collocation tariffs, the interconnection charge comes out to about mid-$30 per DS-1 interconnection. So if you bought a channel termination, you'd have to pay an average of $125, even with what we consider to be the excessive collocation rates that are now tariffed on the federal level that goes to about roughly $35.

Q We may come back to that.

COMMISSIONER CLARK: Mr. Murphy, how much more do you have?

MR. MURPHY: I have ten more questions.

COMMISSIONER CLARK: Okay. We'll take a lunch break after you're through.

Q (By Mr. Murphy) Mr. Canis, what economic signals are generally present which cause a competitor to enter a market?

A Basically, the perception that a need for its services exists. This can be if the -- and since we're talking about competing against the LECs, if the LEC's services are priced excessively, if the LEC doesn't offer a variety of services or the type of service that the -- that the competitor could provide, and if the LECs do not provide the level of customer responsiveness that is often required. All of these areas, product innovation, price, and customer responsiveness, the willingness and ability to turn up service on a highly expedited basis or to customize service to meet individual customers' needs are all extraordinarily strong selling points that AAVs have been able to use over the past five years.

Q You mentioned prices, can regulation artificially constrain prices so that new entrants will use these higher rates as an opportunity tc enter a

market?

A To my experience that hasn't happened yet. You know, theoretically, it could be if a Commission prohibited any LEC rate changes under any circumstances. But we say in states that are promoting collocation and, indeed, in a lot of states that don't really have collocation yet, the LECs have been given extraordinary pricing flexibility that would allow them to meet any competitive response.

I believe that is the case that currently exists in Florida. That LECs have considerable pricing flexibility that would enable them to meet any -- respond to competitors.

COMMISSIONER CLARK: Mr. Canis, I think you have astounded everyone in this room.

I guess what comes to mind is average rates for long distance service. I mean, it certainly costs more to serve some remote areas than it does to serve between large metropolitan areas, and to that extent the requirement that a carrier average its rates for long distance service has the effect of allowing competitors to come in and underprice or price closer to cost in the markets where it costs less.

WITNESS CANIS: Commissioner, I was answering that question under the assumption that we're only

talking special access and private line.

COMMISSIONER CLARK: Okay.

WITNESS CANIS: And, of course, that's the area where competition has been coming in.

I certainly agree that in any jurisdiction that is considering collocation as a means of promoting competition for, say, switched services, they have looked at the need to restructure pricing. It happened in New York, it's happened at the FCC, and I have no doubt that that kind of a scrutiny is appropriate here as well.

COMMISSIONER CLARK: Go ahead, Charlie.

Q (By Mr. Murphy) Are you aware that there are statewide average rates for special access in Florida -- in private line. I'm sorry.

A Yes, I am.

Q Company specific.

A Uh-huh.

Q Okay. Changing gears a little bit.

In terms of percentages, for a typical AAV, what are the revenues received from IXCs versus large users?

A You know, I really am not prepared to answer that in any but a very generic way.

My understanding is that from very large

IXCs, particularly AT&T, constitute a significant source of revenues for LECs. Other than that, I really have no specific information.

Q Is it true that there's a significant value to an AAV from expanded interconnection because the AAV can avoid millions of dollars in capital expenditures from not having to install an extensive network?

A Well, I guess I have to agree with that, although it's -- all due apologies, it's kind of a loaded question.

I can tell you that AAVs are not looking at collocation as an excuse not to build their networks. And every AAV that I know is very aggressively expanding its network, increasing it's capital outlays in improving, updating and expanding its network as much as possible. It is true, however, that collocation would allow an AAV to expand its potential customer base very significantly.

Q What aspects of the LEC network do you consider to be bottleneck?

A Without collocation, the entire local exchange network. With collocation, essentially just the central office.

COMMISSIONER CLARK: The switching?

WITNESS CANIS: The central office itself.

This actually gets to the issue of reasonable rates, terms and conditions for collocation, and essentially why AAVs feel it is so important for regulatory bodies to closely scrutinize those areas.

The LECs own and control that central office and even with collocation you have to ask them to interconnect. And if they have cart blanche to establish the rates, terms and conditions, you may be subject to price gouging or unreasonable conditions.

The bottom line is there is only one central office and the LEC owns it, so it's not just for switching, like for switched services, but that whole issue about how to interconnect with the broader LEC network. The central office represents a bottleneck in that function.

MR. MURPHY: We're going to have a series of loaded questions now.

COMMISSIONER CLARK: What is the central -- let me -- what are you -- it seems to me that in, I guess, ultimately where I guess this path is leading us is not only will there -- there will be competition for access, both private line and switched. And I guess if you do -- if we do approve actual collocation, what is the bottleneck? I mean, when you say central office, I think of a central office as a functions provider.

WITNESS CANIS: Yeah.

COMMISSIONER CLARK: So I'm assuming that it will only be the switched function that is -- will remain a monopoly, I guess. Because you'll have access to everything going out, all the loops going out.

WITNESS CANIS: That's true. Of course, we have access to those loops now. We can buy regular telephone service and I can reach anyone on a LEC's loop. But I have to take that interconnection, I have to take that connection at rates, terms and conditions set by the LEC and, of course, approved by the Commission. So inasmuch as we're talking about LEC control and the ability to price a critical facility that determines whether you can reach the end user or not, I consider that a bottleneck. And even with collocation, that gives us access. However that's only usable access if the Commission ensures that the rates, terms and conditions are reasonable.

COMMISSIONER CLARK: Go ahead, Charlie.

Q (By Mr. Murphy) Would you agree that the LEC network which exists today was built by capital generated from both LEC ratepayers and stockholders?

A Yes, I think that's a fair statement, yes.

Q Do you believe that the AAVs have a right to expand an interconnection?

A Well, the AAVs have as much right as this Commission or any other regulatory body deems reasonable. I would say that to the extent that the benefits of competition are self-evident and well-documented, I would hope that this Commission deems it reasonable to provide LECs -- AAVs with that rate.

Q Do the AAVs have a right to obtain access to the LEC's network at a price lower than other LEC customers?

A My feeling is that as a basic tenet of ratemaking for any regulatory body, is service is provided on a cost basis. Inasmuch as interconnection between two telecommunications carriers requires a minimal amount of functionality that isn't used by an end user, then I think it is appropriate that that interconnection be based on cost. As it would work out, that would certainly be cheaper if you break it down on a per circuit basis than what an end user that didn't operate its own network that would have to pay for a similar functionality.

Q So you believe it's appropriate for an AAV to provide lower contribution to the LEC for its access than other LEC customers?

A Well, wait a minute now. The issue of

contribution is very highly charged and largely anecdotal.

It has been the position of Intermedia and other AAVs across the country that they are certainly willing to pay any contribution element that may reasonably be required of them. The problem is that, in my experience, no LEC has identified what services provide contribution, how much that contribution is, what services benefit from that contribution and what services receive that subsidy. To the extent that that kind of data is available, subject to public scrutiny and adequately identified and justified by the LEC, we are certainly willing to pay our fair share.

Q Dr. Beauvais testifies -- in his testimony he uses an example of a gas station owner having to provide space to his competitor with that of collocation. What is your view of Dr. Beauvais' analogy?

A I really believe that's not an appropriate analogy. What we're talking about here is the interconnection of networks.

If you didn't have mandated interconnection, you wouldn't see competition on the long distance market. Indeed, you wouldn't see -- you probably wouldn't see international calling for MTS. The bottom

line here is you've got two different networks both providing service to the public. To the extent that competition injects innovation, lower cost and increased customer choice, mandatory rules governing and mandating interconnection of those networks certainly serves the public interest and serves the interest of competition.

MR. MURPHY: Thank you. We have a few housekeeping matters, but that concludes my questions.

Could we get a late-filed exhibit for DS-1 and DS-3 comparing actual costs under collocation versus noncollocation? That will be at the FCC.

COMMISSIONER CLARK: Give me a short title.

MR. MURPHY: "Cost, Collocation Versus Noncollocation."

COMMISSIONER CLARK: "Costs Comparison Under FCC order"?

COMMISSIONER CLARK: Cost comparison of --

MR. MURPHY: Collocation versus status quo.

COMMISSIONER CLARK: Do you mean physical collocation or virtual collocation?

MR. MURPHY: We're referring to physical collocation tariffed under the FCC order.

COMMISSIONER CLARK: And compared to what?

MR. MURPHY: Compared to noncollocation

service, charges by the LECs.

WITNESS CANIS: That's fine.

COMMISSIONER CLARK: All right. Give me the title again.

MR. MURPHY: Oh, you were helping me so well, Commissioner Clark.

"Comparison Charges, Collocation versus Status Quo."

(Late-Filed Exhibit 5 identified.)

COMMISSIONER CLARK: Comparison -- cost comparison of charges for DS-1

MR. MURPHY: 1 and DS-3:

COMMISSIONER CLARK: With and without collocation?

MR. MURPHY: Yes.

COMMISSIONER CLARK: Mr. Canis, you understand what he's asking.

WITNESS CANIS: Yes, I do, Commissioner.

MR. MURPHY: One more thing, we handed out a chart of virtual collocation. That was intended to replace Page 118 of Exhibit No. 3, JC-2, which, unfortunately, was a duplicate page.

COMMISSIONER LAUREDO: A duplicate of the physical collocation.

MR. MURPHY: Yes, there were two physical

collocations.

COMMISSIONER LAUREDO: Okay.

MR. ERWIN: Excuse me. Could I ask a question about that? Could someone tell me what an AOC central office is? I know what a LEC central office is.

COMMISSIONER LAUREDO: If you keep asking all of these rational questions, you're never going to get through the nominating council.

I was going to ask some of those questions, but I guess you want to -- is he going to be excused?

MR. ERWIN: Well, I don't know the answer to the question.

WITNESS CANIS: Excuse me. I have a real quick answer to that. This was taken from a Ameritech pleading. It's Ameritech's illustration. So that's an Ameritech operating company central office.

COMMISSIONER CLARK: Got that, Mr. Erwin?

COMMISSIONER LAUREDO: Are we going to have him back after lunch?

COMMISSIONER CLARK: He'll be back for direct, but you will have an opportunity before direct to ask questions.

MR. ERWIN: Before that, I had one other request to make before you go to lunch, but I wouldn't

want to do it until perhaps after lunch. But on the cross examination conducted by Mr. Murphy, something came out that appears to me to be somewhat different than the direct testimony from the witness having to do with the regulatory scheme pertaining to non-Tier 1 local exchange companies, in which Mr. Canis indicated there would be a general obligation on the part of the non-Tier 1 LECs to respond and to request for interconnection, and that the Commission would act as a arbiter, and so forth, which I think differs somewhat, or at least expands upon our response in the direct testimony on Page 35. And I'd like an opportunity to ask a few questions about that, if I could.

COMMISSIONER CLARK: I'll give you that opportunity after lunch.

MR. ERWIN: Okay.

MR. MURPHY: Okay.

COMMISSIONER CLARK: That's it. We'll reconvene at 1:30.

(Whereupon, lunch recess was taken at 12:30 p.m.)

(Transcript follows in sequence in Volume II.)

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