

ORIGINAL  
FILE COPY

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**GTE FLORIDA INCORPORATED**  
**DIRECT TESTIMONY OF EDWARD C. BEAUVAIS, PH.D.**  
**DOCKET NO. 950985 - TP**

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND TITLE.**

**A.** My name is Edward C. Beauvais. My business address is 600 Hidden Ridge Drive, Irving, Texas, 75038. I am employed by GTE Telephone Operations as Senior Economist in the Regulatory Policy Department and am representing GTE Florida, Inc. ("GTEFL") in this proceeding.

**Q. WILL YOU PLEASE STATE YOUR EDUCATION AND BUSINESS EXPERIENCE?**

**A.** I received my undergraduate degree in economics from the Virginia Polytechnic Institute in 1971. I continued my education taking courses in finance, math and computer science at Virginia Commonwealth University from 1972 to 1973 while employed by the Virginia Electric and Power Company, responsible for forecasting loads and electricity sales, as well as pricing for natural gas and electricity. I hold both a Masters and a Doctor of Philosophy in Economics from the Center for the Study of Public Choice at the Virginia Polytechnic Institute and have taken postgraduate courses at the Massachusetts Institute of Technology. I have served as a Professor of Economics both at the University of Alabama and the University of Connecticut. I am currently on the visiting faculty at the

DOCUMENT NUMBER-DATE

01354 FEB-68

1 currently on the visiting faculty at the University of Kansas. For the  
2 past nineteen years, I have been with GTE. At GTE, I have held  
3 numerous positions dealing with costing, pricing, demand analysis,  
4 forecasting and public policy issues. I have provided expert witness  
5 testimony before the following state and federal regulatory  
6 commissions: Federal Power Commission (now FERC), Federal  
7 Communications Commission, Virginia State Corporation  
8 Commission, North Carolina Utilities Commission, West Virginia  
9 Public Service Commission, Public Service Commission of Wisconsin,  
10 Public Utility Commission of Ohio, Hawaii Public Utilities Commission,  
11 California Public Utilities Commission, Illinois Commerce Commission,  
12 Kentucky Public Service Commission, South Carolina Public Service  
13 Commission, Georgia Public Service Commission, Florida Public  
14 Service Commission, Corporation Commission of Oklahoma, Indiana  
15 Utility Regulatory Commission, Michigan Public Service Commission,  
16 Iowa Utilities Board, Pennsylvania Public Utility Commission, Public  
17 Utility Commission of Texas, Public Utility Commission of Oregon,  
18 Washington Utilities and Transportation Commission, Idaho Public  
19 Utilities Commission, and Alabama Public Service Commission.

20  
21 In addition to the testimony before state and federal regulatory  
22 bodies, I have also presented legislative testimony before the Indiana  
23 House Commerce Committee, the Illinois Public Utilities Committee,  
24 the Florida House of Representatives and the Virginia General  
25 Assembly.

1 Finally, I have written numerous articles for academic and  
2 professional journals in the areas of public finance, public choice and  
3 the economics of the electric and telecommunications industries, as  
4 well as articles and presentations to industry organizations and  
5 publications. My professional resume is attached as Exhibit ECB-1.

6

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
8 **DOCKET?**

9 **A.** In response to the testimony of Timothy T. Devine, dated January 23,  
10 1996 and a Petition filed by Metropolitan Fiber Systems of Florida,  
11 Inc. ("MFS") on that same date, my testimony will address certain  
12 economic issues associated with the interconnection of companies  
13 entering the local exchange market; in particular, I will focus on the  
14 appropriate and economically efficient compensation arrangements  
15 to be made between and among companies for the termination of  
16 traffic in the local exchange market. I will explain why MFS-FL's bill  
17 and keep proposal for the exchange of traffic should be rejected in  
18 favor of an originating responsibility plan. Ms. Beverly Menard will  
19 address the remainder of the issues associated with interconnection  
20 in this docket.

21

22 **Q. DO YOU TAKE ISSUE WITH MR. DEVINE'S ASSERTION (AT**  
23 **PAGES 9-10 OF MFS' DIRECT TESTIMONY) THAT**  
24 **INTERCONNECTION OF MFS' FACILITIES WITH GTEFL'S**  
25 **NETWORK IS A REQUIREMENT IN A COMPETITIVE LOCAL**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**EXCHANGE MARKET?**

**A.** Not at all. In fact, GTEFL strongly agrees that every telephone user, not only in Florida, should be able to place and to receive calls from every other user, regardless of the carrier selected by any customer to provide service. By definition, therefore, interconnection of networks is required for the exchange of traffic between and among companies. Included in facilitating this exchange of traffic will be a variety of companies utilizing a variety of technologies. Some companies will provide wireless services, others will use wireline technologies; still others will combine the technologies. Some companies may be primarily transport providers, others may concentrate on providing switching services to customers. Network interconnection is required and signalling and billing information is a part of this interconnection. All of these companies may well be considered co-carriers competing with each other in the local exchange marketplace. But even though these companies are (and must be) interconnected, they are also competitors of each other, a fact which must be recognized by the Commission in establishing interconnection policies. No entity--LEC or ALEC--should be responsible for assuring the financial viability of its competitors. Yet this seems to be the assumption underlying many of MFS-FL's positions.

At the same time, it is important to recognize that GTEFL has in no manner suggested that any customer electing to take service from

1 MFS or any other company will not be able to call all other  
2 customers. Neither has GTEFL suggested that MFS customers must  
3 use inconvenient dialing patterns, experience call set-up delays, or  
4 pay excessive prices to GTEFL for the use of its facilities. To the  
5 extent Mr. Devine is suggesting that GTEFL has done so, then he is  
6 simply wrong.

7

8 **Q. ONE OF THE SO-CALLED CO-CARRIER ARRANGEMENTS**  
9 **DEMANDED BY MFS RAISES THE ISSUE OF COMPENSATION**  
10 **FOR EXCHANGED TRAFFIC. DO YOU AGREE THAT THIS IS AN**  
11 **AREA THAT MUST BE RESOLVED?**

12 **A.** Absolutely. Mr. Devine is correct that an intercompany  
13 compensation plan is important, not only to ALECs, but to LECs as  
14 well. The possibility that a compensation plan may more dramatically  
15 affect MFS than it does initially GTEFL (as he indicates on page 25  
16 of his testimony) simply reflects that GTEFL is relatively that much  
17 larger than MFS when MFS is first starting out as a local exchange  
18 carrier in Florida. Moreover, Mr. Devine's apparent concern about  
19 the potentially negative impact on MFS is undercut by other of his  
20 statements suggesting that traffic between the GTEFL and MFS-FL  
21 networks is likely to be in balance. (Devine Direct Testimony at 30.)  
22 These inconsistencies and uncertainties serve only to emphasize my  
23 point that the relative size of the interconnecting carriers has little  
24 bearing on whether any compensation plan is an efficient one--which  
25 should be a principal concern in this docket.

1       **Q.    WHAT IS THE APPROPRIATE STRUCTURE AND PRICING FOR**  
2       **LOCAL ACCESS SERVICES?**

3       **A.**    First, it is important to recognize that services provided by a local  
4       exchange company as well as new entrants are subject to  
5       economies of both scope and scale, with very large amounts of  
6       common costs present. Thus, if one is truly interested in evaluating  
7       an efficient rate structure, then the pricing of services provided out  
8       of this common plant should not be examined in piece-parts, as MFS  
9       suggests. Rather, the rate structure should be examined on an  
10      integrated basis. The presence of economies of scope and scale  
11      also imply that it will simply not be possible to price all services  
12      simultaneously equal to incremental costs--as MFS-FL advocates for  
13      the long-term--and to have the firm break even financially. Rather,  
14      prices must depart from their optimal first-best prices in an economic  
15      sense. This, of course, involves questions as to what is the most  
16      efficient source for generating such contribution, bringing in the  
17      demand side of the marketplace. The brief answer on the demand  
18      side will be that those services subject to the greater competitive  
19      pressures will make less of a contribution to generating revenues to  
20      covering the firm's common costs while services subject to less  
21      competitive pressure will make more of a contribution. This is  
22      certainly a change from traditional policies pursued in the United  
23      States, including Florida, where services such as toll and access,  
24      which have historically generated the most contribution to common  
25      costs, also exhibit the greatest elasticity of demand. Obviously, this

1 cannot continue in light of the competitive entry which has and  
2 continues to occur, as evidenced by MFS in the instant proceeding.

3  
4 Prospectively, GTEFL is concerned with migrating the current price  
5 structure from the fragmented patchwork of toll, access, and local  
6 rates that exist today toward a single integrated structure, much as  
7 our rival companies, particularly the cellular carriers, have already  
8 been able to do. In this pricing structure, telephone companies must  
9 develop rates designed to recover the amount of subscriber "loop"  
10 costs and prices to cover the traffic sensitive switching and transport  
11 costs. Further, these latter prices must become time and distance  
12 sensitive, where cost and demand justified, for all classifications of  
13 service that are presently offered: interstate access, intrastate  
14 access, intraLATA toll, EAS, and local. All prices in this competitive  
15 pricing structure must be derived from the market forces of supply  
16 and demand. Aligning all prices to at least recover long run  
17 incremental costs avoids cross-subsidization among customers,  
18 reduces reliance on arbitrary class of service and rate group  
19 characterizations, achieves equity, promotes price stability, and  
20 allows GTEFL and consumers greater flexibility in responding to  
21 competitive alternatives. In fact, it may even allow GTEFL's  
22 competitors the ability to develop creative alternatives.

23  
24 Under this unitary pricing approach, there would be a single multi-  
25 part tariff applicable to both intra- and intercity calling. For example,

1 a basic monthly rate for network access would be charged and a  
2 usage rate structure applied to all calling. The total cost of an  
3 intercity call would be the usage charge for end office switching on  
4 each end plus the applicable transport charge (including any  
5 compensation costs which might be incurred), but still offered to  
6 customers as a composite rate or in service packages, if the firms so  
7 desired. This is illustrated graphically in GTEFL Exhibit ECB-2, page  
8 1, entitled Representative Rate Structure. In this Exhibit, inside wire  
9 and customer premise equipment are assumed to be deregulated  
10 and are priced on a competitive basis. The loop and line sensitive  
11 portion of the LEC central office would be priced on a monthly  
12 recurring (flat-rated) basis with the same rate applicable to all  
13 customers for a given set of service functional characteristics. This  
14 network connection, or network access, charge is the first part of the  
15 multi-part tariff.

16  
17 The second part of the tariff is a usage charge, applicable to all end  
18 office switching and transport of usage, regardless whether the call  
19 is toll, access, local, or EAS under today's definitions. As drawn, this  
20 rate structure reflects both time-of-day and distance in the applicable  
21 prices. In the upper diagram, labeled Peak Usage, two distance  
22 bands are shown. The illustrative price per minute of use is given for  
23 marginal minutes of use in each of the distance bands: \$0.01 for  
24 intraoffice usage; \$0.03 for distance band 1. As drawn, these prices  
25 display a declining block structure within each distance band to



1 reflect the anticipated cost characteristics of the newer technologies.  
2 Inframarginal prices would be somewhat higher than those shown for  
3 marginal usage to satisfy the "revenue requirement." The price  
4 structure for off-Peak usage is similar with two distance bands again  
5 illustrated. For illustrative purposes, the off-peak marginal prices are  
6 50% of those applicable in the peak period.

7

8 **Q. WHAT ARE THE ADVANTAGES OF THIS APPROACH TO THE**  
9 **PRICING OF NETWORK SERVICES RELATIVE TO TRADITIONAL**  
10 **PRICING APPROACHES?**

11 **A.** This approach has definite advantages over traditional practices. For  
12 example, the enforcement and definition problems inherent in placing  
13 a differential access charge on "intercity" facilities and usage alone  
14 are avoided. Customers are not given an economic signal to switch  
15 from a direct to an indirect method of access to the network. Also,  
16 such an approach would appear substantially easier to apply in a  
17 way that is equitable to all customers and competitors in the  
18 telecommunications market. For example, the definition debate  
19 which the parties and the Commission might have to go through to  
20 determine which minutes are local and which are toll under a bill and  
21 keep type plan for local, along with the associated costs, can be  
22 avoided. An additional advantage offered by this approach is the  
23 flexibility it offers to both customers and to the company, including  
24 establishing a framework and reference points for unbundled service  
25 provision.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

The key to long-run success in an increasingly competitive market is flexibility and adaptation, not only in pricing which is my immediate concern here, but in all areas of the GTEFL's operations. The emphasis given to price level and structure is based on empirical evidence in the intercity market that a key element of competition in the future will be price; it will not be the sole playing field on which the game is contested, others will include quality and advertising, but that pricing policy will be a principal method by which rivalry among firms manifests itself.

**Q. ARE THERE ANY OTHER IMPLICATIONS OF THE PROPOSAL YOU ARE MAKING HERE?**

**A.** Yes. The existence of competition combined with the decided possibility of resale implies that a sustainable pricing structure must eschew the traditional mechanisms of segmenting users (such as residence, business, interexchange carrier), uses (such as voice, data, or video), and regulatory jurisdiction (interstate, intrastate, toll/local). Rather, feature requirements and the volume of usage along with the costs of providing service will have to become the basic mechanisms for developing prices in the marketplace. In particular, the usage elements of such a competitive pricing structure should specify prices that vary with the quantity of usage in the form of a nonlinear multi-part tariff. GTE Florida Exhibit ECB-2, page 2, illustrates such a rate structure.

1 In the top half of this Exhibit, the prices to be charged for each block  
2 of usage are illustrated. Units of output between zero and  $Q_1$  are  
3 charged at a rate of  $P_1$ ; between  $Q_1$  and  $Q_2$ , price  $P_2$  prevails;  
4 between  $Q_2$  and  $Q_3$ , price  $P_3$  applies; all units subsequent to  $Q_3$   
5 would be priced at the rate of  $P_4$  which approximate the marginal  
6 cost of usage. This same rate structure will also incorporate  
7 distance and time-of-day considerations. That is, if rates  $P_1$  to  $P_4$   
8 are thought of as the peak period prices, then in this Schedule, the  
9 prices  $P_1'$  to  $P_4'$  would represent the nonlinear multi-part rate  
10 structure associated with off-peak usage prices. Careful note should  
11 be taken that these off-peak rates may, in fact, be equal to zero in  
12 some cases, as is the example shown for  $P_4'$ . The element of  
13 distance would be included by appropriately increasing the individual  
14 prices for subsequent mileage bands. That is, the nonlinear multi-  
15 part structure would be repeated for longer distance bands, but with  
16 the individual prices within each subsequent band being higher than  
17 in the previous band to reflect the costs associated with the longer  
18 length of transport.

19  
20 In the bottom half of Exhibit ECB-2, page 2, these prices are  
21 translated into revenues on a per end user line basis including the  
22 recurring monthly connection price. Point A represents the monthly  
23 network connection price to be collected on a flat rate basis. The  
24 slope of each line segment in the bottom half of the exhibit  
25 corresponds to the price of usage in the upper half of the exhibit. In

1 this sense, the nonlinear multi-part structure is equivalent to providing  
2 volume discounts to the end user, regardless of his identity.

3  
4 Such a nonlinear competitive pricing structure offers several  
5 advantages. First, the notion of paying less per incremental unit for  
6 large volumes of usage may appear to be intuitively fair, especially  
7 when, on the low end of the usage spectrum, this is coupled with a  
8 targeted lifeline rate option for low-income customers, such as the  
9 FCC's Link-Up America Plan. Second, the nonlinear multi-part  
10 competitive pricing structure avoids the economic distortions created  
11 by the traditional market segmentation definitions currently employed  
12 in the telephone industry. This, in turn, could reduce the regulatory  
13 costs necessary to enforce and police the prevailing market  
14 segmentation classification. For example, all users of line-side  
15 network connections, whether residence, business, or interexchange  
16 carrier, would pay for line-side network connection and usage  
17 pursuant to the same nonlinear multi-part rate structure, thereby  
18 eliminating all tariff restrictions based on user identity or the purpose  
19 of the usage. That is, GTEFL becomes indifferent to both the use to  
20 which the network is put and the identity of the user of the network.  
21 The nonlinear multi-part structure also recovers costs which are  
22 directly attributable to the switching and transport of network usage  
23 from prices based on the volume of usage consumed, while at the  
24 same time approximating the economic efficiency condition that  
25 marginal price should be equal to marginal cost. This latter

1 characteristic clearly reduces the threat of inefficient bypass,  
2 specifically for large volume users such as interexchange carriers or  
3 rival local competitors, by pricing their incremental usage at a level  
4 approximately equal to, or at least approaching, their incremental  
5 cost.

6 Finally, and perhaps most importantly, a nonlinear multi-part  
7 competitive pricing structure can ultimately be viewed as providing  
8 a substitute for jurisdictional separations by integrating into a unified  
9 rate structure prices for network access, exchange, EAS, intraLATA,  
10 and interexchange usage. This rate structure will readily pass an  
11 economically correct imputation test and satisfy the equilibrium  
12 requirements of the Efficient Component Pricing Rule ("ECPR")  
13 (which is detailed in the testimony of Dr. Gregory Duncan in the  
14 related Docket number 950984-TP). The last characteristics are  
15 important given MFS's petition for the creation of an unbundled  
16 product line offer.

17

18 **Q. CAN THE REBALANCED RATE STRUCTURE YOU JUST**  
19 **DESCRIBED BE IMPLEMENTED IN THE CURRENT FLORIDA**  
20 **MARKETPLACE?**

21 **A.** Not in one giant step, especially given the current Florida law.  
22 However, the Commission can adopt approximations of the ideal rate  
23 structure which may prove almost as efficient. In the testimony that  
24 follows, I have proposed a plan and price structure which are  
25 consistent with statutory restrictions, yet accurately describe where

1 the price levels must head if an efficient industry structure is to  
2 develop and the benefits of competition are to be fully realized. I  
3 have described a long-run sustainable price structure which suggests  
4 where rate levels ought to be set, including the rate levels for  
5 interexchange of "local traffic" between and among companies. As  
6 I have just explained, the marginal price of what is currently referred  
7 to as "switched access" decreases under the plan I have proposed  
8 and becomes one and the same with the price of what is currently  
9 called "local exchange service." In one sense, the rate structure  
10 closely resembles the restructured switched local transport charges,  
11 with interconnectors paying a flat-rated monthly recurring charge for  
12 the entrance facility to the first point of switching and a usage  
13 sensitive charge thereafter. Of course, it also looks very much like  
14 the traditional local measured service rate structure for end users  
15 employed by GTE Florida for shared tenant service (STS) providers.  
16 This similarity to a local measured service plan suggests that the  
17 price for the exchange of local traffic should also be in the range of  
18 the current price of a measured local call. Of course, the structure  
19 can also be implemented by a series of optional pricing plans.

20  
21 I believe it is important to continue the transition to this type of  
22 pricing structure as soon as possible, rather than adopt MFS'  
23 proposals for a zero-rated marginal price of a "local minute" of traffic  
24 from interconnected carriers such as would prevail under a bill and  
25 keep approach. Establishing a zero price for such usage is almost

1           certainly in the financial interest of the newly interconnected  
2           companies, at least for some time, but does virtually nothing to  
3           facilitate the transition to an economically efficient overall product line  
4           and rate structure which I described earlier.

5

6           **Q.   WHICH SERVICES NEEDED FOR LOCAL INTERCONNECTION**  
7           **ARE NEW AND WHICH DO LECS ALREADY OFFER TO OTHER**  
8           **CUSTOMERS/PROVIDERS?**

9           **A.**   The basic service used for local interconnection should be an  
10          arrangement such as that already contained in LECS switched  
11          access tariffs. After all, one of the purposes of such tariffs was in  
12          fact to accommodate the origination and termination of traffic  
13          between other carriers and the LEC. These arrangements would  
14          primarily be expected to be the existing Feature Groups, especially  
15          Feature Group D. Feature Group A is also a real possibility.

16

17          However, as I have pointed out to the Commission on other  
18          occasions, Feature Group A looks very much like a regular business  
19          or residential connection to the network. In addition, it closely  
20          resembles the access arrangements currently available to shared  
21          tenant service (STS) customers and to PBX customers. Certainly  
22          these arrangements can be well suited to the termination of traffic as  
23          well and are so used today. After all, the terminating call from a rival  
24          LEC or from an IXC coming over an STS trunk, a PBX trunk, or even  
25          an R1 line, looks very much like an originating call to the LEC, which

1 must see that call is terminated or routed to the appropriate party.

2

3 **Q. IF EXISTING SERVICES ARE USED FOR THE**  
4 **INTERCONNECTION OF RIVAL LOCAL EXCHANGE NETWORKS,**  
5 **IS THERE JUSTIFICATION FOR PRICING THE SAME SERVICES**  
6 **DIFFERENTLY FOR DIFFERENT USERS?**

7

8 A. Today, essentially the same LEC services are priced differently to  
9 different entities, based primarily on these entities' traditional  
10 descriptions, which are becoming less and less relevant in a  
11 marketplace where technology often blurs the distinctions among  
12 these categories. This identity-based pricing is, in large part, a result  
13 of historical pricing patterns which evolved in a market structure in  
14 which entry was essentially barricaded, or at least tightly controlled.  
15 The purpose was largely to keep the price of residential basic local  
16 exchange service lower than it otherwise would have been. To do  
17 so, other prices were increased, contributing in part to the entry  
18 patterns which have been observed in the industry. So there was a  
19 social justification for pricing similar services differently for different  
20 customers, at least in a closed market.

21

22 However, policy makers at both the state and federal levels have  
23 now decided to rely to a far greater degree on competitive market  
24 forces rather than regulation to administer markets. Witness the  
25 alternative regulatory framework adopted in Florida and the number



1 of applicants already certificated to compete with incumbent LECs  
2 here. Entry is no longer controlled and is explicitly encouraged,  
3 rather than barred.  
4  
5 As part of this entry pattern, new entrants are and will be demanding  
6 resale of LEC services as well as a complete restructure of LECs'  
7 product lines at discounted rates. Within this "wholesale product  
8 line," there are to be no resale restrictions. I would note first that  
9 this wholesale/retail distinction can be handled within the context of  
10 my proposed rate structure whereby large volume purchasers  
11 (wholesale) get a lower price at the margin than do small volume  
12 purchasers (retail). In such a product line pricing arrangement,  
13 resale is allowed. However, the prices are the same to all parties.  
14 If one is going to attempt to continue to set discriminatory prices for  
15 the same services, based on the identity of the customer, rather than  
16 the volume of services purchased and the attributes of those  
17 services, then resale must be necessarily be strictly controlled. That,  
18 of course, is inconsistent with the demands of the new entrants as  
19 well as even attempting to police the resale restrictions in a more  
20 competitive marketplace. Thus, I am again led back to the  
21 conclusion that attempting to price the same service differently to  
22 different customers when costs do not vary (third degree price  
23 discrimination) must be rejected on a going-forward basis, and a  
24 different method found to recover the common costs of the firm,  
25 since all prices cannot be set at incremental costs. Some of those

1           common costs should be efficiently recovered from local  
2           interconnection charges, but certainly not in the proportion that was  
3           done as a matter of public policy in the initial establishment of access  
4           charges. A transitional mechanism can be employed to accomplish  
5           this result, including the restructure of a universal service fund, which  
6           this Commission is considering in another docket. But certainly any  
7           attempt to continue identity-based pricing in the face of unlimited  
8           resale can only be successful up to the limits of the transactions  
9           costs involved.

10

11           **Q.    EARLIER YOU MENTIONED THAT MFS-FL FAVORS A "BILL AND**  
12           **KEEP" METHOD OF COMPENSATION.  COULD YOU PLEASE**  
13           **DEFINE WHAT A BILL AND KEEP PLAN IS?**

14           **A.**    "Bill and keep" simply means that the carrier serving a customer bills  
15           that customer for all services rendered and keeps all the revenues  
16           received from that customer. No other carrier which may be involved  
17           in serving that customer through terminating or transporting calls  
18           made by that particular end user customer receives any  
19           compensation for the use of its facilities.

20

21           **Q.    IS BILL AND KEEP APPROPRIATE UNDER ANY**  
22           **CIRCUMSTANCES?**

23           **A.**    Yes.  Certainly if only one carrier is involved in the originating,  
24           transport and termination of a call from an end user to another, bill  
25           and keep is appropriate. Bill and keep may also be appropriate

1 under very narrow circumstances where the quantity of terminating  
2 minutes is the same, the terminating price charged by both  
3 customers is the same and no transiting carriers are involved.  
4 Because these circumstances will rarely be present in Florida, the  
5 Commission should not establish the bill and keep approach  
6 recommended by MFS. Rather, the Commission should adopt an  
7 originating responsibility plan ("ORP"). Under an ORP, the carrier  
8 serving the customer who originates the call is responsible for seeing  
9 that the call is completed and that other firms involved in either  
10 transporting or terminating the call are compensated for use of their  
11 networks and the services they provide. The originating firm is also  
12 responsible for collecting the revenues from the originating customer.

13  
14  
15 **Q. PLEASE EXPLAIN WHY AN ORP CONSTITUTES A MORE**  
16 **APPROPRIATE PRICING STRUCTURE THAN BILL AND KEEP AS**  
17 **A INTERCONNECTION PRICING ARRANGEMENT.**

18 A. When more than one carrier is involved in calling flowing in both  
19 directions, then compensation flows will also be in both directions  
20 among certified carriers. For simplicity, let us assume that there is  
21 no intermediate carrier involved in the transport of a call. If the  
22 quantity of terminating minutes on one carrier is equal to the quantity  
23 of terminating minutes sent to the other carrier AND the price carrier  
24 A charges for traffic termination is equal to the charge that carrier B  
25 charges for traffic termination, then in fact, an ORP and a bill and

1 keep would result in the same net payment between carriers--\$0.00.  
2 However, MFS' proposed bill and keep arrangement will always  
3 result in zero regardless of the traffic flow characteristics and the  
4 relative prices of the carrier pairs. Although a bill and keep  
5 arrangement may be appropriate under certain circumstances, it  
6 should not be mandated for all other scenarios.

7  
8 The existence of a transiting carrier in between originating and  
9 terminating carriers (which will be very likely as interfirm rivalry  
10 expands in Florida markets) also supports rejection of the bill and  
11 keep approach advocated by MFS. For example, a GTEFL  
12 customer on one side of town could be making a local or EAS call  
13 to a customer of MCI Metro on the other side of the calling area and  
14 vice versa. Let's assume that, to complete that call, the call transits  
15 an MFS facility. Under the ORP plan, MFS would bill GTE for its  
16 transport price and MCI would bill for its terminating price. Under a  
17 bill and keep approach, no one gets billed, under the assumption of  
18 equal traffic and equal prices in both directions. Although MFS has  
19 carried both calls in this example, it is not paid at all under the bill  
20 and keep approach because it terminated no calls. Even though I  
21 would agree that the incremental cost of transport is quite low, I do  
22 not agree that the price should be zero. (However, MFS is at liberty  
23 to set a price at zero if it wishes for the use of its facilities.)

24  
25 Therefore, bill and keep is financially appropriate under those

1 conditions in which the quantity of terminating minutes is the same,  
2 the terminating price charged by both customers is the same and  
3 that no transiting carriers are involved. The general preference,  
4 however, should be given to an ORP plan, with bill and keep viewed  
5 as a unique, special case of ORP.

6

7 **Q. DO YOU AGREE WITH MR. DEVINE THAT BILL AND KEEP**  
8 **SHOULD BE ADOPTED IN ORDER TO SAVE ON THE COSTS OF**  
9 **MEASUREMENT AND BILLING?**

10 **A.** No. In making this statement (at pages 27-28 of his Direct  
11 Testimony), Mr. Devine ignores the fact that measurement and billing  
12 costs are very low. Based on investigations into the ongoing  
13 incremental costs of measurement and billing associated with local  
14 measured service, the incremental costs are between \$0.0003 and  
15 \$0.0005 per local message (not per minute). These costs have  
16 declined over time, since the technology driving them is the same  
17 which has resulted in the decline of switching costs. Thus, although  
18 Mr. Devine offers the rationale of high measurement costs a principal  
19 motivation for a bill and keep system, he has made no attempt to  
20 quantify these costs or otherwise support this assumption, which is  
21 critical to his support of bill and keep. Under the circumstances, his  
22 assertion that measurements and billing cost could have a  
23 "devastating" impact on the cost of local exchange service (Devine  
24 Direct Testimony at 27) is simply implausible.

25

1           Moreover, all parties appear to assume that, at least for some time,  
2           switched access charges will continue to be assessed on a traffic-  
3           sensitive basis, thus requiring the measurement and billing of those  
4           calls and charges--certainly MFS makes that assumption clear in its  
5           testimony. For some reason, it absolutely believes that switched  
6           access charges for toll traffic should be collected on a usage-  
7           sensitive basis at the price levels established by the LEC, even  
8           though when it may be required to pay a price for "local switched  
9           access termination," it believes the appropriate marginal price is  
10          zero. Thus, a measurement and billing system will need to be put  
11          into place by new entrants in any event. (It would be also seem to  
12          be the case that some sort of measurement would be required just  
13          to verify or estimate on a periodic basis that traffic was indeed in  
14          balance). Having made the capital investment in such a  
15          measurement and billing system, the incremental costs of operations  
16          must still be sufficiently low to accommodate a measured approach  
17          on an ORP basis. It appears to me that this is indeed the case.

18

19          **Q.    DO THE DECISIONS FROM OTHER STATES RELIED UPON BY**  
20          **MR. DEVINE ON BILL AND KEEP ARRANGEMENTS SUPPORT**  
21          **ADOPTION OF SUCH AN ARRANGEMENT HERE IN FLORIDA?**

22

23          **A.**    No. In each of the cases noted by Mr. Devine, the state commission  
24          supported the so-called bill and keep arrangement on only an interim  
25          basis, recognizing that such a plan was not appropriate on a

1 permanent basis. Moreover, with respect to the Michigan, the  
2 Commission there did not even order a bill and keep plan, at least  
3 under my definition of a bill and keep approach.

4  
5 The Michigan intercompany compensation plan sets a local traffic  
6 exchange price of \$0.015 per minute. If the traffic is in balance within  
7 a 5% range, no exchange of funds takes place, *ceteris paribus*.  
8 (While not part of the Michigan plan, I would also point out that if  
9 prices are different between companies for the termination of traffic  
10 and the traffic is in balance, only the net difference would be  
11 charged.) I would not characterize such an approach as a "bill and  
12 keep" plan, as MFS witness Devine has done, because a positive  
13 incremental price has been established for traffic in both directions,  
14 records are made and net compensation flows to the correct  
15 company when traffic is not in balance. I would instead characterize  
16 it as an ORP with mutual compensation. Nevertheless, if MFS  
17 wishes to label such an approach "bill and keep," then I would  
18 support it accordingly. Given that the traffic is to be metered  
19 anyway, then I would also eliminate the 5% zone, or at least reduce  
20 it, since five percent of the traffic can be a very substantial number  
21 of minutes.

22  
23 **Q. IF BILL AND KEEP IS NOT THE APPROPRIATE METHOD TO**  
24 **USE FOR INTERCOMPANY COMPENSATION, HOW SHOULD**  
25 **THE COMMISSION PROCEED IN DEVELOPING A METHOD**

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

**WHICH MOST CLOSELY MEETS THE IDEAL PRICING  
STRUCTURE DESCRIBED EARLIER?**

**A.** Given my comments above, the Commission's task is to reconcile the bill and keep approach with that of a mutual compensation/ORP approach. That may not be so difficult to do, considering MFS' support for the Michigan plan. I have already stated my belief that bill and keep can be a special case of an ORP and that I believe that an ORP represents the best solution as an appropriate and efficient pricing policy in Florida.

I recommend that the Commission in this case therefore adopt the following guidelines as consistent with the correct public and economic policy direction in which to proceed:

- 1) Establish an ORP framework;
- 2) Require independent development of prices for compensation purposes by each company;
- 3) Each company (or an administrator) determines net compensation;
- 4) Net compensation payments are made among companies based on known prices for the difference in traffic flow and price.

If step (4) results in zero among a given pair of companies, then no payment is made between those two carriers for that month and the special case of "bill and keep" will have resulted. In my opinion,



1           however, it is rather unlikely that exchanged traffic among all pairs  
2           of certified local exchange carriers will be in balance, so that net  
3           compensation will take place.

4

5           **Q.    EARLIER YOU STATED THAT THE PRICE LEVEL SHOULD BE**  
6           **IN THE RANGE OF A LOCAL MEASURED CALL. WHAT PRICE**  
7           **LEVEL WOULD YOU SUGGEST THAT THE COMMISSION**  
8           **APPROVE FOR THE TERMINATION OF EXCHANGED LOCAL**  
9           **TRAFFIC IN FLORIDA?**

10          **A.**    The current local calling prices in Florida for residential and business  
11          local calling are stated on a per call basis at \$0.10 per completed  
12          local call. At the most, the price of local terminated traffic should not  
13          exceed this level when expressed on a per minute basis. The mean  
14          local holding time is approximately four minutes for a residential call  
15          and two minutes for a business call. On a per minute basis, then,  
16          the ex post average price for a residential call is \$0.025; for a  
17          business customer, the corresponding implicit ex post price would  
18          average \$0.05 per minute. However, these prices are too high to  
19          facilitate efficient interexchange of local traffic among carriers. There  
20          is also a shared tenant service tariff available to be considered. The  
21          price for STS service includes both a peak and off peak component.  
22          Peak prices currently are \$0.015 per set up and \$0.015 per minute  
23          of use; off-peak prices are \$0.01 per call set up and \$0.01 per  
24          minute of use.

25          These local measured prices can be compared to the current

1 switched access prices in GTEFL's tariff. I argue that the Carrier  
2 Common Line charge ("CCLC") should not be applied to the  
3 exchange of what otherwise would be defined as local traffic by the  
4 terminating company. In this case, the applicable price for end office  
5 switching is \$0.0089 per minute of use. GTEFL's transport prices  
6 are distance sensitive, so I will not include all possible outcomes  
7 here. Rather, it is sufficient to point out that the price for terminating  
8 traffic with one mile of transport would be approximately \$0.0099  
9 under current access tariffs. If, instead, MFS were to deliver traffic  
10 to GTEFL expecting GTEFL to transport the call to a destination sixty  
11 miles away, the per minute price including end office switching and  
12 transport would be \$0.0107 per minute of use. Clearly, GTEFL's  
13 current switched access prices when the CCL is removed are in the  
14 range of the Company's local service prices and allow for the  
15 efficient interexchange of traffic under the cost characteristics I  
16 described earlier. Thus, in the GTEFL case, I would recommend that  
17 the FPSC simply adopt the existing switched access prices,  
18 excluding the CCLC and the residual interconnection charge, as the  
19 applicable prices to be charged by GTEFL for the use of its facilities  
20 in terminating "local" traffic for MFS.

21

22 **Q. YOUR COMMENTS INDICATE THAT YOU BELIEVE THAT**  
23 **COMPENSATION PAYMENTS SHOULD BE MUTUAL. IS THAT**  
24 **A CORRECT ASSESSMENT?**

25 **A.** Yes. While I believe that each certified carrier should independently

1           develop its own prices for the use of its facilities based on the cost  
2           and demand conditions it faces, I certainly believe that an efficient  
3           outcome in the marketplace calls for compensation to be paid in  
4           both directions. That is, an incumbent LEC should efficiently  
5           compensate a new certified entrant for use of that company's  
6           facilities just as the new entrant should pay the LEC for services it  
7           obtains from the incumbent provider(s).

8

9           **Q. TO WHAT CALLING AREA WILL SUCH RECIPROCAL LOCAL**  
10           **COMPENSATION PRICES APPLY?**

11           **A.** In the long run, I believe that there should be no distinction between  
12           "access charges" for the completion of "local" calls and what today  
13           are referred to as regional toll and interLATA calls. However, before  
14           that can occur, additional rate rebalancing will need to take place.  
15           Accordingly, for purposes of compensation payments among rival  
16           local exchange carriers transacting "local calls," including EAS, the  
17           local calling area as defined by the terminating carrier should apply.

18

19           **Q. COULD YOU PROVIDE AN EXAMPLE?**

20           **A.** Surely. Assume a new entrant begins to offer service in Tampa  
21           utilizing a switch located in Orlando. Further, the new entrant  
22           declares the entire state of Florida to be its "local" calling area. One  
23           of its customers in Tampa wishes to call his next-door neighbor  
24           served by GTEFL. The call goes from Tampa to Orlando, where it  
25           is switched by the new entrant, and then back to Tampa. Under

1 GTEFL's definitions as the terminating carrier, this is a "local" call and  
2 would be priced at the local traffic interexchange rate. Of course,  
3 GTEFL does not necessarily have any idea where such a call  
4 originated and it is therefore up to the originating company to  
5 correctly report such traffic or to place such traffic on the appropriate  
6 trunk group. The service which I am discussing is that provided by  
7 the terminating carrier. Therefore, it is the product definition and  
8 associated price of the terminating carrier which should apply.  
9 Should the call have originated in Orlando to be terminated in  
10 Tampa, the interLATA switched access charges of the terminating  
11 carrier would be applicable today. This would be the case even  
12 though the service provided by the terminating carrier to the  
13 originating carrier is the same in both the local and toll cases.

14  
15 **Q. DOES A BILL AND KEEP APPROACH SOLVE THIS PROBLEM?**

16 **A.** No. If anything, a pure bill and keep makes the problem more acute  
17 by assigning a zero marginal price to terminated local usage. That  
18 is, a pure bill and keep plan would assign a zero marginal price to  
19 "local" usage which a carrier terminates and the company's current  
20 switched access prices to other usage which the company  
21 terminates for other carriers. This obviously sets up a very significant  
22 arbitrage opportunity between a marginal price of zero and whatever  
23 the level of switched access charge is for the company in question.  
24 The integrated pricing plan I have proposed would eliminate this gap.  
25 In the interim, if the price for the termination of local exchanged traffic

1 is set at a level different from the current switched access price, the  
2 gap would only be between a price in the range of current measured  
3 local service prices and the current switched access price rather than  
4 a zero marginal price and the current switched access price.

5

6 **Q. SINCE UNDER EITHER A BILL AND KEEP OR UNDER YOUR**  
7 **PLAN, "LOCAL" TERMINATING TRAFFIC MUST BE IDENTIFIED**  
8 **AND SEPARATED FROM OTHER TERMINATING TRAFFIC FOR**  
9 **BILLING PURPOSES, HOW DO YOU PROPOSE TO DO THIS?**

10 **A.** I suggest that separate trunk groups be established for the  
11 termination of local/EAS traffic. While it may be possible to utilize  
12 combined trunk groups with the sending carrier reporting percent  
13 local usage ("PLU") factors for billing purposes, it is likely  
14 administratively easier for billing and rating purposes to have  
15 separate trunk groups. It would be the originator's responsibility to  
16 ensure that the proper jurisdictional traffic is routed over the  
17 appropriate trunk group. Such a responsibility would be subject to  
18 audit by the terminating company. This would apply in both  
19 directions. Not only would a new entrant be responsible for placing  
20 the jurisdictionally correct traffic on the appropriate trunk group and  
21 be subject to auditing by GTEFL, but GTEFL would have the same  
22 responsibilities and obligations to the new entrants.

23

24 **Q. HOW WOULD SUCH TRUNK GROUPS BE PROVISIONED?**

25 **A.** The interconnecting carriers have several options in obtaining and

1 placing trunks linking their networks together. The first option is for  
2 a new entrant to construct its own facilities to the desired point of  
3 presence, such as a GTEFL end office, and take advantage of  
4 GTEFL's virtual colocation offering. A variant of this option would be  
5 for the new entrant to utilize a competitive access provider or a cable  
6 television company or similar entity to provide the internetwork  
7 facilities. In both of these variations of the first option, the new  
8 entrant would be responsible for the costs of building and  
9 maintaining the internetwork trunk facilities.

10

11 A second option would be for the new entrant to obtain from GTE  
12 DS1 or DS3 facilities to the desired first point of switching for traffic  
13 termination. Since in this case, I am discussing two rival carriers  
14 dealing with each other, it must be recognized that the new entrant  
15 also has the right to establish prices for the use of his central office  
16 space on either a physical or virtual colocation basis as the new  
17 entrant may choose. In this second option, it would be the  
18 responsibility of GTEFL to build and maintain these internetwork  
19 facilities.

20

21 A third option would allow GTEFL and new entrants to mutually  
22 agree upon joint provision of facilities and the location of  
23 interconnection. In this third option, the contractual agreement  
24 would specify the construction cost and maintenance cost  
25 responsibility and how these costs are to be split or shared between

1 and among the parties involved. In all of the above situations,  
2 appropriate prices should be established by all parties involved for  
3 the provision of such trunk facilities, including fiber optic termination  
4 equipment where appropriate. The same netting approach as  
5 developed above should then be utilized, so that only the net  
6 balance is paid among pairs of companies, or that no payment is  
7 made if the net difference is zero.

8

9 **Q. SHOULD THE INTERNETWORK TRUNKS BE ONE-WAY OR**  
10 **TWO-WAY TRUNKS?**

11 **A.** This decision can and should be left open to be worked out between  
12 and among the interconnecting parties. GTEFL is willing to offer  
13 both arrangements to rival companies, including MFS.

14

15 **Q. SHOULD ALL THE ABOVE PRICES BE TARIFFED OR**  
16 **NEGOTIATED SUBJECT TO CONTRACT?**

17 **A.** With the variety of options for interconnection of rival local networks  
18 possible, negotiated interconnection agreements are probably more  
19 efficient than attempting to develop tariffs to meet all possible  
20 situations. However, I do believe it is important that such  
21 agreements contain non-discriminatory prices across interconnected  
22 companies. Further, I believe that for customer information  
23 purposes, a requirement to file such contractually negotiated  
24 arrangements with the Commission is appropriate for all parties.  
25 One possible approach is for "standard" local interconnection

1 arrangements to be tariffed and to then utilize those tariffs as the  
2 basis for crafting customized individual contracts as required. I do  
3 not see contracts and tariffs as mutually exclusive options. They can  
4 be used to complement each other in the marketplace. However, if  
5 the maximum acceptable to price to one of the firms involved is  
6 essentially zero, the likelihood of reaching a mutually acceptable  
7 agreement is rather low, as this case makes clear.

8

9 **Q. IF THE COMMISSION WERE TO ADOPT YOUR ORP PLAN,**  
10 **RATHER THAN BILL AND KEEP, DOES THIS PLACE MFS IN A**  
11 **SO-CALLED PRICE SQUEEZE AS MR. DEVINE SUGGESTS?**

12 **A.** No. First of all, if, as Mr. Devine claims, traffic between it and GTEFL  
13 is likely to be in balance, then under the approach I have described,  
14 the cash flows between the two carriers will also be in balance, so  
15 no squeeze on MFS will occur. Second, as I have pointed out, the  
16 long-run price structure developed above can be approximated by  
17 a series of optional tariffs made available to the consumers, even  
18 though this approach will result in increased transactions cost for  
19 consumers. The current variety of pricing options available to GTEFL  
20 consumers already exhibits this characteristic. Thus consumers may  
21 elect to take service under a measured option or a flat-rated option.  
22 Mr. Devine is incorrect if he believes that GTEFL only offers flat-rated  
23 local exchange rates to its customers. The price of GTEFL's  
24 measured options is greater than that of its switched access  
25 terminating prices. If MFS cares to offer customers measured



1 options, it is at liberty to establish the prices for its services at  
2 whatever levels it chooses. Likewise, if MFS wants to offer  
3 customers flat-rated local exchange service, it is free to do so. The  
4 price of such service only needs to be at a level sufficiently high to  
5 cover MFS' costs of providing service. For very large volume  
6 customers, there will indeed be a point at which compensation  
7 payments may exceed the price that MFS has established to end  
8 users. However, for the majority of business customers, this will not  
9 be an issue. This is yet another example of why the entire concept  
10 of rate restructuring is so critical to efficient functioning of competitive  
11 local markets.

12  
13 As a matter of public policy, compensation prices for new entrants  
14 must be as economically efficient, consistent with cost  
15 characteristics, as possible. However, there is nothing which  
16 suggests that incumbent firms are required to establish their prices,  
17 both wholesale and retail, so as to make new entrants economically  
18 viable. Price squeezes are to be avoided as a matter of sound  
19 public pro-competitive policy, but that must not be taken to its other  
20 extreme either--that incumbent LEC pricing must make all new  
21 entrants financially viable. A number of new entrants should be  
22 expected to fail; indeed, incumbents may fail in the presence of  
23 rivalry from new entrants. But simply because one or more new  
24 entrants may fail does not mean that rivals to other firms must  
25 establish their prices to accommodate their competitors.

1 Florida's policy should be to promote competition that is broad-  
2 based and balanced. But compensation among firms is only a piece  
3 of that. Overall, it is the profitability or loss of serving various  
4 customers and customer sets which will determine the pattern of  
5 entry into the industry, just as it has been in the past and continues  
6 to be the pattern today. Certainly compensation among licensed  
7 carriers can be an aspect of that pattern of entry, but it is not the  
8 sole factor. The price associated with compensation among certified  
9 carriers should be consistent with other prices, so that no additional  
10 undue bias is introduced into the system.

11  
12 Given the evolving market structure, I see rivalry among firms taking  
13 many different paths--advertising, diversity, service quality,  
14 differentiation, as well as pricing. The prices charged by various  
15 firms will necessarily be different, based upon their selected strategy.  
16 Their marketing strategy may well be influenced by their relative cost  
17 position in the market and the demands of their customer sets.  
18 Since different firms are likely to face different demand  
19 characteristics, especially in the evolving stages of the competitive  
20 market, there is no reason to believe that the resulting prices across  
21 the product line will be the same among companies. And it should  
22 be kept in mind that the price for compensation is, after all, just  
23 another price. Therefore, I believe that the correct principle is that  
24 prices should be based on the supply and demand characteristics  
25 of the respective firms.

1           While I believe that in principle, prices should be based upon cost  
2           and demand conditions of the firm, given the likely incremental costs  
3           of all firms, the resulting prices are likely to be rather close to each  
4           other in any event. Further, if, as MFS seems to believe, traffic will  
5           be in "balance," then as a practical matter, it may not much matter  
6           at all what the price is for mutual interconnection. So if the supply  
7           and demand conditions are approximately the same and the  
8           quantities of minutes are the same, then as a practical matter, it may  
9           prove to be an efficient outcome that the price of traffic termination  
10          will be the same for all companies involved.

11

12          **Q.    IN HIS TESTIMONY, MR. DEVINE CALLS FOR THE**  
13          **COMMISSION TO ESTABLISH AT LEAST ONE POINT WHERE**  
14          **ALL PARTIES WILL MEET TO EXCHANGE TRAFFIC WITHIN A**  
15          **LATA. DO YOU AGREE WITH THIS PROPOSAL?**

16          **A.**    I agree that all certified common carriers must interconnect with each  
17          other. However, there is no reason that these points of  
18          interconnection must all take place at a single location--the  
19          Designated Network Interconnection Point ("D-NIP") as Mr. Devine  
20          refers to it. Depending upon the distribution of customers and the  
21          facilities serving them, as well as the flow of traffic within a  
22          metropolitan area or LATA, the establishment of a single D-NIP may  
23          or may not be an efficient network arrangement. Therefore, in  
24          keeping with the principle of voluntary arrangements among carriers  
25          whenever possible, I disagree with Mr. Devine's proposed

1 Commission-mandated establishment of a D-NIP. The correct public  
2 policy is simply to require interconnection of all certified carriers and  
3 to allow for such carriers to negotiate the interconnection points  
4 between and among themselves. Indeed, this approach is more in  
5 keeping with Mr. Devine's own comment (at page 20 of his Direct  
6 Testimony) that "MFS-FL opposes any interconnection plan that  
7 mandates too specifically where interconnection should take place."  
8 There is no reason to mandate that all certified carriers must  
9 establish a D-NIP. If a D-NIP is the efficient arrangement for  
10 interconnection, then it will be adopted without a Commission  
11 requirement to do so.

12

13 **Q. WOULD YOU PLEASE SUMMARIZE YOUR TESTIMONY?**

14 **A.** I have addressed in some detail as to how the long-term  
15 intercompany compensation mechanism--price--should be structured  
16 between and among rival carriers in the marketplace. To do so in  
17 context, I have also discussed what the long-term, efficient price  
18 structure should look like, since the compensation mechanism  
19 between rival companies is but a part, albeit a critical part, of that  
20 overall price structure. In addition to establishing a framework for  
21 evaluating what an efficient price for local interconnection is,  
22 GTEFL's long-run pricing policy readily and efficiently  
23 accommodates unbundling and wholesale/retail distinctions among  
24 clients and carriers, eliminates the need for use and user distinctions  
25 and prohibitions on resale of LEC services, and promotes economic

1 efficiency in the marketplace. This policy calls for the  
2 implementation of an integrated set of prices which are nonlinear and  
3 contain multiple parts to the rate structure, based upon the supply  
4 and demand characteristics facing the LEC.

5

6 While wholesale adoption of GTEFL's pricing policy may be  
7 infeasible today, the Commission can take a significant first step in  
8 establishing an efficient framework for competition by implementing  
9 GTEFL's ORP approach for intercompany compensation, rather than  
10 the bill and keep method suggested by Mr. Devine. More  
11 specifically, the Commission should proceed to develop a long-term  
12 intercompany compensation plan by taking the following actions:

- 13 1) Adopt an ORP framework;
- 14 2) Require independent development of prices for compensation  
15 purposes by each company;
- 16 3) Require each company (or an administrator) to determine net  
17 compensation;
- 18 4) Require net compensation payments to be made among  
19 companies based on known prices for the difference in traffic  
20 flow and price.

21

22 If step (4) results in zero among a given pair of companies, then no  
23 payment is made between those two for that month and the special  
24 case of "bill and keep" will have resulted. In my opinion, however, it  
25 is rather unlikely that traffic between *all* carrier pairs will be in

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

balance, so that net compensation will take place.

It is also important to realize that the price level specified in step (2) is important, even if the traffic is in balance and no compensation actually flows between a given pair of companies. Therefore, I have suggested that the appropriate price for the termination of local traffic for a rival local carrier is in the range of those established for local measured service. In the case of GTEFL, the use of the Company's existing switched access prices less the carrier common line and the residual interconnection charge satisfy this objective without placing MFS in a price squeeze. This will move significantly in the direction of establishing an efficient pricing arrangement in a competitive marketplace.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

**A. Yes.**

**RESUME**

**January, 1996**

**EDWARD C. BEAUVAIS, III  
925 Lakewood Drive  
Southlake, Texas 76092**

**Office: (214) 718-5464 Fax: (214) 718-6392  
Home: (817) 488-0707**

**EDUCATION:**

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

**FIELDS:**

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

**CURRENT POSITION:**

Senior Economist  
Regulatory and Governmental Affairs  
GTE Telephone Operations  
Irving, TX 75038  
(October, 1992 to Present)

**PREVIOUS POSITION:**

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

**PREVIOUS POSITION:**

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

**PREVIOUS POSITION:**

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

**PREVIOUS POSITION:**

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

**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  
Illinois Commerce Commission  
California Public Utilities Commission  
Kentucky Public Service Commission



South Carolina Public Service Commission  
Georgia Public Service Commission  
Florida Public Service Commission  
Corporation Commission of Oklahoma  
Indiana Utility Regulatory Commission  
Michigan Public Service Commission  
Iowa Utilities Board  
Pennsylvania Public Utility Commission  
Public Utility Commission of Texas  
Public Utility Commission of Oregon  
Washington Utilities and Transportation Commission  
Alabama Public Service Commission

**Other Regulatory Appearances:**

NARUC Technical Education Conference for Commissioners  
New England Council of Public Utility Commissioners  
Alabama Public Service Commission Telecommunications Conference  
Virginia State Corporation Commission Annual Conference  
Instructor - NARUC Annual Regulatory Studies Program; Michigan State University  
South Carolina Public Service Commission Annual Conference  
Current Policy Issues Forum for Commissioners, NARUC

**Legislative Testimony:**

Before the Indiana House Commerce Committee  
Before the Illinois Public Utilities Committee  
Before the Florida House of Representatives  
Before the Virginia General Assembly

**PRESENTATIONS and PUBLICATIONS:**

"Econometric Estimation of Peak Electricity Demands", Journal of Econometrics, 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", Paper 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, Kansas City, MO;

"Forecasting Peak Electricity Demands", Paper presented to the Electric Power Research Institute, April, 1977, Aspen, CO;

"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)

"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 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 **Perspectives on Local Measured Service**, TIW, October, 1979;

"Usage Sensitive Pricing", **Proceedings of the 5th Annual Symposium on Rate making Problems of Regulated Industries**, 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 **Challenges for Public Utility Regulation in the 1980s**; Michigan State University: December, 1980; also appearing in **Proceedings of Workshop on Telecommunication Issues**; 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 Peak Load Pricing: European Lessons for US Energy Policy", **The Southern Economic Journal**, 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);

"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 Bellcore 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.

"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; Tennessee 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. Appearing in **Regulatory Responses to Continuously Changing Industry Structures**, Michigan State University. 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.

"Expanded Interconnection and Access Competition: 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 Washington Telecom Week, 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?," Teletimes (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," Utilities Policy (November, 1993), (with Virginia Sheffield)

"Fiber To The Cow?? Fiber's Role In The Competitive Marketplace," paper presented to the 16th Annual Newport Conference on Fiberoptics Markets, October 19, 1993, Newport, Rhode Island.

"Regulation and Competition: Bet You Can't Have Just One," paper presented to the University of Kansas 1993 Fall Stakeholders Symposium on Telecommunications, November 18, 1993, Lawrence, Kansas.

"Competition and Rivalry in Telecommunications Markets: Definitional Issues," invited paper presented to NARUC Winter Meetings, February 24, 1994; Washington, D.C.

"Telecommunications Regulation Between Technological Dynamics and Public Policy Goals," paper presented to Current Policy Issues Forum - 19 West, Michigan State University, July 25, 1994, San Diego, California.

"On Market Share & Market Power in Telecom Markets," New Telecom Quarterly (Fourth Quarter, 1994) Volume 2, Number 4, pp. 48 - 52.

"Pricing for Competition: Markets, Politics, Economics & Public Policy," paper presented to TeleStrategies Conference, June 2, 1995, Washington, D.C.

**COURSES TAUGHT:**

Principles of Economics  
Introduction to 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  
Who's Who in the West

Beta Gamma Sigma  
Who's Who in the East

**PROFESSIONAL AFFILIATIONS:**

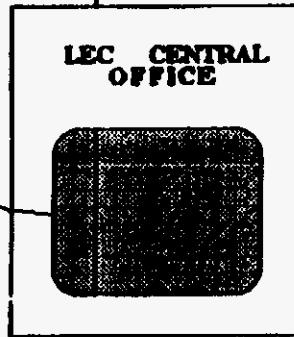
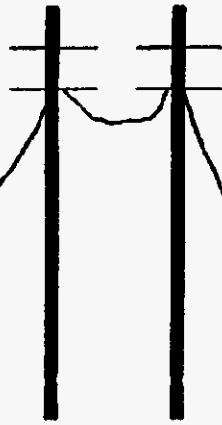
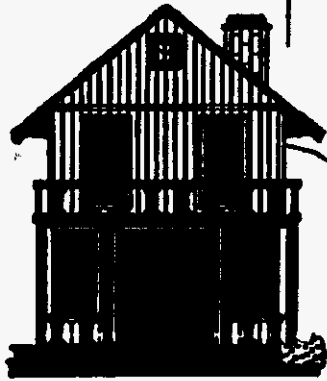
American Economic Association  
Southern Economic Association  
Western Economic Association  
Public Choice Society  
Policy Analysis Committee - United States Telephone Association

# REPRESENTATIVE RATE STRUCTURE

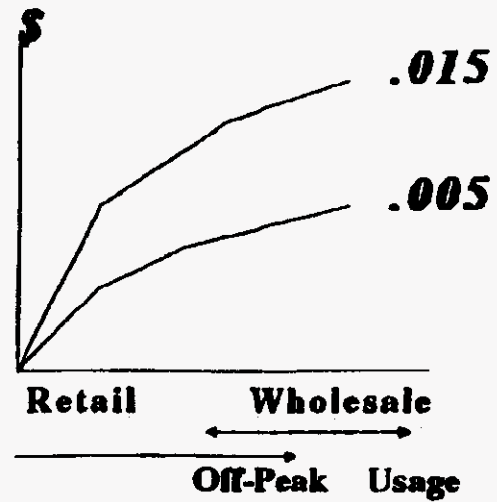
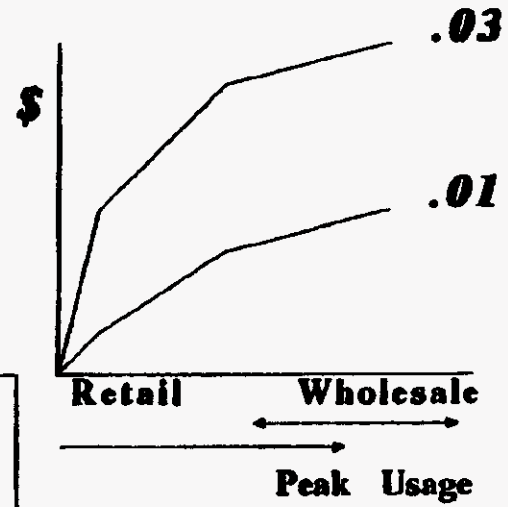
**DEREGULATED**

**NETWORK ACCESS**

**NETWORK USAGE**



**MONTHLY FLAT RATE**



**MARKET or LATA BOUNDARY**



### NONLINEAR MULTIPART TARIFF

