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One Tampa City Center

June 24, 1993

Mr. Steve C. Tribble, Director Division of Records & Reporting Florida Public Service Commission 101 E. Gaines Street Tallahassee, FL 32399-0865

Dear Mr. Tribble:

Docket No.

In the Matter of the Petition of Intermedia Communications of Florida, Inc. for Expanded Interconnection for AAVs within LEC Central Offices

Please find enclosed for filing an original and fifteen copies of the Direct Testimony of Edward Beauvais on behalf of GTE Florida Incorporated in the above referenced matter.

Service has been made as indicated on the attached Certificate of Service. If you have any questions, please contact the undersigned at 813-228-3087.

ours,

Thomas R. Parker

TRP: tas Enclosures

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06836 JUN 248

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A part of GTE Corporation



#### BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of INTERMEDIA	)	
COMMUNICATIONS OF FLORIDA, INC.	)	Docket No. 921074-TP
for expanded interconnection for	)	
AAVs within LEC central offices.	)	

**DIRECT TESTIMONY** 

of

EDWARD C. BEAUVAIS, Ph.D.

On Behalf of

GTE FLORIDA, INC.

DOCUMENT NUMBER-DATE
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1		DIRECT TESTIMONY OF EDWARD C. BEAUVAIS, Ph.D.
2	a.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	My name is Edward C. Beauvais; my business address is 600
4		Hidden Ridge, Irving, TX 75038. I am employed by GTE
5		Telephone Operations as Chief Economist in the Regulatory Policy
6		and Governmental Affairs Department.
7		
8	a.	WILL YOU PLEASE STATE YOUR EDUCATION AND BUSINESS
9		EXPERIENCE?
10	A.	My professional resume with a partial listing of my professional
11	1 1	publications and appearances is contained in Schedule ECB-1.
12		
13	a.	HAVE YOU PREVIOUSLY APPEARED BEFORE THIS
14		COMMISSION?
15	A.	Yes. I have appeared before the Commission in Docket No.
16		900633-TL, and in Docket No. 910757-TP, as well as in several
17		workshops held by the Commission.
18		
19	a.	WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY?
20	A.	My testimony today addresses the policy issues raised by the
21		Commission in its Order No. PSC-93-0811-PCO-TP of May 26,
22		1993 in this docket concerning issues associated with expanded
23		interconnection with the local exchange network. The issues I
24		will present are closely interrelated, so that an integrated approach
25		will enable a cohesive discussion of the policy directions

necessary to satisfy the complex concerns this docket encompasses. With the further development of competition in the local exchange market, the Florida Public Service Commission ("Commission") must comprehensively address the issues facing all telecommunications providers and consumers in Florida. Complex and significant issues such as colocation, unbundling and elimination of resale restrictions and their associated impact on pricing levels and structures should not be handled through a single proceeding.

While all of these various interconnection issues are interrelated and need to be recognized as such, expansion of competition in the local market should be approached incrementally. The successful transition to a more open, competitive marketplace requires careful balance and timing of activities. The worst possible alternative is to proceed along an "all or nothing" path and implement flash-cut measures only to arrive at an undefined competitive environment with undetermined consequences. To prevent this outcome, GTEFL urges the Commission to take a series of steps to fully investigate the impact of competition upon local exchange carriers ("LECs"), alternative access vendors ("AAVs"), other service providers and certainly the impact on consumers.

1 Q. COULD YOU PLEASE BE SPECIFIC AS TO WHAT STEPS YOU
2 WOULD RECOMMEND IN THIS INVESTIGATION?

- A. Certainly. Specifically, GTEFL recommends that the Commission address the competitive impacts attendant Intermedia's petition as follows:
  - 1. Address intrastate special access interconnection first. This is appropriate given the progress that has already been made by the FCC. With the exception of the physical colocation mandate, GTEFL believes that the FCC requirements can be mirrored by the Florida Public Service Commission for intrastate purposes. As explained below, GTEFL strongly believes that the FCC mandate of physical colocation should be eliminated.
  - 2. Address the restructuring of switched transport. The FCC is also in the process of restructuring switched transport. See Transport Rate and Structure Pricing, Report and Order, CC Docket No. 91-213 (October 19, 1992). GTEFL recommends that the Commission adopt a policy consistent with the interstate dedicated/common transport rules and orders adopted by the FCC.
  - 3. Address Costing and Pricing Issues. Having established a policy in the recently-concluded Commission's cross-subsidy docket to establish a set of costing procedures to more effectively serve the broad issues introduced by the Intermedia Petition, a pricing project

should be initiated addressing pricing issues as well as tariff and resale restrictions. GTEFL suggests a full scale investigation of these issues either through an evidentiary hearing or a series of workshops. Completion of these workshops would not need to delay implementation of either expanded interconnection of special access services or the restructuring of dedicated/common transport.

4. Address issues of general unbundling. A restructuring of dedicated/common transport and resolution of the costing/pricing issues are logical foundations for initiating the unbundling phase. Because unbundling involves a fundamental restructuring of all LEC services and raises a myriad of public policy issues, a full scale evidentiary proceeding will be necessary to adequately review all related issues and determine the benefits and costs of unbundling.

GTEFL urges the Commission to be prudent and exercise caution; too aggressive an agenda, trying to do everything at once, will only jeopardize the areas where immediate attention is most needed, special access intercennection and dedicated/common restructuring. Technology is increasing at such a pace that competition in telecommunications is thriving without unbundling and expanded interconnection. It is not correct to view these activities as necessary for competition. However, in order for

unbundling, interconnection and removal of tariff restrictions to contribute to the development of a competitive market, GTEFL believes that these actions must be done in a coordinated manner and only after a full investigation of all the facts.

A.

#### Q. WHAT CIRCUMSTANCES RESULTED IN TODAY'S HEARINGS?

The petition brought by Intermedia Communications of Florida, Inc. ("ICI") is a direct consequence of the FCC's Expanded Interconnection Order released on October 19, 1992. Expanded Interconnection with Local Telephone Company Facilities, CC Docket No. 91-141, Amendment of the Part 69 Allocation of General Support Facilities, CC Docket No. 92-222, Report and Order and Notice of Proposed Rulemaking. That Order mandates that Tier 1 local exchange companies, including GTE, permit interested parties to colocate and interconnect their special access transmission facilities within the LEC's central offices.

(1) A formal state regulatory or legislative policy decision in favor of virtual colocation for expanded interconnection, or allowing LECs to choose which form of colocetion to use for such interconnection; or

There are only two potential exceptions to this directive:

(2) A demonstration by the LEC that a particular central office lacks sufficient space to permit physical colocation. Expanded Interconnection Order at para. 41.

- Q. HOW DOES THE FCC DEFINE PHYSICAL COLOCATION AND
  WHAT IS THE DIFFERENCE BETWEEN IT AND VIRTUAL
  COLOCATION?
- A. It is the FCC's opinion that physical colocation will promote competition resulting in new services, reduced rates, and increased efficiency within the access market. The term physical colocation is defined by the FCC as a situation where the "interconnecting party pays for LEC central office space in which to locate the equipment necessary to terminate its transmission links, and has physical access to the LEC central office to install, maintain, and repair this equipment." (Expanded Interconnection Order at para. 39.) In its Memorandum Opinion and Order adopted on June 8, 1993 in CC Docket No. 91-141, the FCC also defines physical colocation as the "physical placement of the interconnecting party's equipment in the LEC's central office."

Under the FCC's virtual colocation guidelines, interconnectors would designate the central office equipment dedicated to their use and monitor and control their circuits terminating in the LEC's facilities. (Expanded Interconnection Order at para. 44.) The interconnector's equipment would thus be located in the LEC's

central office under either a physical or virtual colocation scenario. The FCC's virtual colocation scheme requires technical interconnection arrangements comparable to those anticipated with physical colocation. Also in its June 8th Order, the FCC defines virtual colocation as "interconnection adjacent to the LEC central office with economic and technical characteristics comparable to interconnection in the central office." The only real distinction is that, with virtual colocation, the demarcation between LEC and interconnector networks is neatly defined at a demarcation point very close to the central office. In a physical colocation situation, "the interconnection point would not indicate a change in ownership of cable facilities." (See Expanded Interconnection Order at para. 848 n. 201.)

In its Order, the FCC also required LECs to file physical colocation tariffs within one hundred and twenty (120) days of the release of the Order, which was accomplished by GTE on February 16, 1993 with an effective date ninety (90) days following, or May 17, 1993. Included in this tariffing requirement are prices for floor space, installation non-recurring charges (NRCs), power and lighting and use of duct and riser space. The May 17th date was delayed until June 16th pursuant to ten parties filing petitions against the tariffs filed by the Local Exchange Companies (LECs) subject to the Expanded Interconnection order.

1 Q. WAS THE FCC EXPANDED INTERCONNECTION ORDER SUBJECT
2 TO ANY DISSENT WITHIN THE FCC?

Yes. The Expanded Interconnection Order was issued notwithstanding separate statements from Chairman Sikes and Commissioner Quello, both indicating serious reservations about mandatory physical colocation. In his dissent, Chairman Sikes expressed both legal and policy objections to mandatory physical colocation. He noted that mandatory physical colocation raises serious questions about a "taking" or confiscation of local exchange carrier property in violation of the Fifth Amendment and leaves unclear what problems the FCC is attempting to resolve by forcing LECs to offer physical colocation, especially when the Order itself acknowledges that some parties might prefer virtual interconnection arrangements. Similarly, Commissioner Quello in his separate statement noted that "the only real difference between physical colocation and virtual colocation is whether the local exchange carrier or the interconnector installs, maintains, and repairs the interconnector's equipment."

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Q. HOW DOES THE FCC'S ORDER ON EXPANDED
INTERCONNECTION AFFECT THE FLORIDA COMMISSION'S
ABILITY TO IMPOSE FORMS AND CONDITIONS OF EXPANDED
INTERCONNECTION THAT ARE DIFFERENT FROM THOSE
IMPOSED BY THE FCC'S ORDER?

The FCC's Order did not preempt the states. This Commission may retain some significant latitude to develop its own interconnection policies in accordance with state-specific conditions and concerns. This independent effort is essential since the implementation of special access interconnection greatly accelerates competition for local exchange services. The FCC has already announced and is actively pursuing the same type of rules for switched interconnection. The long-run impacts at the local and state level are likely to be much larger than the impacts at the federal level.

The Expanded Interconnection order stated the FCC's intention to exempt LECs from its physical colocation requirements based on a formal decision by a state legislature or public utility regulatory agency favoring virtual over physical colocation, or allowing LECs to choose the form of interconnection to use for intrastate expanded interconnection. The June 8th Memorandum Opinion and Order, however, shows that the FCC intends to very narrowly define what constitutes a state's right in establishing its own policy for expanded interconnection, even on an intrastate basis. Absent any further actions, as a practical matter, I believe that the FCC has effectively, if not legally, preempted the Florida PSC.

Q. DR. BEAUVAIS, IN RESPONSE TO MY PREVIOUS QUESTIONS
YOU INDICATED THAT "ABSENT ANY OTHER ACTION" THE FCC

WOULD HAVE ESSENTIALLY DETERMINED THE
INTERCONNECTION POLICY FOR FLORIDA. ARE THERE ANY
OTHER SUCH ACTIONS CURRENTLY BEING TAKEN?

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Yes. On December 22, 1992, GTE along with Bell Atlantic Telephone Companies, BellSouth Corporation and BellSouth Telecommunications, Inc., Cincinnati Bell Telephone Company, Illinois Bell Telephone Company, Indiana Bell Telephone Company, Inc., Michigan Bell Telephone Company, The Ohio Bell Telephone Company, Wisconsin Bell, Inc., Lincoln Telephone and Telegraph Company, Pacific Bell Telephone Company, Nevada Bell Telephone Company, The Southern New England Telephone Company, and The United Telephone Companies jointly moved the United States Court of Appeals for the District of Columbia Circuit for a stay pending the review of the FCC's Expanded Interconnection Order. The filing with the Court followed FCC denial on December 18, 1992 of four Petitions For Stay filed jointly by nine LECs including GTE, Ameritech, Southwestern Bell, and Bell Atlantic. The Joint Petition for Stay submitted to the FCC developed the legal arguments that imposing physical colocation on LECs constitutes a taking of property and that the FCC had failed to justify its reversal of previous policy decisions on mandatory physical The joint petition also showed that the FCC requirement to tariff physical colocation in every central office would impose an enormous burden on LECs and that such burdens would cause irreparable harm since colocation in many

offices may not be demanded for years, if ever. Despite the FCCs denial of the Petitions for Stay, it acknowledged that the original Expanded Interconnection Order was flawed when it issued a Memorandum Opinion and Order which significantly reduced the number of end offices and serving wire centers that are required to provide mandatory physical colocation initially. It is interesting to note that on the same day--December 18, 1992--that the FCC issued its denial of the requests for stay, Petitions For Reconsideration were filed with the FCC by the United States Telephone Association and GTE, among others. In addition, the National Association of Regulatory Utility Commissioners (NARUC) filed with the Commission objections to the actions taken by the FCC. With the issuance of its June 8th memorandum Opinion and Order, the FCC brushed aside the NARUC petition. At the moment, the only other pending action is the substantive appeal of the Expanded Interconnection Order before the United States Court of Appeals for the District of Columbia Circuit. I have been advised by GTE attorneys, that mandatory ohysical colocation raises a significant legal issue in that it is a taking of LEC assets in violation of the Fifth Amendment to the United States Constitution. GTE does not dispute the fact that regulatory bodies such as this Commission and the FCC have the power to regulate telecommunications services in the public interest. However, that power, as exercised by the FCC in its Order does not extend to the taking of private property.

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# 1 Q. WHAT ARE THE POSSIBLE BENEFITS ASSOCIATED WITH 2 EXPANDED INTERCONNECTION?

The costs and benefits associated with expanded interconnection cannot simply be stated in terms ascribing the theoretical benefits usually associated with more competitive marketplaces, for the type of competition being introduced has atypical characteristics. Consider for a moment that under current authorizations in Florida. an AAV can construct facilities to any location for which right of way can be obtained. Furthermore, with contain constraints, the AAV can provide a variety of services over those facilities to any AAVs or other providers of customer it might secure. telecommunications services can build, purchase, lease, or rent real estate assets to house their terminating network equipment or any other facilities they might desire, subject only to zoning restrictions and market conditions. At any time, the AAV can purchase interconnection to the LEC network on the basis of filed access tariffs of Florida LECs. Expanded interconnection changes none of these, save that under the terms of the FCC's Order, the LEC is now compelled to enter the real estate business and make space available in its central offices to any party desiring such space. This action, of course, requires both a degree of unbundling and repricing of LEC services. A more accurate term might simply be "cheaper interconnection to the LEC network by non-LEC providers."

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The situation that arises is very similar to a gas station operator with a very desirable geographic location. Due to the volume of traffic which passes his store on the nearby highways, the station operator does a large volume of business. A new entrant would certainly find such a location to be very desirable to locate his gas station. Unfortunately, the spot is already taken. In traditional markets, the response would be for the new firm to either find a different location to open his business or to offer the current location owner a sufficiently high price to induce the current owner of the location to vacate and allow the new owner to assume use of the property. That is not the approach in the expanded interconnection context. In the expanded interconnection context, the existing station owner is required to make a portion of his facilities available to the new entrant thereby allowing the new entrant to compete with him at the same location. Certainly, this is not the typical form of geographic competition. Aside from the unique circumstances attendant the FCC decision, however, expanded interconnection increases the scope of competition in the local exchange market. professional economist, I support competition. However, it is important to examine the distribution of the costs and benefits of expanding competition. After all, competition brings with it costs as well as benefits.

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## Q. WHO WILL BE THE PRIMARY BENEFICIARIES OF EXPANDED INTERCONNECTION?

Interconnectors, such as ICI, themselves will stand to benefit the most from expanded interconnection. Depending upon the relative price elasticities in the market for special access services, firms such as AAVs taking expanded interconnection may pass a portion of the savings along to their customers. Those customers are typically large business customers located in the larger metropolitan areas, such as Tampa. The impact upon LECs, small business customers and residential customers will depend on the manner in which specific interconnection arrangements are structured and the degree to which LECs are allowed by this Commission to respond to increasing competition by interconnectors. However, interconnection, especially with the mandate of physical colocation, may serve to harm LECs and their rural and residential customers.

A.

### Q. WHAT ADDITIONAL BENEFITS ARE CREATED FOR CONSUMERS BY THE MANDATE OF PHYSICAL COLOCATION?

A. Physical colocation may harm LECs while providing little additional benefits to consumers. Although expanded interconnection may offer some benefits by encouraging additional competition, there are no additional benefits created by the physical colocation mandate. In fact, it is difficult to construct any rational or logical argument that physical colocation provides additional benefits to

competition that are not already available under virtual colocation.

On the contrary, given the highly prescriptive nature of the FCC's Expanded Interconnection Order, any anticipated benefits to consumers as a result of expanded interconnection have been substantially diminished by restricting parties' ability to negotiate effectively.

indeed, the real economic consumer welfare benefit of a competitive market for a service is that mutually advantageous voluntary trades among parties are maximized. By mandating physical colocation, at least one of the parties may be forced to enter into a trade it would not elect to enter on a voluntary basis. Such compulsion violates the very spirit of competition the FCC was attempting to create through expanded interconnection. This aspect was recognized by Chairman Sikes, who stated:

The highly regulatory and inflexible approach the Commission has adopted seems likely to create more concrete problems than the illusory ones it seeks to resolve.

This lack of flexibility engendered by a physical colocation requirement severely thwarts one party, the LEC, from adequately representing its own interest, negotiating effectively and fulfilling its other service obligations.

Mandatory physical colocation will subject LEC operations to several levels of ongoing disruptions that will compromise its ability to improve and expand service in the most efficient way. Space allocation and exhaustion problems are perhaps an inevitable consequence of a physical colocation mandate. The FCC's scheme requires the LEC to provide space to interconnectors until space is "exhausted." Expanded Interconnection Order at para. 80 and Appendix B, rule 64.1401(b). The Order fails to make any explicit allowance for a LEC to deny physical colocation when space remains in the central office. If central office space is allocated to interconnectors, the LEC may be forced to acquire additional space for equipment to meet the state's telecommunications needs. The result may well be increased rates for the average telephone subscriber.

Moreover, the FCC's physical colocation scheme imposes upon LECs the burden of considering possible interconnector demands for space when remodeling or building central offices. This expectation is wholly unfair and inefficient. The LEC's capital planning process continues to become increasingly more difficult as the critical need for cost-cutting measures has grown along with competition in LEC business sectors. The FCC directive to anticipate physical colocation demands introduces an additional and unreasonable element of uncertainty into its capital planning efforts. Ultimately, ratepayers may be forced to bear the

increased expense flowing from this unwarranted competitive disadvantage for the LEC.

Physical colocation may also create sarious space constraints which will likely lead to future unnecessary conflicts. If, for example, mandatory physical colocation within the central office is believed to confer some advantage, and not all parties can be accommodated, then some will feel that the LEC conferred an advantage to those parties obtaining physical colocation over those who did not.

Mandatory physical colocation may also lead to service arrangements which create an inefficient use of LEC central office space for any given level of demand. The measures necessary to accommodate interconnectors will directly affect LEC costs and productivity. LECs will need to set aside separate space within the central office and then provide secure access to that space. Significant new construction may be required, depending on the existing central office configurations. LECs will also be required to arrange for interconnectors' heat, air conditioning, electricity and other such services. Further, the LEC, who must accommodate each interconnector with separate transmission cable, will be unable to promote efficiency by sharing cables and equipment among customers.

In addition to the LEC's direct costs of accommodating interconnectors in its facilities, a physical colocation rule will force the LEC to bear increased administrative expenses. Employees will need to develop charges and file tariffs to cover space rental and associated services (heating, power, etc.). As I noted earlier, LECs will be required to undertake the likely futile effort to incorporate potential future space demands in their long-range expansion and remodeling plans. Forecasts will thus need to be revised -- and additional costs incurred -- as interconnectors' plans become known.

All of the costs flowing from a physical colocation mandate can never be recovered. Many of the most substantial, ongoing costs will remain unquantifiable because they derive from injection of inefficiencies into the day-to-day operations of the LEC. Among other things, LEC employees must suffer construction intrusions every time the office needs to be reconfigured to accommodate interconnectors. LEC personnel will lose immediate unrestricted access to all parts of their facilities, as well as the ability to freely exchange information about LEC plans and operations.

Although the interconnectors may argue that increased inefficiencies on the part of the LEC is a price to be paid for competition, the number of disruptions and degree of inefficiency can be

1 decreased with virtual colocation arrangements without an 2 appreciable negative impact upon interconnectors. 4 Additionally, mandatory physical colocation will remove the LEC's 5 ability to insure network security and reliability, as Chairman Sikas 6 recognized in his dissent from the FCC's physical colocation rule. 7 Today, one of the LEC's chief means of guarding against harm to 8 the network is its complete discretion to control antry to its 9 central offices. Without this authority, the potential for both 10 inadvertent and intentional interference with LEC operations 11 increases dramatically. 12 13 Finally, safety hazards in collocators' spaces could affect the 14 entire cantral office. The LEC will have little authority over the 15 interconnectors' activities, equipment and installation methods. 16 Because interconnectors' areas will be locked, the ability of LEC 17 employees to quickly and effectively respond to emergencies will 18 be substantially diminished. 19 20 Q. GIVEN THE COSTS ASSOCIATED WITH MANDATORY PHYSICAL 21 COLOCATION, DOES GTEFL SEEK TO HAVE THE FLORIDA 22 COMMISSION ORDER EXPANDED COLOCATION IMPLEMENTED 23 ON A VIRTUAL BASIS INSTEAD? 24 A. No. Although many parties may contend that virtual colocation

arrangements are the most efficient, GTEFL is not advocating a

virtual colocation mandate any more than it is advocating one for physical colocation. Rather, GTEFL is only asking for an equal right to negotiate an expanded interconnection arrangement with its customers/competitors. GTEFL desires to maintain its property rights in its structural assets as well as to manage its businesses and fulfill its obligations to customers and stockholders, without being compelled by regulatory authority to accommodate architectural and rate design imperatives which impose inefficiencies in network design, provisioning and administration. With a physical colocation mandate, the LEC has no choice; it must provide physical colocation regardless of the inefficiencies or disruptions created.

As a broader issue, at present it is far from clear that any benefits will accrue to consumers on the whole because of physical colocation. Clearly any benefits ascribed to expanded interconnection will accrue directly to requesting interconnectors who, unlike LECs, can customize service offerings and price beneath the LECs' tariffed rate umbrella. Likewise, the interconnectors' customers, who are typically large urban businesses with the market influence to attract competitive service vendors, will also benefit.

GTEFL believes, however, that the benefits realized by the large players will be at the expense of the smaller ones, the rural and

residential customers. If the large urban business customers discontinue LEC tariffed services and substitute interconnectors' services, inherent contributions/subsidies which benefit rural and residential customers will be lost. These subsidies are inherent in the requirement that the LECs charge statewide averaged tariffed rates for their services despite the fact that service costs vary as a function of terrain, traffic and household density. These contributions generally support residential and rural customers, who are charged prices for service provisioning that are lower than related costs, using revenues obtained from business and urban customers, who are charged prices higher than their causally related costs.

Any potential benefit to the rural customer is likely to be deferred to the indefinite future, due to the alternative provider's complete discretion regarding its customer selection. By contrast, the loss of the contribution and the resulting increase in rates is a very real possibility. Any proceeding which fails to fully consider the impact upon all contribution and support mechanisms could seriously deteriorate the quality and availability of service presently enjoyed by the more rural citizens of Florida.

Q. WHILE THIS DOCKET IS CONCENTRATED ON THE ISSUES
ASSOCIATED WITH EXPANDED INTERCONNECTION FOR

SPECIAL ACCESS, ARE THERE ANY RELATED ISSUES THE COMMISSION SHOULD KEEP IN MIND?

Yes. Even more so than the case of expanded interconnection for special access, expanded interconnection for switched access is likely to place a very significant strain on the overall support flows in the industry, due to the current pricing mechanisms. Current pricing arrangements rely on the continued flow of contribution from switched access services and intraLATA toll services to allow GTEFL and other LECs to retain a low average basic R1 service price. As other service provider, attempt to capture a larger share of the transport market for switched services (including the provision of loops), the contribution contained in the prices will be eroded. Expanded interconnection for switched access accelerates the competitive erosion. The reason this matter should be considered in this docket is that once a party has obtained floor space under a physical colocation order, that party will no doubt argue that it is absolutely inefficient to not be allowed to use that space for both switched and special transport services. Thus, in establishing its policy for physical, virtual, or LEC-choice for special access transport facilities, the Commission should bear in mind that its decision will affect a subsequent switched access decision.

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Q. WHAT LECS IN FLORIDA SHOULD BE REQUIRED TO PROVIDE EXPANDED INTERCONNECTION?

In principle, if expanded interconnection provides such significant benefits as are claimed by its proponents, then all LECs should be required to provide for the service, no matter what their size or where they are located. However, the FCC's order limits tariffing requirements to expanded interconnection for special access services of Tier 1 LECs only. GTEFL believes that this limitation is a reflection of the facts I described above--that the benefits of expanded interconnection are quite concentrated and the costs are diffused over a wide base. Further, in many non-urban areas, the costs associated with expanded interconnection will not be recoverable due to insufficient demand for such a service by potential interconnectors. Thus GTEFL supports a limitation to Tier 1 LECs in Florida as well. Many small LECs concur in tariffs developed and maintained by the National Exchange Carrier Association ("NECA"), which has not been required to file expanded interconnection tariffs on behalf of its member companies.

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Even though expanded interconnection requirements apply only to larger LECs, the impact of such interconnection is not, however, limited to such LECs. Expanded interconnection for intraLATA services will affect smaller LECs through the compensation arrangements that exist between large and small LECs. These arrangements specify how LECs involved in jointly providing services will be compensated for the portion of the service they

have provided. Expanded interconnection allows for non-LEC interconnectors to provide portions of these services. Current arrangements do not reflect this possibility or its impact. The consequences of expanded interconnection to smaller LECs cannot be limited or controlled by applying the interconnection requirement to only the larger LECs.

A.

# Q. ARE DISTINCT REQUIREMENTS FOR INTERSTATE AND INTRASTATE EXPANDED INTERCONNECTION APPROPRIATE FOR FLORIDA?

As I have already testified, the FCC's Order does not compel this Commission to adopt the same requirements for intrastate interconnection as those at the interstate level. After all, today we treat interstate and intrastate services as different for pricing purposes. This could be continued for the case of expanded interconnection as well. As a practical matter, however, separate intrastate and interstate interconnection regimes would prove unworkable. For the most part, GTEFL believes that interconnection for intrastate special access services should follow interconnection for interstate special access services. Having a unified plan would certainly limit the administrative costs of the expanded interconnection service and remove some of the incentive for misreporting the jurisdictional nature of the traffic.

1 Q. DOES THIS UNIFIED TREATMENT EXTEND TO ALL ASPECTS OF
2 THE ISSUES ASSOCIATED WITH EXPANDED
3 INTERCONNECTION?

No. With regard to colocation, GTEFL strongly believes that the Commission should decide for itself whether it is in the public interest of all Florida consumers to force physical colocation on LECs. The FCC has allowed the states to express their view on this subject, even if they didn't accept the positions taken by all the states. Although the states were ostensibly required to take appropriate action by February 16, 1993, this Commission, along with NARUC and commissions from several other states, raquested an extension of that deadline. While the FCC has now denied that petition as well, a number of local exchange providers, including the GTE companies, have appealed the FCC's Order mandating physical colocation. The Bell Atlantic Telephone Companies, et al. v. FCC, Petition for Review, No. 92-1619 (D.C. Cir. filed Nov. 25, 1992. Given the remaining uncertainty associated with the FCC's physical colocation rule, GTEFL urges the Commission to develop and be prepared to implement its own colocation policy. Only in this way can the Commission actively ensure protection of state-specific interests.

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Q. SHOULD THE COMMISSION MANDATE EXPANDED
INTERCONNECTION FOR NON-FIBER OPTIC TECHNOLOGY?

In principle, the technology involved in expanded No. interconnection should be irrelevant. However, practical considerations with regard to space constraints, particularly in vault space and entrance facilities to LEC central offices, imply strongly that expanded interconnection should be limited to only fiber optic technology. Traditional cable facilities are far larger than those associated with fiber and therefore could lead to far greater demands on limited space. However, if the Commission were to allow the parties seeking interconnection to negotiate their own agreement as to virtual vs. physical colocation, there is no inherent reason why an acceptable agreement as to the technology to be employed in expanded interconnection could not be egreed upon. But the final decision would have to be deferred to the owner of the property rights--the LEC. Otherwise, a party seeking interconnection via non-fiber technology could result in an immediate exhaustion and excess demand for LEC structural space. Under such conditions, the LEC must have the right to refuse expanded interconnection.

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#### Q. IS ANY UNBUNDLING OF EXISTING LEC SERVICES REQUIRED TO IMPLEMENT EXPANDED INTERCONNECTION?

A. Yes. While some limited unbundling is necessary to ensure effective interconnection of special access, a fundamental unbundling of all LEC services and functionalities is not needed.

The rate elements for special access services are already

unbundled into loop, transport and termination elements and the FCC explicitly determined that unbundling, beyond the establishment of the interconnection charge and the "real estate" rate elements, was not needed to implement expanded interconnection. Indeed, unbundling is not something that should be pursued simply for its own sake. Many significant issues exist, such as the effect on existing subsidy flows and local residential rates. Services should only be unbundled following a determination by the Commission that unbundling is an effective and necessary means of promoting fair and efficient competition. Following such a determination, specific unbundling decisions should be guided by criteria of economic and technical feasibility. The application of these criteria will ensure that LECs are capable of offering the specific network functionality on an unbundled basis and that sufficient demand exists at a price which cover the relevant incremental costs and contributes to the common overhead costs of the LEC.

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As a matter of timing, unbundling beyond that necessary to ensure effective interconnection of special access should not be addressed until the implementation of expanded interconnection is complete. The unbundling of local exchange services should be addressed in a separate proceeding (or at least a separate phase of this proceeding), as competition for basic local exchange services continues to develop.

- Q. IF THE COMMISSION REQUIRES LECS TO OFFER EXPANDED
  INTERCONNECTION, SHOULD THE COMMISSION ALLOW LECS
  AND OTHER PARTIES TO INTERCONNECT WITH THE
  COLOCATING PARTY?
  - A. Yes. First, it is consistent with the symmetrical treatment of all parties in the marketplace. Second, if the AAVs truly have a "better mousetrap" to offer the marketplace than do the LECs, then there is no reason it should be denied to any entity in the marketplace. Likewise, if AAV costs are lower than those of the LEC, there is no reason that LECs should be precluded from purchasing inputs from the AAVs in order to provide the services to its remaining customers. Clearly, the AAVs are no longer simply interested in providing just a "redundant" or "network reliability" type of offering to their established customer base. After all, once they are interconnected with the LEC, the end-toend service is no more reliable than the weakest link. Part of the AAV service would be an input provided by a LEC. If LEC service is unreliable, then a more efficient market solution would be to allow the LEC to purchase services from the AAV and utilize them in providing its own output. One of those inputs which might be utilized by a LEC, or another party, is AAV floor space.

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Q. A CLOSELY RELATED ISSUE, THEN, IS WHO SHOULD BE

In its Order, the FCC proposes that expanded interconnection for special access be made available to all parties, regardless of their possible regulatory classification as Interexchange Carrier (IXC), end user, Competitive Access Provider (CAP), Enhanced Service Provider (ESP), or any other label. GTE supports this line of reasoning and believes that limiting this service to a given classification of customers is unworkable.

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A.

It is virtually impossible to distinguish among customers. How does a LEC know the difference between an ESP and an AAV or an AAV and an IXC, or an IXC and a cellular provider? The LEC doesn't, unless the customer elects to tell it. Some customers can be placed in multiple classification. An IXC can be an ESP; a cellular provider can be an IXC; an AAV be an IXC and an ESP; a cellular provider can be a co-carrier, an ESP, an IXC, an AAV, and also appear to be an end user. Given the ability to resell LEC services, which is fundamentally what an interconnector is doing, an approved class of customers can act as an agent for any other Thus, any attempt to enforce some arbitrary classification scheme is simply a waste of LEC resources. This points out the problems associated with many existing tariff applications in an increasingly competitive merketplace. Since this policy confusion crosses both special and switched access services in the Florida jurisdiction and also clearly exists at the federal level, a comprehensive reexamination of FCC as well as

Florida rules will be required if the benefits of expanded interconnection are truly to be realized.

- Q. DOES THE COURSE OF ACTION WHICH YOU JUST DESCRIBED
  WITH RESPECT TO RECIPROCAL COLOCATION REQUIREMENTS
  AND WHO IS ALLOWED TO INTERCONNECT HAVE ANY OTHER
  REGULATORY IMPLICATIONS?
  - Yes, some rather serious ones. Essentially, what is being suggested for expanded interconnection is the elimination of resale and use and user restrictions. As currently filed, interstate access tariffs do not contain resale or sharing restrictions and therefore, these matters need not be addressed solely with respect to these tariffs. However, local tariffs do contain resale and sharing prohibitions. These restrictions exist because the local tariffs contain rate structures and rate levels which are, to a large degree, dependent on customer identity, rather than the volume of service purchased by customers. The use of resale and sharing restrictions has allowed social and public policy goals to be introduced into the rate design for LEC services. The elimination of these restrictions, while desirable as a long term policy goal, must be preceded by a comprehensive review and potential restructure of all affected services.

Q. IF THE LONG TERM EFFECTS INCLUDE A POTENTIAL
RESTRUCTURE OF ALL AFFECTED SERVICES, THEN DOES

#### 1 EXPANDED INTERCONNECTION HAVE POTENTIALLY 2 SIGNIFICANT EFFECTS ON THE JURISDICTIONAL SEPARATION 3 OF LEC COSTS? 4 Yes, expanded interconnection could have potentially significant 5 effects on the jurisdictional separation of LEC costs. accurately, it is the increased competition induced by 7 technological changes and enhanced by expanded interconnection 8 which will affect the jurisdictional separations. Switching equipment at LEC end offices and tandem offices is used jointly 10 for local, extended area service (EAS), intraLATA toll, and 11 interLATA switched access services. The total cost (or revenue 12 requirement) of this equipment is allocated to the various services, 13 based upon their relative minutes of use. 14 15 LEC costs associated with interoffice trunking facilities are 16 likewise allocated to the above services plus private line and 17 special access based upon relative use, expressed in terms of 18 trunks, circuits, and miles. The costs allocated to each service 19 drive the jurisdictional allocation of LEC costs. 20 21 As interexchange carriers begin to interconnect at the LECs' 22 central offices and abandon existing LEC access connection

facilities, the total LEC investment in these joint facilities will not

disappear; rather, this investment will be reallocated among the

services and jurisdictions which remain, based on the usage that

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remains on these facilities. As the interLATA access usage declines, more of the interoffice transport facility costs will be allocated to the remaining EAS and intraLATA toll services. The impact of special access interconnection will therefore result in a decrease in the cost of special access and an increase in the cost of all other LEC services.

If and when switched interconnection is adopted, jointly used facilities will see a decrease in switched access minutes, both state and interstate, and a corresponding increase in costs allocated to all other services, including EAS and local. The jurisdictional impact of switched interconnection will be much greater than the impact of special interconnection, both because of the sheer volume, and because switched interconnection will likely result in carriers interconnecting at each end office, bypassing the tandem altogether. As the interLATA switched access minutes decline because IXCs bypass LEC tandem switches, more of the jointly used switching and exchange trunking facility costs will be allocated to intraLATA toll, EAS, and local services.

Q. IF THE COMMISSION PERMITS EXPANDED INTERCONNECTION,
WHAT PRICING FLEXIBILITY SHOULD THE LECS BE GRANTED
FOR SPECIAL ACCESS AND PRIVATE LINE SERVICES?

in terms of pricing flexibility, there is the need to deaverage prices both on a volume basis and geographically; there will need to be a rebalancing between switched and special and between state and interstate jurisdictions, the latter as a result of the separations impacts. There are consequences beyond the narrowly defined impacts on access services, due to the contribution mechanisms embodied in LEC prices. Both the separations rules as well as the marketplace dictate these actions. If the service is competitive, and by the Federal Communications Commission's own language--"Competitive Access Providers"--it is and is becoming ever more so, then the service should be deregulated or at least detariffed. If it is not competitive everywhere and that is the rationalization for not deregulating or detariffing, then GTEFL suggests that this is an implicit recognition that geography does make a difference and that difference should be recognized in pricing flexibility granted to LECs. This will be especially true for switched access services under expanded interconnection, but is no less valid for special access and private line interconnection.

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#### Q. SHOULD ALL SPECIAL ACCESS AND PRIVATE LINE PROVIDERS BE REQUIRED TO FILE TARIFFS?

A. I believe that all participants in the market of ould be allowed the same freedom to compete, under the same terms and conditions.

Therefore, if the Commission finds it appropriate that the LECs should operate subject to tariffs, then all special access and

private line providers should be subject to the same condition. If the competitive rivals are not required to file tariffs, then the LECs should be afforded the same degree of regulatory latitude. A strong case can be made that the unilateral requirement imposed on LECs to file tariffs actually weakens the price competition between the LEC and other parties, lessening the benefits to the ultimate consumers.

IF THE COMMISSION PERMITS COLOCATION, WHAT RATES.

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Q.

TERMS, AND CONDITIONS SHOULD BE TARIFFED BY THE LEC? As I have just testified, the answer to this question depends upon whether or not the Commission requires LECs to file tariffs in the first place. If firms such as ICI are not required to file tariffs, then GTEFL and other LECs should also not have to meet such requirements. If the latter is the case, then it is not necessary to tariff any rates, terms and conditions for expanded interconnection, as they would be reached by negotiation. If tariffs are required, however, in terms of colocation, a legitimate argument can be made by LEC rivals that GTEFL and other LECs have market power in the provision of loops, including special access lines to end users, but not monopoly power; there are very legitimate and cost-effective loop substitutes available today and even more will be available in the future. However, whatever degree of market power that a LEC has in the provision of loops,

it certainly does not have any market power in the provision of

real estate or commercial/industrial floor space for colocation.

Accordingly, the market can be allowed to work very efficiently in the pricing of floor space, should the Commission be interested in pursuing such a policy.

To the extent that a LEC has space available in its Central Offices and wishes to make that space available to third parties, rental rates can be established based on market conditions in the area for equivalent kinds of space. To the extent that central office space is differentiated from other floor space, some premium can potentially be extracted. Consider the consequences if the Commission pursues this course of action. First, the LEC would be effectively replacing the Cost Aliocation Manual ("CAM") with a market-based transaction price. If there is no effective demand for the rental space made available, then the price will be quite low, approximating the marginal cost of the floor space. If the demand exists, then the price which would be charged, both to the LEC itself and to any other party seeking to rent the space is the same market-based price.

Suppose a market price is established, even for the sake of argument including pure economic rent, and the demand for the space exceeds the quantity of space available. The first market action in response to this excess demand is to raise the price of the floor space until the quantity demanded is in balance with the

quantity available. Of course, competitors will utilize the regulatory process to complain that the price is too high. If a firm making the allegation of "price gouging" is not happy with the LEC price for floor space, the firm can simply locate elsewhere and face no competitive harm in the terms of colocation pricing, since GTEFL is maintaining its pricing policy of virtual colocation. Any appeals to the regulatory process for relief from the pricing of floor space should immediately be dismissed by the Commission as an arbitrary attempt to use the process to force delay on the LEC. Thus, in principle, the price of floor space should not be a tariffed service.

## Q. HASN'T THE FCC ALREADY REQUIRED THE TARIFFING OF FLOOR SPACE PRICING FOR INTERSTATE EXPANDED INTERCONNECTION?

Indeed it has; that is why my answer to the previous question was that in principle the price of floor space should not be subject to tariffing requirements. As I also stated earlier, a number of issues have been taken out of this Commission's hands by the FCC's actions. Since a price already exists for floor space, power, etc. in the interstate tariffs, GTEFL suggests that as a practical matter, the prices, terms and conditions in the federal tariffs should be mirrored in the state tariffs.

- 1 Q. SHOULD THE SAME TERMS AND CONDITIONS OF EXPANDED
  2 INTERCONNECTION APPLY TO AT&T AS APPLY TO OTHER
  3 INTERCONNECTORS?
- A. Yes. As I have already testified, GTEFL believes that all parties,
   regardless of their identity, should be authorized to purchase our
   access services.

9 PHYSICAL AND/OR VIRTUAL COLOCATION?

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No. It is not necessary for the Commission to require standards for colocation. It is clearly possible for two parties to reach a mutually advantageous agreement between themselves without the establishment of "standards" by an outside party. however, standards are to be required, the Commission should establish only minimum technical standards to be agreed to by the parties. These minimum technical standards should be equivalent to what the LEC currently offers on its own services. Certainly nothing higher should be required, nor should more stringent standards be precluded. It is likely that on the basis of voluntary negotiations, that some parties might find higher service standards to be in both parties best interests, even if the more stringent standards result in a higher price. For example, the normal standard for DS-1 provisioned by a LEC may be 5 days at a price of x dollars. If the interconnecting party seeking colocation finds it desirable to establish a standard to market to its customers that

a DS-1 will be provisioned in 3 days, then the price from the LEC to the interconnector might be set at a higher level x + y dollars for the higher level of service. In such cases, voluntary agreements can be reached if negotiations are allowed. However, these higher standards should not be required, simply allowed.

# Q. WHAT STANDARDS SHOULD BE ESTABLISHED FOR THE LECS TO ALLOCATE FLOOR SPACE FOR COLOCATORS?

As I testified above, the market, if allowed to operate, will take care of this matter without any standards being established. The FCC, however, not trusting the very market mechanisms it says it seeks to encourage, established a first-come/first-served policy for the allocation of floor space in a LEC central office. Again as a practical matter, the standards already established for obtaining space in the LEC C.O.s for interstate expanded colocation should be mirrored in the Florida intrastate arrangements.

At the federal level, no requirement for reciprocity was placed on those parties seeking colocation from the LECs. As GTEFL has stated, we believe that reciprocal agreements are desirable, so that those parties seeking colocation with LECs should have the same standards imposed on them to allocate floor space as are imposed on the LECs. This may call for an increased level of regulation to be imposed on the AAVs in Florida than has been exercised in the past.

Q. SHOULD EXPANDED INTERCONNECTION BE SUBJECT TO A

"NET REVENUE TEST" IN ORDER TO AVOID POSSIBLE CROSSSUBSIDY CONCERNS?

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A. One of the stated purposes of the introduction of expanded interconnection is to increase the level and degree of competition within the local exchange boundaries. If this is indeed correct. then clearly to maximize the benefits to consumers, it is desirable that all competitors in the market be subject to the same types of incentives. The assumption generally made by economists is that firms will attempt to maximize profits and will introduce a new product, such as expanded interconnection, if such a product adds more to revenues than it does to costs. That is, if the net revenues associated with the new product are positive, stated on a net present value basis. As an economist, this is exactly the type of incentive that all firms should face. With scarce resources available, as a society we have no business in "wasting" resources where the incremental costs exceed the benefits which are expected to be derived. So, GTEFL's answer is that "yes", expanded interconnection should be subject to a net revenue test. If the offering does not pass such a test, this means that the additional costs associated with expanded interconnection exceed the additional revenues gained. If the LEC is to be "made whole", then the additional costs will have to be recovered from some other source. Or in short, failure to pass the net revenue test will imply that on the basis of total service incremental cost, the

expanded interconnection product offering is being cross-2 subsidized. I believe that GTEFL's position in this is consistent 3 with the decision recently reached by the Commission in Docket No. 910757-TP on cross-subsidization. BASED ON YOUR TESTIMONY, WOULD YOU SAY THAT Q. 7 **EXPANDED INTERCONNECTION FOR SPECIAL ACCESS AND/OR** 8 PRIVATE LINE IS IN THE PUBLIC INTEREST? 9 GTEFL agrees that expanded interconnection can be a desirable 10 offering and can promote expanded choices to customers. 11 Despite this conditional endorsement of the concept of expanded 12 interconnection, GTEFL remains firmly convinced that the current 13 policies associated with tariff rules and applications hinder the 14 ability of the LEC to compete with its non-regulated or lightly 15 regulated competitors. GTEFL strongly believes that access rules 16 and rate structure changes are necessary either concurrently or 17 preferably prior to the availability of expanded interconnection. 18 Such pricing and regulatory reforms must include:

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a) geographic deaveraging of access services pricing;

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increased flexibility in the timing of making price b) adjustments that are timely in the market place;

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1	c)	the ability to put together service packages as end-to-end	
2		offers to customers, including the resale of AAV facilities,	
3	, Ave	with the ability to go "off-tariff" to satisfy unique customer	
4		demands and service arrangements.	
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6	d)	increased flexibility in the range of allowable prices to LECs;	
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8	e)	consistent treatment for all competitors in the marketplace	
9		by regulatory bodies with recognition that AAVs, ESPs,	
0		IXCs, cellular carriers, etc. are potential and actual LEC	
1		competitors as well as valued customers;	
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3	f)	recognition that a firm can simultaneously be an ESP and	
4	100 1007	an AAV, or an AAV and an IXC. Any rules established by	
5		the Commission should be blind to the identity of the party.	
6		The LEC does not have the ability, nor does it want to,	
7		perform the duties of the telephone police.	
8	W		
9	This	last point, in GTEFL's opinion, is somewhat critical to	
20	establishing a focused and consistent telecommunications policy.		
1	GTEFL believes that as a matter of general business ethics, the		
2	Company should not be put in the position of giving its customers		
3	the financial incentive to misrepresent who they are and what		
		do Coment annulation, annulations along the LECs in this	

uncomfortable position.

1	Q.	IF EXPANDED INTERCONNECTION DOES INDEED OFFER
2		BENEFITS TO THE CUSTOMERS, SHOULD THE COMMISSION
3		GRANT ICI'S PETITION?
4	A.	With the caveats I have provided above concerning pricing
5		flexibility and symmetrical regulatory treatment of all players in
6		the market place, GTEFL does not object to the Commission
7		granting ICI's petition.
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9	a.	DOES THIS COMPLETE YOUR TESTIMONY?
10	A.	Yes, it does.
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## RESUME May, 1993

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#### **EDUCATION:**

B.A. in Economics from Virginia Polytechnic Institute (June, 1971)
Graduate study in Business and Finance - Virginia Commonwealth University
(July, 1971 - June, 1973)
M.A. in Economics from Virginia Polytechnic Institute (May, 1975)
Ph.D. in Economics from Center for the Study of Public Choice, Virginia Polytechnic Institute (May, 1977)
Postdoctoral study in Econometrics - Massachusetts Institute of Technology (Summer, 1980)

#### FIELDS:

Microeconomic Theory, Economics of Regulation, Industrial Organization, Public Choice, Econometrics

#### **CURRENT POSITION:**

Chief Economist
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#### PREVIOUS POSITION:

Director - Pricing Policy Product Management Department GTE Service Corporation Irving, TX 75015 (June, 1988 to January, 1992)

#### PREVIOUS POSITION:

Pricing & Economic Policy Manager Regulatory Affairs Department GTE Service Corporation Stamford, CT. 06904 (June, 1981 - June, 1988)

#### PREVIOUS POSITION:

Director - Federal Regulatory Matters Regulatory & Governmental Affairs GTE Telephone Operations Irving, TX 75038 (February, 1992 to October, 1992)

#### PREVIOUS POSITION:

Adjunct Professor Dept. of Economics University of Connecticut Stamford, CT. 06903 (June, 1982 to Jan. 1989)

#### PREVIOUS POSITION:

Senior Economic Analyst Regulatory Economic Research GTE Service Corporation Stamford, CT. 06904 (January, 1978 - June, 1981)

#### PREVIOUS POSITION:

Senior Technical Analyst Management Sciences Section GTE Data Services, Inc. Tampa, FL. 33601 (July, 1976 - January, 1978)

#### PREVIOUS POSITION:

Rate Economist
Dept. of Rates and Contracts
Virginia Electric & Power Co.
Richmond, VA. 23219
(June, 1971 - September, 1973)

#### CURRENT RESEARCH:

Pricing and costing of evolving telecommunication networks and evaluation of welfare, allocative, and distributive effects of alternative pricing systems; Evaluation of alternative regulatory regimes for public utility services; Demand and cost analysis of telecommunications services; Experimental design of peak load pricing experiments; Evaluation of competition in telecommunications markets.

#### CONSULTING & TESTIMONY PREPARATION:

Virginia State Corporation Commission: design and development of forecasting methodologies for use by Commission in evaluating capital budgets of electric utilities in Virginia; (August, 1975 - June, 1976)

## Testimony/Exhibits/Comments Prepared and Filed before:

Federal Power Commission (now FERC)
Federal Communications Commission
Virginia State Corporation Commission
North Carolina Utilities Commission
West Virginia Public Service Commission
Public Service Commission of Wisconsin
Public Utility Commission of Ohio
Hawaii Public Utilities Commission
California Public Utilities Commission
Illinois Commerce Commission
Kentucky Public Service Commission
South Carolina Public Service Commission
Georgia Public Service Commission
Florida Public Service Commission
Corporation Commission of Oklahoma

## Other Regulatory Appearances:

NARUC Technical Education Conference for Commissioners
New England Council of Public Utility Commissioners
Instructor - NARUC Annual Regulatory Studies Program; Michigan State University
Alabama Public Service Commission Telecommunications Conference

## CONSULTING & TESTIMONY PREPARATION (continued):

## Other Regulatory Appearances (continued):

Virginia State Corporation Commission Annual Conference South Carolina Public Service Commission Annual Conference

## Legislative Testimony:

Before the Illinois Public Utilities Committee Before the Illinois Public Utilities Committee Before the Florida House of Representatives

## PRESENTATIONS and PUBLICATIONS:

- "Econometric Estimation of Peak Electricity Demands", <u>Journal of Econometrics</u>, January, 1979 (with R.M. Spann);
- "An Interventionist Theory of Public Utility Regulation", Paper presented to the Virginia Economic Association, March, 1976, Richmond, VA;
- "Alternative Bidding Arrangements: A Study of Risk and Uncertainty in the Domestic Oil Industry", Peper presented to the Western Economic Association, June, 1976, San Francisco, CA. (with S. Millsaps);
- "The Demand for Residential Telephone Services Under Non-Metered Tariffs: Implications for Alternative Pricing Policies", Paper presented to the Western Economic Association, June, 1977, Anaheim, CA;
- "The Financial Effects of Local Measured Service on the Operating Telephone Company", Paper presented to the Telecommunication Industry Workshop, March, 1979, Kensas City, MO;
- "Forecasting Peak Electricity Demands", Paper presented to the Electric Power Research Institute, April, 1977, Aspen, CO;
- "Econometric Estimation of Peak electricity Demands", Paper presented to the Southern Economic Association, November, 1977, New Orleans, LA. (with R.M. Spann); also appearing in:

Forecasting and Modeling Time-of-Day and Seasonal Electricity Demands, Electric Power Research Institute, December, 1977.

"The Supply of Private, Semi-Public, and Public Goods: Budget Size in a Democracy Revisited", The Southern Economic Journal, October, 1978, (with J.M. Fesmire)

## PRESENTATIONS and PUBLICATIONS (continued):

- "The Demand for Electricity in Virginia", The Review of Economics and Statistics, November, 1978, (with R.M. Spann, M. Murray, and L. Pulley);
- "An Evaluation of Potential Welfare Gains from Usage Pricing of Local Telephone Service", Paper presented to the Western Economic Association, June, 1978; Honolulu, HI;
- "Review of Modern Political Economy", The Southern Economic Journal, January, 1980.
- "The Financial Effects of Local Measured Service", in <u>Perspectives on Local Measured Service</u>, TIW, October, 1979;
- "Usage Sensitive Pricing", <u>Proceedings of the 5th Annual Symposium on Rate making Problems of Regulated Industries</u>, May, 1979, (with G. Cohen);
- "The Demand for Local Exchange Service: Some Implications for Planning", Proceedings of the 3rd International Conference on Analysis, Forecasting, and Planning for Public Utilities, June, 1980, Paris, France; (with G. Cohen);
- "Local Loops as Barriers to Entry?", in <u>Challenges for Public Utility Regulation in the 1980s</u>; Michigan State University: December, 1980; also appearing in <u>Proceedings of Workshop on Telecommunication Issues</u>; Bureau of Utility Research, University of Connecticut: January, 1984; (with J. Alleman);
- Universal Measured Service Policy Statement, GTE Service Corporation, March, 1980.
- "No Main Is An Island", Paper presented to the Western Economic Association, July, 1981, San Francisco, CA. (with J. Alleman);
- "Review of <u>Peak Load Pricing</u>: <u>European Lessons for US Energy Policy</u>". The <u>Southern Economic Journal</u>, July, 1981.
- "Predicting Local Telephone Usage Under Measured Service", Public Utilities Fortnightly, August 5, 1982; (with G. Cohen and L. Garfinkel);
- "The Economic Impact of Access Charges: Does Anyone's Ox Need to be Gored?", in Adjusting to Regulatory, Pricing, and Marketing Realities: Michigan State University, December, 1983, (with L. Cole);

## PRESENTATIONS and PUBLICATIONS (continued):

"Metering Costs and Measured Service: An Evaluation of Efficiency Gains from Usage Sensitive Pricing of Telephone Service", Paper presented to the Institute of Public Utilities, December, 1983, Williamsburg, VA. Also in Changing Patterns in Regulation. Markets, and Technology: The Impact on Public Utility Pricing: Michigan State University, December, 1984.

"A Cost-Benefit Analysis of Alternative Local Service Pricing: Estimates From a US Telephone Company", in Local Telephone Pricing: Is There a Better Way?: Canadian Radio-Television & Telecommunications Commission and The Centre for the Study of Regulated Industries, McGill University, Third Quarter, 1984.

"An Overview of the Economic Impacts of Local Measured Service", Paper presented to the Kentucky Telephone Association, May, 1985, Lexington, KY;

"Exchange and Interexchange Rate Design", Presented to the NARUC Annual Regulatory Studies Program; Michigan State University, June, 1985.

"Cost Trends in Telecommunications", Presented to the Electronic Funds Transfer Association, June, 1985, New Orleans, LA;

Rational Pricing in a Competitive/Regulated Environment: Conceptual Statement of Rate Design and Public Policy, GTE Service Corporation, August, 1985.

Rational Pricing in a Competitive/Regulated Environment: Strategy Implementation Guidelines, GTE Service Corporation, December, 1985.

"Alternatives for Traffic Sensitive Cost Recovery", Paper presented to Belicore Seminar on TS Costs; March, 1986, Seattle, WA;

"Implications of Cost Characteristics of New Technologies for the Pricing of Telecommunications Services", Presented to the University of Georgia Public Utilities Conference, September, 1986, Atlanta, GA;

"La tarification des telecommunications", in Le Bulletin de l'Idate, April, 1986; Geneva; (with J. Alleman, L. Cole, and N. Stolleman);

"The Competitive Pricing of Telecommunications Services: Does LMS Still Have a Place?", Paper presented to Conference on Local Measured Service, May, 1987, Washington, D.C.

"Rational Pricing of Telephone Services in the New Environment", Presented to the Georgia Telephone Association, June, 1987, Jekyll Island, GA.

## PRESENTATIONS and PUBLICATIONS (continued)

"Funding Tomorrow's Electronic Highways; Who Should Pay the User Fees?: Trucks? - Nissans? - Ferraris?," Presented to Tennessee Tomorrow, Belmont College: Nashville, Tennessee, September 30, 1987; Tenessee Public Service Commission, Tennessee Telephone Association, Tennessee Department of Economic and Community Development, Tennessee Technology Foundation, Tennessee Valley Aerospace Board. Abstract published in Tennessee Tomorrow: Building Electronic Highways for Economic Growth.

"Of Taxis and Telecommunications," Invited paper presented to the First Annual Telecommunications Conference, August 16-17, 1988. Sponsored by the Alabama Public Service Commission, Birmingham, Alabama.

"Costing Strategies in a More Competitive Environment," Invited paper presented to the GTE North Regulatory & Legal Conference; August 23-24, 1988, Lake Geneva, Wisconsin.

"Regulatory Reform: A Vision of the Future From the Perspective of a Local Exchange Company," Presented to the Tennessee Telephone Association Annual Conference, September 9, 1988; Chattanooga, TN.

"Private Transmission Networks: The Evils of Bypass or Fulfilling Unsatisfied Customer Needs," Paper presented to the 4th Annual Conference on Telecommunications Regulation, January 22, 1989, University of Utah, Salt Lake City.

"LMS for ESPs Under ONA BY FCC with PUCs," Paper presented to the Southeastern Regional Public Utilities Conference, the University of Georgia, August 30, 1989, Atlanta, GA.

"The Parable of the Taxi," OPASTCO Roundtable, Fall, 1989 (with D. Johnson, and R. Calkins).

"Local Exchange Competition: Where Is Competition Taking Us? or Bottleneck? What Bottleneck," Paper presented to the Institute of Public Utilities, Michigan State University, December 11, 1991, Williamsburg, Virginia. Publication forthcoming. Also presented to the OPASTCO Annual Winter Convention & Workshops, January 21, 1992, Orlando, Florida.

"Local Transport Competition: Interconnection and Price Reform - Expanding the Scope," paper presented to the Center for Public Utilities, College of Business Administration and Economics, New Mexico State University, March 11, 1992, Santa Fe, New Mexico.

## PRESENTATIONS and PUBLICATIONS (continued)

"Expanded Interconnection and Access Compatition: A Holistic Approach to Products and Prices," paper presented to the 18th Annual Rate and Regulatory Symposium, The Changing Environment: Competition, Regulation and Incentives, April 27, 1992, St. Louis, Missouri.

"Regulation and Competition: Sweet Siblings or Evil Twins?," paper presented to the University of Kansas 1992 Fall Stakeholders Symposium on Telecommunications, November 17, 1992, Lawrence, Kansas.

"Some Preliminary Thoughts On Public Policy Implications of Personal Communication Services: Impacts On Support Mechanisms, Price Levels, and Rate Structures," appearing in <u>Washington Telecom Week</u>, December 4, 1992 (Volume 1, No. 36).

"On the Road to Divestiture II: New Organizational & Regulatory Structures for GTE," paper presented to GTE South Area Key Management Meeting: Challenging Times ... Challenging Issues, March 17, 1993, Tampa, Florida.

"Local Exchange Service: What Bottleneck?," <u>Teletimes</u> (Spring, 1993) pp 2 - 5, 17.

"The Good, The Bad, and The Ugly: Regulation and Competition," paper presented to the University of Kansas 1993 Advanced Tele-Management Program, May 26, 1993, Lawrence, Kansas.

"Public Policy for a Multiproduct Firm: Tearing Down the Berlin Wall in Telecommunications," publication forthcoming in <u>Utility Policy</u>, (with Virginia Sheffield)

#### **COURSES TAUGHT**

Principles of Economics
Econometrics
Public Policies Toward Business
Introduction to Public Choice Theory

Industrial Organization
Managerial Economics
Intermediate Microeconomic Theory
Public Finance

#### HONORS and AWARDS:

Omicron Delta Epsilon Phi Kappa Phi Beta Gamma Sigma Who's Who in the East

## **PROFESSIONAL AFFILIATIONS:**

American Economic Association
Southern Economic Association
Western Economic Association
Public Choice Society
Policy Analysis Committee - United States Telephone Association

### CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the Direct Testimony of Edward Beauvais on behalf of GTE Florida Incorporated in Docket No. 921074-TP was sent by U.S. mail on June 24, 1993 to the parties on the attached list.

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