

ORIGINAL
FILE COPY

BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION

DOCKET NO. 961537-TP
FLORIDA ARBITRATION
GTE

REBUTTAL TESTIMONY OF
DR. MARVIN H. KAHN

ON BEHALF OF
AMERICAN COMMUNICATIONS SERVICES, INC.

ACK _____
AFA _____
APP _____
CAF _____
CMU Green
CTR _____
EAG _____
LEG 1
LIN 3
OPC _____
RCH _____
SEC 1
WAS _____
OTH _____

FEBRUARY 1997

DOCUMENT NUMBER-DATE
01459 FEB-75
FPSC-RECORDS/REPORTING

TABLE OF CONTENTS

	<u>Page</u>
I. Introduction and Summary	1
II. Cost Study Review	6
Summary of GTE's Cost Studies	6
Retail Costs	13
Distribution of Cable and Wire Between Aerial, Buried and Underground	15
Depreciation	16
Fill Factors for Cable and Wire Facilities	19
Support Structure	26
III. Efficient Component Pricing Rule (ECPR)	29
IV. Joint and Common Costs	40
V. Interim Loop Rates	44
VI. Number Portability	49

EXHIBITS

4	Hatfield Default Proxies for GTE-Florida
5	Comparison of Company Proposed Depreciation Rates with FCC-Prescribed Rates
6	Fill Factor Analysis
7	Comparison of GTE-FL and BellSouth-FL Loop Costs by Density Zone Hatfield Model Results Using Hatfield Density Zones
8	Comparison of GTE-FL and BellSouth-FL Costs by Density Zone BCM2 Model Results Using BCM2 Density Zones
9	Comparison of GTE-FL and BST-FL BCM2 Cost Results BCM2 Model Using GTE's Cost Study Density Zones
10	GTE-FL Proxy Loop Rate
11	Calculation of Rates and Charges for Interim Number Portability

TABLE OF CONTENTS

	<u>Page</u>
I. Introduction and Summary	1
II. Cost Study Review	6
Summary of GTE's Cost Studies	6
Retail Costs	13
Distribution of Cable and Wire Between Aerial, Buried and Underground	15
Depreciation	16
Fill Factors for Cable and Wire Facilities	19
Support Structure	26
III. Efficient Component Pricing Rule (ECPR)	29
IV. Joint and Common Costs	40
V. Interim Loop Rates	44
VI. Number Portability	49

EXHIBITS

4	Hatfield Default Proxies for GTE-Florida
5	Comparison of Company Proposed Depreciation Rates with FCC-Prescribed Rates
6	Fill Factor Analysis
7	Comparison of GTE-FL and BellSouth-FL Loop Costs by Density Zone Hatfield Model Results Using Hatfield Density Zones
8	Comparison of GTE-FL and BellSouth-FL Costs by Density Zone BCM2 Model Results Using BCM2 Density Zones
9	Comparison of GTE-FL and BST-FL BCM2 Cost Results BCM2 Model Using GTE's Cost Study Density Zones
10	GTE-FL Proxy Loop Rate
11	Calculation of Rates and Charges for Interim Number Portability

BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION

FLORIDA ARBITRATION
GTE
REBUTTAL TESTIMONY OF
DR. MARVIN H. KAHN

I. Introduction and Summary

1 Q. ARE YOU THE SAME DR. MARVIN H. KAHN WHO HAS CAUSED DIRECT
2 TESTIMONY TO BE FILED IN THIS PROCEEDING?

3 A. Yes.

4 Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

5 A. This testimony is to respond to positions taken and analyses provided by GTE in its direct
6 testimony. There are several discrete issues that will be addressed.

7 First, it is ACSI's position that Company-specific cost studies are appropriate for the
8 setting of cost-based rates for unbundled network elements. On February 4, GTE did
9 provide cost study results for a number of elements and services which GTE describes as
10 being based on TELRIC and TSLRIC procedures. We reviewed these documents in the
11 limited time available. I report on the results of that review.

12 Second, I comment on the basis of the GTE pricing proposals, as contained in its
13 testimony. Among other things, the GTE pricing proposals are based upon the
14 application of ECPR and its proposed measurement of joint and common costs. I discuss
15 the merits and identify the inefficiencies of applying ECPR as proposed by GTE. In

1 addition, I discuss the difficulties associated with its measurement of and proposed
2 allocation of joint and common costs.

3 In my direct testimony, I provided an analysis of GTE-Florida operations using the
4 Hatfield Model. That analysis was based upon using certain BellSouth data. I have been
5 able to update that analysis using GTE data. This analysis forms the basis of my
6 recommendation for an interim loop rate.

7 Finally, I also comment on GTE's proposed interim number portability (INP) rate in
8 light of my proposal and the FCC requirement of competitive neutrality.

9 Q. PLEASE EXPLAIN THE REASON FOR YOUR UPDATE OF THE HATFIELD
10 MODEL RESULTS FOR UNBUNDLED LOOP ELEMENTS.

11 A. The Hatfield Model results were presented with my direct testimony. These results were
12 those filed on September 10, 1996 with the FCC.¹ As noted in that testimony, these
13 results were based upon BellSouth data. We viewed it reasonable to use BellSouth data
14 as a first approximation for GTE for at least two reasons. First, BellSouth serves more
15 than two and one-half times many loops in Florida as does GTE. This suggests that
16 BellSouth service covers the same type of territories as does GTE. Second, as explained
17 in further detail later in my testimony, we would expect the costs incurred by BellSouth
18 and GTE to be similar when serving similarly situated exchanges. Since ACSI is
19 proposing that loop rates be deaveraged based upon density zones, the cost per density
20 zone for BellSouth and GTE will clearly be similar. For these reasons, it was felt that
21 costs based upon BellSouth data for individual geographic density zones would be similar
22 to those derived using GTE data. Differences in statewide averages result only because
23 similar density zone costs would be weighted differently due to the difference in
24 distribution of loops across these density zones.

1 Since the filing of my direct testimony, we have prepared cost estimates using GTE
2 data. Hence, first best approximations are no longer necessary. This information is
3 provided in my Exhibit 4.²

4 Q. HOW DO THESE GTE BASED COSTS COMPARE WITH THOSE YOU FILED
5 EARLIER USING BELLSOUTH DATA?

6 A. As noted above, the costs by density zone for BellSouth and GTE are indeed similar. The
7 GTE costs tend to be less than or approximately equal to the BellSouth costs per each
8 geographic density zone. This is the case whether a three density zone or six density
9 zone formulation is used for geographic deaveraging. The differences are greatest in the
10 least dense areas. Over the remaining zones, the GTE costs and BellSouth costs are very
11 similar. Indeed, the costs found for either company can be used safely as an
12 approximation of the costs of the other.

13 Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

14 A. My testimony is organized around the issues addressed and presents the conclusions I
15 have drawn from reviewing the cost study and other information provided by GTE. In
16 Section II, which immediately follows, I review the cost study information provided by
17 GTE. I explain why, in my opinion, this study fails to meet a burden of proof test, and
18 should not be relied upon by the Commission to establish cost based rates. In addition, I
19 identify a number of problems with the study methodology and/or its application. Given
20 the limited amount of time available to evaluate the Company's cost studies and the
21 failure of the Company to provide adequate documentation, it was not possible to
22 perform a complete evaluation of those studies. The problems identified are only the
23 more obvious and easily identifiable. These problems may not be overwhelming under
24 normal circumstances. However, given the absence of study documentation and

²Exhibits 1-3 are included in my direct testimony.

1 supporting workpapers, there is no indication of the magnitude of the problem at hand,
2 and often no direction as to the appropriate method of dealing with it. For these and other
3 reasons, I recommend that the Commission not rely on the GTE studies for establishing
4 cost based rates in this proceeding.

5 In Section III, I deal with the matter of Efficient Component Pricing Rules, or ECPR.
6 With the stay of the FCC Order, the Company has reargued its position with regard to
7 ECPR. I note that ECPR is an inefficient method of pricing and should not be adopted by
8 the Commission.

9 In Section IV, I deal with the matter of joint and common cost recovery. I explain
10 why GTE's position that joint and common costs exceed 55 percent of its direct costs is
11 simply not a defensible position. The fact that the Company has on its books a volume of
12 current revenues that exceed estimates of forward-looking direct costs, and amount to
13 \$455 million, is not at all relevant. What is relevant is the volume of joint and common
14 costs that are forward-looking and efficiently incurred. In my direct testimony, I pointed
15 to a competitive market surrogate for the appropriate mark-up to recover joint and
16 common costs. In this testimony, I provide additional empirical information in support of
17 that same 15 percent mark-up.

18 Next, I turn to matters dealing with establishing interim prices. In Section V, I
19 present updated estimates of cost for the unbundled loop for GTE based on GTE specific
20 results from the Hatfield Model. I recommend that these Hatfield Model estimates be
21 adopted on an interim basis. In that section, I also explain why the forward-looking costs
22 incurred by GTE and BellSouth are similar and, therefore, why the Commission's
23 BellSouth proxy should serve as the maximum rate for unbundled loops in the event that
24 the Commission does not accept the recommendation to adopt the Hatfield based rates.

1
2
3

Finally, in Section VI, I turn to the matter of interim number portability. I show why the Company's cost recovery mechanism is not competitively neutral and provide estimates of rates which are consistent with the FCC's guidelines.

II. Cost Study Review

1

2 Summary of GTE's Cost Studies

3 Q.

WHAT ISSUES ARE ADDRESSED IN THIS SECTION OF YOUR
4 TESTIMONY?

5 A.

In this section of my testimony, I report on my review of the pricing methodology and the
6 cost studies submitted by GTE. I have also been asked to assess whether these studies are
7 consistent with the pro-competitive goals of the Telecommunications Act of 1996 (Act)
8 and the criteria adopted by the Federal Communications Commission (FCC)³ for
9 establishing the "forward-looking economic cost" of unbundled elements. Particularly, I
10 have been asked to focus on cost information pertaining to unbundled loops, and
11 comment on the extent to which GTE has shown that the proposed rates for these
12 elements are efficient and do not exceed the forward-looking cost of providing that
13 unbundled element.

14 In this section, I will discuss the failure of GTE to provide the documentation and
15 cost data necessary to adequately evaluate the proposed studies. In addition, I will
16 discuss certain application specific concerns identified in the materials that were
17 provided. Specifically, I will address GTE's failure to account for avoided retail costs in
18 its TELRIC estimate, the distribution of cable and wire between aerial, buried and
19 underground, the inappropriateness of the fill factors used in the studies, the impact of
20 using Company's use of depreciation rates which are inconsistent with the requirements
21 of the FCC Order, the inconsistency in the cost of capital used in the studies and the
22 failure to properly account for the fact that loop support facilities are used for purposes
23 other than the provision of GTE loops.

³Implementation of Local Competition Provision of the Telecommunications Act of
1996, First Report and Order CC Docket 96-98, FCC 96-325, Appendix B-Final Rules (released
Aug. 8, 1996) ("First Report and Order" or "FCC Order").

1 Q. WHAT COST MATERIALS HAS GTE PROVIDED?

2 A. During the course of the negotiations with ACSI, GTE provided no cost data. Although
3 GTE took the position that the prices being offered were cost based, in response to
4 requests from ACSI for cost information, none were provided.

5 On February 4, 1997, GTE provided a number of cost study volumes. These
6 volumes identify the Company's estimates of direct incremental costs (TSLRIC and
7 TELRIC) for various network elements and services, as well as common costs. These
8 volumes are identified as GTE Florida TSLRIC Workpapers and as Supplemental
9 Materials.

10 Q. DO THESE STUDIES SATISFY THE REQUIREMENTS OF THE ACT OR THE
11 FCC ORDER?

12 A. No, these studies fail to satisfy these requirements for at least two reasons. First, these
13 documents do not provide information that can be relied upon to produce cost estimates
14 that are consistent with economic or regulatory principles, or with the requirements of the
15 1996 Act or the FCC Order. There are a number of general concerns with the study
16 procedure.

17 Second, there are a number of more specific problems with the cost study which
18 question the accuracy of the numeric results. While no one of these may necessarily be
19 fatal, the absence of adequate documentation makes it impossible to determine the
20 magnitude of the resulting problem and the method by which it can be corrected. These
21 difficulties include the estimates of and treatment of (1) retail costs, the method by which
22 the distribution of aerial, buried and underground facilities was determined and applied,
23 (3) depreciation rates used, (4) the fill factors used, and (5) the treatment of support
24 structures in the costing methodology. There are also concerns with the methods used to
25 measure as well as to recover joint and common costs.

1 Q. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR REVIEW OF THESE
2 STUDIES?

3 A. GTE has provided a series of documents focusing on network elements and their costs.
4 Primarily, the documents consist of tables depicting results, but do not include
5 substantive information on the study assumptions and the data provided. The information
6 provided is far too limited to allow for an independent assessment of the reasonableness
7 of the methodology or accuracy of the resulting calculations. Consequently, the cost
8 information provided is not of the type that this Commission can rely upon to establish
9 cost based rates which meet the requirements of the Act or the standard established by the
10 FCC in its Order. This is in addition to the specific concerns identified and discussed
11 below.

12 Q. WHAT IMPACT DOES THE ABSENCE OF ADEQUATE COST STUDY
13 DOCUMENTATION HAVE ON YOUR INVESTIGATION?

14 A. The absence of adequate cost study documentation makes it impossible to undertake a
15 complete examination of the GTE data and make a reasonable assessment of the GTE
16 study results. The importance of adequate cost study information and documentation was
17 recognized in the Act and by the FCC. For instance, the Act requires that rates
18 established, either through an arbitration or a rate proceeding, must be cost based. The
19 Act further requires that if cost data are to be used in an arbitration process, reasonable
20 access to these data must be made to the competing carrier and to the state commission.⁴
21 The FCC noted the undesirable consequences of asymmetric access to these types of
22 critical information:

23 We note that incumbent LECs have greater access to the cost
24 information necessary to calculate the incremental cost of the
25 unbundled elements of the network. Given this asymmetric access

⁴47 U.S.C. §252 (b)(4)(B).

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
26
27
28
29
30
31
32
33
34

to cost data, we find that incumbent LECs must prove to the state commission the nature and magnitude of any forward-looking costs that it seeks to recover in the prices of interconnection in unbundled network elements.⁵

The FCC also underscored the importance of having the record in any arbitration proceeding contain the relevant cost study information relied upon by the incumbent.

The FCC noted:

Any state proceeding conducted pursuant to this section shall provide notice and an opportunity for comment to affected parties and shall result in the creation of a written factual record that is sufficient for purposes of review. The record of any state proceeding in which a state commission considers a cost study for purposes of establishing rates under this section shall include any such cost study.⁶

In addition, the Recommended Decision of the Federal-State Joint Board on Universal Service similarly concluded that the costing model for estimating forward-looking economic costs should be open, available to all parties and that all underlying data should be verifiable.⁷

The model and all underlying data, formulae, computations, and software associated with the model should be available to all interested parties for review and comment. All underlying data should be verifiable, engineering assumptions reasonable, and outputs plausible.

The model should include the capability to examine and modify the critical assumptions and engineering principles. These assumptions and principles include, but are not limited to, the cost of capital, depreciation rates, fill factors, input costs, overhead adjustments, retail costs, structure sharing percentages, fiber-copper cross-over points, and terrain factors. The models should also allow for different costs of capital, depreciation, and expenses for different facilities, functions or elements.

⁵FCC Interconnection Order, ¶680.

⁶FCC Interconnection Order, Final Rules, §51.505 (e)(2) (Emphasis added).

⁷CC Docket No. 96-45, Recommended Decision, Adopted November 7, 1996, ¶277, Criteria 7 and 8.

1 The Joint Board went on to conclude that, while no specific model was endorsed, it
2 virtually rejected the Cost Proxy Model (CPM) sponsored by Pacific Telesis on the basis
3 that it was "suffering from the flaw that significant amounts of input values and
4 information are considered proprietary."⁸

5 From an analytic perspective, these statements make clear the importance of
6 undertaking a complete examination of the incumbent's cost model and the data used to
7 construct the basis for establishing costs and cost based rates. At the same time, these
8 statements indicate that cost information and cost documentation must be provided in a
9 manner that allows reasonable and comparable access to the cost studies to all parties, as
10 well as including the details of the cost studies themselves as part of the record.

11 GTE's failure to provide the detailed information necessary to properly review its
12 cost studies, as required by the Act to make a proper, reasonable evaluation, clearly
13 diminishes the ability of any participant to make use of that information in establishing
14 costs and corresponding rates for unbundled network elements.

15 Q. WOULD YOU PLEASE SUMMARIZE THE PROCEDURE USED BY GTE IN
16 ESTIMATING COSTS FOR UNBUNDLED LOOP ELEMENTS.

17 A. Though the cost information provided is limited, it does indicate that the overall structure
18 of the study is similar to that used by other LECs. The model begins by identifying
19 investment by type of plant. As it applies to unbundled loops, plant types include cable
20 and wire, support structures (poles and conduit), circuit equipment and central office
21 equipment. The investment information was identified and organized on a plant account
22 basis. In other words, cable and wire information was organized by whether it was aerial,
23 buried or underground, not by whether it was feeder or distribution. Various annual cost

⁸*ibid.*, ¶279. The Joint Board did not consider the CPM model because it was filed late, but specifically rejected the concept of a model that was proprietary.

1 factors (ACFs) were identified. Factors were developed for capital costs (depreciation,
2 return and taxes), as well as O&M. These factors were applied to the relevant investment
3 estimates to obtain annual expense levels. The expense levels, by plant account, were
4 summed to equal the annual (or monthly) loop costs.

5 Loop costs were identified separately based upon central office size (large, medium
6 and small) and loop length (ranging from 1 kft. to over 12 kft, at 1 kft. intervals). Costing
7 parameters were identified and presented for each of these central office size/loop length
8 combinations. These data were then summed and averaged to obtain information by
9 central office size and then on a statewide basis.

10 Q. HAVE YOU BEEN ABLE TO VERIFY THE REASONABLENESS OF THE
11 COST METHODOLOGY OR ACCURACY OF THE RESULTS PRESENTED?

12 A. No. As noted above, GTE provided cost study results, not the cost studies themselves. In
13 fact, there is a virtual absence of data that would allow the methodology used to be
14 examined and tested. There were no inputs, study assumptions or study algorithms
15 provided.

16 Consider, for instance, the two wire loop cost study as a case in point. This is
17 included in Book 1, Tab 4 of the TSLRIC Workpapers and of the TSLRIC Supplemental
18 Materials. Page A-9 of the workpaper⁹ provides a spreadsheet showing some of the
19 development of cost estimates for a low "density/size" central office with a specific loop
20 length. Consider page A-9, for example. The information shown here first identifies
21 equipment investment by USOA account, as well as the annual cost factors (ACF) and
22 the resulting annual and monthly costs. The costs by USOA account are then added to a
23 total cost shown at the very bottom of the page for that specific loop length characteristic.

⁹See also page 9 of Supplemental Materials.

1 These equipment investment items are obviously critical to the cost calculations.
2 The primary backup for this information for this sample loop characteristic is found at
3 page 52 of Tab 4 in the volume entitled GTE Florida TSLRIC Supp. Materials, Book 1.
4 However, what is reported there under "Plant Description" is simply a restatement of the
5 very same equipment investment results, with no indication of the basis by which they
6 were determined. Compare, for example, USOA account 2423.10 (buried metallic cable).
7 The backup reported for this category under "Plant Description" is simply the same
8 numbers which appear at lines 15-18 of page A-9. No further backup is provided. As
9 noted, the ACFs used to calculate the various capital costs and O&M expenses are shown.
10 There is, however, no backup provided allowing one to review the development of these
11 factors.

12 In short, the information provided allows little more than the ability to check GTE's
13 arithmetic. There is no opportunity to verify the reasonableness of the primary inputs, the
14 reasonableness of the procedures used or assumptions made or the accuracy of any of the
15 calculations made.

16 Q. WHAT CONCLUSIONS DO YOU DRAW FROM YOUR REVIEW OF THE GTE
17 COST STUDY INFORMATION PROVIDED?

18 A. The absence of workpapers and support documentation for the cost studies prevents the
19 Commission from verifying the reasonableness and accuracy of the cost study results
20 presented. Indeed, the information provided is nothing more than results. With these
21 data, a review is limited to little more than checking the Company's arithmetic with
22 regard to some portions of its study. These data do not satisfy the requirements of the
23 Act or the FCC. Consequently, it would appear that this cost study information is not of
24 the type that can be relied upon by the Commission in establishing cost based rates.

1 Q. YOU INDICATED CONCERN WITH OTHER ASPECTS OF THE COST STUDY
2 INFORMATION AND DOCUMENTATION AS PROVIDED. WHAT ARE
3 THOSE?

4 A. The method used and the information provided by GTE raises a large number of other
5 questions as to the reasonableness and accuracy of the cost study procedure. While no
6 one of these may be fatal, the absence of appropriate documentation simply makes it
7 difficult, if not impossible, to determine the magnitude of the resulting problem and to
8 attempt any correction for it.

9 As noted, these problems deal with the estimates of retail costs, the failure of the
10 Company to adequately account for the sharing of support structures, depreciation and
11 cost of capital, the fill (and other) factors employed, the basis on which the Company
12 determined the distribution of loop plant between aerial, underground, and buried
13 facilities.

14 Retail Costs

15 Q. WHAT IS YOUR CONCERN WITH REGARD TO THE INCLUSION OF
16 RETAIL COSTS?

17 A. A properly structured TELRIC identifies the costs associated with providing unbundled
18 network elements, not end use services. Hence, end user "retail" related costs are not to
19 be included in the TELRIC.

20 Q. WHAT COSTS CONSTITUTE THE RETAIL RELATED COSTS THAT ARE TO
21 BE EXCLUDED?

22 A. There are two distinct sets of retail related costs that are avoided when providing
23 unbundled network elements rather than end user services. The first set includes those
24 costs that are avoided when service is provided on a resale basis. Obviously, the facilities
25 based entrant and the reseller will have to provide certain functions which are applicable

1 to both. These are sales, product management, billing and other indirect and overhead
2 activities that the ILEC will avoid whenever it functions as a wholesaler, whether to a
3 reseller or to a facilities based carrier.

4 There is a second and additional set of costs which will be avoided when the ILEC
5 functions as a wholesaler of unbundled elements to facilities based carriers. When
6 network elements are taken by a CLEC, many of the engineering and network
7 management activities will be avoided by the ILEC or they will be transferred to CLEC.
8 These costs are in addition to those resale related avoided costs discussed above. Hence,
9 in the context of an unbundled loop cost study, the appropriate set of "retail" related,
10 avoided costs will necessarily be greater for a facilities-based carrier than that applicable
11 to resellers of wholesale services.

12 Q. HOW SHOULD THESE RETAIL RELATED COSTS BE DETERMINED?

13 A. The cost estimates for unbundled network elements are to be determined on a total
14 element basis. Hence, the proper measure of retail costs are those avoided assuming the
15 LEC provides only unbundled elements and no end use services.

16 Q. WHICH COSTS OR EXPENSES CAN BE EXPECTED TO BE AVOIDED?

17 A. Avoided costs will include customer operations expenses, network operations and testing,
18 as well as the indirect costs that support these activities. It is also necessary to recognize
19 that a change in company size will be accompanied by a change in the volume of
20 overheads. Stated differently, overhead costs will be avoided also.

21 Q. HAS GTE REMOVED THE APPROPRIATE RETAIL RELATED COSTS FROM
22 ITS TELRIC STUDY?

23 A. No. Included in its workpapers is a cost study report providing its estimate of the
24 wholesale discount for GTE retail services.¹⁰ This estimate of the retail discount is

¹⁰Tab 20, GTE Florida TSLRIC Workpapers.

1 significantly below the FCC proxy or the discounts approved by the vast majority by state
2 commissions which have addressed the issue. However, due to the lack of supporting
3 data and time, it was not possible to verify that GTE's loop TELRIC studies excluded
4 retail costs based on the above mentioned percentage or whether retail costs were
5 excluded at all. In response to ACSI's data requests, GTE responded only that when it
6 adjusts annual cost factors to remove retail costs, it is more than offset by a minor error in
7 the cost of money and the assumed standard for longer loop length.¹¹

8 Q. IF THE COST STUDIES HAVE BEEN ADJUSTED TO REFLECT GTE'S
9 ESTIMATED RETAIL DISCOUNT, ARE YOUR CONCERNS ADEQUATELY
10 ADDRESSED?

11 A. No. As I mentioned, the estimated retail discount reported in GTE's cost studies is
12 significantly lower than the discounts generally considered reasonable by the FCC and
13 the states which have approved discount rates in various arbitration proceedings.
14 Therefore, even if GTE has made an adjustment based on its retail discount cost study,
15 that adjustment is unlikely to be sufficient. That is, GTE's TELRIC has not adequately
16 identified the retail costs which should be excluded in estimating the costs associated
17 with providing network elements.

18 Distribution of Cable and Wire Between Aerial, Buried and Underground

19 Q. WHAT IS YOUR CONCERN WITH REGARD TO THE DISTRIBUTION OF
20 OUTSIDE PLANT FACILITIES BETWEEN AERIAL, BURIED AND
21 UNDERGROUND IN THE UNBUNDLED LOOP STUDY?

22 A. The cost associated with cable and wire investment can be from 60 to 80 percent of total
23 loop costs. Further, there is a significant difference in the cost per foot (including support

¹¹1st Request for Production of Documents, Response 18. The response discusses annual cost factors, but does not address investment.

1 structures) of aerial, buried and underground cable. Nevertheless, there is no discussion,
2 documentation or justification provided for the various cable and wire investment levels.

3 Consider the back-up for investment/cost in a low "density/size" office, referred to
4 above. The percentage distribution of investments in aerial, underground and buried
5 cable is shown under the heading "Secondary Loop Characteristics." However, as noted,
6 no justification or even analysis is provided indicating the basis for these distributions.
7 Next, focus on the data identified under the heading "Outside Plant Distribution." This
8 identifies the length in feet of the various facility types (aerial, underground and buried).
9 Significantly, the distribution of the length of cable facilities as shown here is identical to
10 the distribution by investment shown above. However, the cost per foot differs across
11 these types of facilities, meaning that the distribution by feet and the distribution by
12 dollars are not the same. Again, no explanation for this is provided, nor is there any
13 indication of how it is used in the context of the cost study.

14 Depreciation

15 Q. WHAT DEPRECIATION RATES HAS GTE USED IN ITS TSLRIC/TELRIC
16 STUDIES?

17 A. GTE has used depreciation rates that are based on shorter service lives than those last
18 approved by the FCC.

19 Q. WERE THESE RATES ACCOMPANIED BY ANY EXPLANATION OR
20 JUSTIFICATION FOR DEPARTING FROM THE CURRENTLY PRESCRIBED
21 DEPRECIATION RATES?

22 A. GTE simply provided depreciation rates without any explanation as to why these rates are
23 justified. GTE has indicated only that due to time constraints in preparing cost studies,

1 GTE used its estimate of 1994 economic lives which was based on a combination of
2 industry studies and forecasts in the depreciation rates.¹²

3 Q. IS THERE ANY JUSTIFICATION TO SHORTEN SERVICE LIVES AS GTE
4 HAS PROPOSED?

5 A. No. It is necessary to recognize that there are several types of changes to consider. First,
6 it is possible that the Act and the resultant changes in industry structure may effect
7 facility service lives. For instance, an increase in competition may result in a more rapid
8 retirement of analog and certain smaller, older digital switches. However, if the study is
9 properly based on forward-looking technologies, these switches are not included and the
10 effects on them are not relevant to the study. These depreciation impacts, if they exist,
11 relate to embedded and not forward-looking, incremental costs. The same applies to
12 cable and wire facilities. Competition may lead to the more rapid retirement of copper
13 plant in interoffice and feeder facilities. Again, with a cost study properly based on
14 forward-looking technology, there will be no copper in interoffice and only limited
15 amounts in feeder plant. The Act and any change in industry structure may effect the mix
16 of plant used, but not necessarily the service life of that plant.

17 Second, it is also necessary to recognize that any change in industry structure caused
18 by the Act may lead to an increase in the useful life of various facilities. For instance,
19 competitive entry often results in market niches receiving more attention. The result may
20 not be a monolithic network used to meet all service requirements. Instead, various
21 analog facilities may be in demand and their service life extended.

22 Third, recognize that the impacts of competition, whatever they may be, will not be
23 fully felt immediately. Competition and its effects will likely emerge slowly and initially

¹²1st Request for Production of Documents, Response 17.

1 only in selected markets. Hence, the full impact of competitive entry will be felt only
2 over some extended time period.

3 Finally, it is possible that the method used to gauge service life and incorporate it
4 into rate analysis may have changed. The development of remaining life depreciation
5 rates is necessarily backward looking and not relevant to an incremental cost study.
6 However, the methods used to determine "projection" lives (i.e. service lives) for the
7 relevant forward-looking technologies are themselves forward-looking, based on useful
8 or economic lives not engineering lives.

9 Q. DID THE FCC RECOGNIZE THE POTENTIAL NEED TO RECONSIDER
10 DEPRECIATION RATES FOR COST STUDY PURPOSES?

11 A. Yes, it did. As discussed above, the FCC noted that changes in the market and in
12 "business risk" may result in the need to reconsider depreciation rates. However,
13 recognizing this, the FCC concluded that currently prescribed depreciation rates provided
14 a reasonable starting point for cost study calculations. It further noted that the LEC
15 should bear the burden of demonstrating with specificity that the market conditions
16 required a change in depreciation lives and rates.¹³ GTE has not met this burden.

17 Q. WHAT ARE THE FCC REQUIREMENTS REGARDING DEPRECIATION
18 ASSUMPTIONS IN TELRIC STUDIES?

19 A. The FCC concluded that the currently authorized rate of return at the federal or state level
20 is a reasonable starting point for TELRIC calculations and that the LEC bears the burden
21 of demonstrating with specificity that the business risk faced in providing an unbundled
22 element would justify a different cost of capital or depreciation rate.¹⁴

¹³First Report and Order, ¶686 and 702.

¹⁴First Report and Order, ¶702.

1 GTE has not demonstrated with specificity that the business risk faced justifies a
2 different cost of capital or depreciation rate.

3 Q. HOW SHOULD THE COMMISSION APPROACH THE MATTER OF
4 DEPRECIATION?

5 A. For the limited purpose of this proceeding, the Commission should require the use of
6 currently approved service lives for forward-looking technologies. The intent is not to
7 prejudice the possible need to review these lives and the resulting depreciation rates.
8 However, there is no opportunity to do that in the context of this proceeding.

9 Q. HAVE YOU QUANTIFIED THE EFFECT OF INCLUDING THE PROPOSED
10 DEPRECIATION RATES IN THE TSLRIC AND TELRIC STUDIES?

11 A. Yes. Basing the cost studies on the rates GTE included in its studies rather than those
12 most recently approved by the FCC increases depreciation expense by 37 percent. My
13 calculation is shown on my Exhibit 5.

14 Q. WHAT COST OF CAPITAL HAS GTE USED IN ITS STUDIES?

15 A. GTE uses a cost of capital based on a 12.2 percent cost of common equity that it states is
16 the mid-point of the return on equity approved in its last PSC rate case, which occurred in
17 1993. This is a disingenuous 'application' of the FCC rules. GTE uses the most recently
18 authorized rate of return at the federal or state level for rate of return when it is to the
19 advantage of the Company, but elects to depart from the currently authorized federal or
20 state criteria when it is not.

21 Fill Factors for Cable and Wire Facilities

22 Q. PLEASE DEFINE WHAT IS MEANT BY FILL FACTOR.

23 A. Fill factor is the term used in telephony to describe the capacity utilization rate of
24 telephone network facilities. As with other industries, full or 100 percent utilization of
25 capacity (or a 100 percent fill) is typically not considered optimal and rarely occurs.

1 Excess or spare capacity can be a cost effective way of dealing with unexpected,
2 temporary or even future expected increases in demand, and/or unexpected or future
3 expected maintenance requirements. For instance, it is fully expected that a certain
4 fraction of the loop plant in place will become defective. With spare capacity, additional
5 facilities need not be deployed to allow service to continue with minimum interruptions.

6 In addition, investment in telecommunications equipment is often "lumpy." That is,
7 facilities come in discrete capacity sizes. If, for example, capacity is available in units of
8 100, then demand for 110 units will require deployment of 200 units of capacity. This is
9 referred to as modularity (actually the lack of it) and typically results in some degree of
10 excess or spare capacity.

11 There are also circumstances where it is less costly to inventory capacity in place
12 than in a warehouse. It is very costly to deploy additional distribution capacity to meet
13 each additional increment in demand for telephone service or for unbundled loops.
14 Instead, a telephone company operating efficiently would deploy capacity in sufficient
15 quantities to meet demand growth expectations over a number of years.

16 Q. HOW DO FILL FACTORS OR CAPACITY UTILIZATION RATES AFFECT
17 COST CALCULATIONS IN A TSLRIC OR TELRIC STUDY?

18 A. Fill factors are used by GTE in its TSLRIC/TELRIC analysis to determine the total
19 investment requirements of an unbundled network element. The cost of the network
20 element is adjusted upward to reflect the total investments and other related costs
21 involved, both for the element being used as well as the additional or spare capacity
22 required for efficient operations. For example, if a facility has a 66.7 percent fill factor
23 on a cost minimized, forward-looking basis, it will be two-thirds utilized and one-third
24 unutilized. If the investment requirement for each unit of the facility is one dollar, the
25 investment figure would be adjusted upward to a \$1.50 to account for efficiently incurred

1 spare capacity. The FCC described the adjustment for least cost, forward-looking fill
2 factors as follows:¹⁵

3 Per unit costs shall be derived from total costs using reasonably accurate
4 "fill factors" (estimates of the proportion of a facility that will be "filled"
5 with network usage); that is the per unit costs associated with a
6 particular element must be derived by dividing the total cost associated
7 with the element by a reasonable projection of the actual total usage of
8 the element.

9
10 Q. HOW DID GTE DETERMINE THE APPROPRIATE FILL FACTORS FOR ITS
11 UNBUNDLED LOOP FACILITIES?

12 A. GTE used fill factors based on historic, not forward-looking network configurations. The
13 fill factors were based on the network currently in place and the service demands placed
14 on that network. The factors used were not based on forward-looking estimates of
15 facility costs, technology or best engineering practices.¹⁶

16 Hence, the utilization rates included in the TELRIC study are based on actual
17 utilization rates at specific recent dates, which means they are tied to the current network,
18 in place technology and current service demand expectations. GTE may be of the view
19 that current fill factors are representative, given the embedded technology in the network.
20 If so, this aspect of the analysis draws on historic investment decisions, not forward-
21 looking data.

22 Q. WHAT ARE THE CONCERNS WITH USING EMBEDDED FILL FACTORS?

23 A. There are two interrelated concerns. First, embedded factors are designed to recover
24 revenue requirements associated with historic investments, not the forward-looking costs

¹⁵First Report and Order, ¶682.

¹⁶1st Request for Production of Documents, Response 19; GTE used the total number of working cable pairs divided by the total number of installed cable pairs to estimate a 40.08 percent fill factor for Florida and apparently a 55 percent fill factor GTE-wide for voice grade loops. The 55 percent fill factor was apparently used in the TSLRIC studies. This is an actual or historical calculation, not based on forward-looking assumptions.

1 of a forward-looking network. A TSLRIC or TELRIC study is to focus on the forward-
2 looking network. Second, with embedded factors, any capacity that has been deployed to
3 permit the future economic provision of advanced services, such as video, will
4 necessarily be captured. The resulting cost is not attributable to monopoly network
5 elements or even monopoly services. Instead, these are costs attributable to unrelated
6 strategic services.

7 Q. HAVE YOU BEEN ABLE TO ADJUST THESE FILL FACTORS FOR
8 FORWARD-LOOKING NETWORK DESIGN?

9 A. Yes. I have been able to estimate an appropriate adjustment for distribution fill.

10 Q. PLEASE EXPLAIN YOUR ESTIMATE FOR THE DISTRIBUTION FILL
11 FACTOR.

12 A. Distribution facilities are comprised primarily of buried and aerial cable. The cost
13 characteristics of these facilities and the spare requirements differ. Aerial facilities can be
14 reinforced on a regular basis at acceptable costs. Buried cable cannot. When buried
15 cable is deployed, a reasonable means of calculating the fill factor for buried distribution
16 facilities is to base it on the capacity required to meet maintenance and growth
17 expectations over the life of those facilities. The appropriate fill factor for buried plant is
18 based upon deploying sufficient facilities to meet current demand, expected future
19 demand and expected maintenance requirements over the life of those facilities. Since
20 aerial can be more easily reinforced, facilities need not be deployed to meet ultimate
21 demand and fill factors can generally be expected to be higher. However, for the limited
22 purpose of this analysis, I have assumed that aerial facilities share the ultimate demand
23 requirement of buried facilities.

1 Using this approach, I estimated a forward-looking distribution plant fill factor of
2 65.6 percent, which differs materially from that reported by GTE in its TSLRIC or
3 TELRIC. My analysis is included in my Exhibit 6.

4 Q. PLEASE EXPLAIN THE ANALYSIS THAT YOU UNDERTOOK TO ESTIMATE
5 THAT FILL FACTOR FOR DISTRIBUTION FACILITIES.

6 A. The first variable I focus on is expected facility life. Under no conditions is it reasonable
7 to deploy facilities to meet demand not expected to materialize until after the facility is
8 retired. For instance, if distribution facilities have an expected life of 13.25 years, it is
9 not reasonable to size these facilities to meet demands that are not expected to emerge for
10 another 20, 25 or 30 years. For that purpose, I simply adopted the life used by GTE in its
11 cost studies in this proceeding. GTE has proposed an average economic life of 13.25
12 years for its buried and aerial copper facilities, which together constitute the bulk of its
13 distribution plant.

14 The second variable is the growth rate of loop demand. GTE data indicate a growth
15 rate of about 2.7 percent per year.¹⁷ The third variable is spare capacity to meet
16 maintenance and modularity requirements. The maintenance requirement is for facilities
17 intended to remain in place for 13.25 years, on average. The average age of copper
18 facilities in place today is greater than 13.25 years. Hence, current maintenance
19 experience provides an upper bound to that which can be expected on a forward-looking
20 basis.

21 Modularity is the term used to describe the fact that cable comes in discrete sizes. If
22 a 550 loop pair is the requirement, the LEC will deploy 600 loop capacity. We have
23 included a spare factor of 30 percent to capture these requirements.

24 Q. PLEASE EXPLAIN THE ANALYSIS SHOWN ON EXHIBIT 6.

¹⁷ARMIS 43-08 data for residential access lines, 1994-1995.

1 A. If demand at installation is 100 and grows at 2.7 percent per year, demand will grow by
2 42.0 percent over the life of the facility. Accounting for maintenance needs means that
3 there will need to be 84.6 percent more capacity at retirement than necessary to meet
4 demand at installation. If all facilities needed to meet eventual demands and maintenance
5 requirements are put in place at the time of initial deployment, there will be a fill of 54.2
6 percent at that time. At retirement, after demand has grown, the fill will increase to 76.92
7 percent. The average of these results is 65.6 percent. This analysis is shown at page 1 of
8 my Exhibit 6.

9 Q. PLEASE EXPLAIN WHY YOU BELIEVE A FORWARD-LOOKING FILL
10 FACTOR WILL BE HIGHER THAN THE ACTUAL FACTOR UTILIZED BY
11 GTE.

12 A. There are several reasons why a forward-looking fill factor would be expected to be
13 higher than that which is currently experienced by GTE.

14 First, the current fill factor reflects GTE's operations under monopoly conditions.
15 The advent of competition will, among other things, cause the Company to increase its
16 operating efficiencies, including the extent to which it maintains excess capacity. Hence,
17 among other improved efficiencies, it can be expected that capacity utilization rates or fill
18 factors can be expected to increase.

19 Second, it is necessary to recognize that some portion of the spare capacity in place
20 is service and not network element related. Because of the lumpiness of investment, plant
21 is deployed today in order to allow the efficient provision of strategic services at some
22 point in the future. In many instances, these services are bandwidth, or capacity
23 intensive. High-speed data and video services are included among these. Each of these
24 requires greater bandwidth than do voice grade services. It may well be that the
25 Company believes that it is less costly to deploy these additional facilities now, and be

1 ready to provide these services on demand, rather than risk insufficient capacity when
2 demand does materialize. Nevertheless, it is wholly inappropriate to ascribe the costs of
3 meeting the demand for these services to unbundled network elements or to basic local
4 exchange service. It is improper to assign these costs to a standard two-wire unbundled
5 loop.

6 Similarly, portions of these requirements for spare capacity relate to particular
7 services, such as Centrex or ESSX. This spare capacity results from uncertainty as to
8 demand for loop facilities by business customers, depending upon the specific service
9 taken. Consider, as a hypothetical, a particular business customer with 50 stations. The
10 total number of loops required to serve that customer is dependent upon whether the
11 customer uses a PBX or ESSX service as its switching system. If ESSX is used, 50 loops
12 are required. If a PBX is used, the customer could be served by 5 or 10 loops. The
13 problem is further magnified with larger size business customers. To meet the potential
14 for ESSX service, the Company will have to have sufficient facilities in place to provide
15 ESSX service largely on demand. These costs, assuming that they are legitimately
16 incurred, are attributable to the end use service, ESSX in this instance, not to the
17 unbundled loop element.

18 Finally, recognize again the need to fashion a competitive outcome when pricing
19 unbundled network elements. Though GTE proposes to use actual, average, embedded
20 fill factors when estimating the cost for monopoly network elements, LECs generally
21 propose the use of objective fill factors when estimating costs for competitive service
22 elements. The use of the higher fill factor results in a lower estimate of incremental costs,
23 allowing greater pricing flexibility and lower prices for these competitive service
24 elements. In order to ensure the competitive in the pricing of unbundled network
25 elements, the objective fill factor should be utilized in this instance as well.

1 Q. HAVE YOU ESTIMATED THE IMPACT OF ADJUSTING THE FEEDER AND
2 DISTRIBUTION FILL FACTORS IN THE GTE STUDIES?

3 A. No, we have not been able to estimate that impact. Without access to the GTE cost study
4 and without reasonable documentation on the cost study model, it is most difficult to
5 model and estimate these effects. This, plus the time constraint imposed further
6 compounded that difficulty. As a result, we have no estimate of that impact available at
7 this time.

8 Support Structure

9 Q. PLEASE EXPLAIN YOUR CONCERN WITH REGARD TO THE MANNER IN
10 WHICH SUPPORT STRUCTURE COSTS ARE INCLUDED IN THE TSLRIC
11 AND TELRIC STUDIES.

12 A. GTE has apparently included costs of loop support facilities (e.g., poles and conduit) in
13 its loop TSLRIC and TELRIC studies, on the presumption that these facilities are
14 dedicated to providing telephone services. This, however, is not the case as the network
15 is currently laid out, and is even less likely to be the case in the open access environment
16 of local competition. Certain facilities may be used to provide services that are unrelated
17 to GTE's provision of telecommunications services (and, therefore, to its provision of
18 unbundled network elements). For example, conduits or poles may be used to provide
19 'leased space' to electric companies or to cable companies. That is, structure investment
20 (i.e., poles, conduit, trenches and manholes) generally are shared by various utilities and
21 others. Typically, these facilities are shared by the LECs, the cable TV operators, the
22 electric utility companies, and sometimes the competitive access providers (CAPs) or the
23 IXCs. To the extent that this sharing takes place, it is appropriate to 'share' the costs of
24 these structures among those using them.

1 Q. IS THE SHARING OF THIS COST CONSISTENT WITH THE TELRIC AND
2 TSLRIC APPROACH?

3 A. Yes. Both TSLRIC and TELRIC identify incremental or additional cost resulting from a
4 telephone company action, assuming all other ILEC services and facilities continue to be
5 offered. Hence, even if the ILEC no longer provides loops, some quantity of conduit and
6 poles all remain in place. Trenching for conduit will have occurred. These costs should
7 be shared among the users of these structures.

8 Q. DOES GTE'S CALCULATION OF STRUCTURE INVESTMENT REFLECT
9 THIS SHARING?

10 A. No. Based on information discovered in Texas, GTE's cost calculations assume that 100
11 percent of this type of distribution and feeder structure investment is attributed to local
12 telephone service.

13 Q. WHAT PERCENT OF STRUCTURE INVESTMENT IS APPROPRIATELY
14 ASSIGNED TO TELEPHONE SERVICE?

15 A. The Company has not provided information which would allow an assessment of the
16 appropriate allocation of these costs to non-telephone services.

17 Q. IS THERE ANY EVIDENCE AVAILABLE FROM PUBLICLY AVAILABLE
18 SOURCES TO INDICATE WHAT PERCENT OF THIS TYPE OF STRUCTURE
19 INVESTMENT SHOULD BE ASSIGNED TO TSLRIC AND TELRIC STUDIES?

20 A. I am aware of one source. The written documentation of the Hatfield Model, Version 2.2,
21 Release 2, assumes that the fraction assigned to telephone is 33 percent.¹⁸

22 Q. HAVE YOU ESTIMATED THE EFFECT OF THIS BIAS ON GTE'S COST
23 ESTIMATES?

¹⁸Model Description, September 4, 1996, Appendix C, "Expense Model Inputs," C-6.
This is the default position. The fraction can be varied within the model.

1 A. Not at this time. Given the very limited amount time and the lack of supporting data
2 provided by GTE, it was not possible to estimate the impact of that bias on GTE's cost
3 estimates. However, the Commission should consider this potentially significant impact
4 in its determination as to whether GTE's cost studies represent reasonable estimates. My
5 experience with cost studies in other jurisdictions suggests that the assumption regarding
6 sharing has a material impact on the cost estimate.

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

III. Efficient Component Pricing Rule (ECPR)

WHAT IS THE EFFICIENT COMPONENT PRICING RULE?

Q. The efficient component pricing rule or ECPR is a distraction. The primary issue in this proceeding is setting cost based rates, rates consistent with a competitive outcome. ECPR, on the other hand, is a method designed to set rates to protect the LECs current level of revenues and earnings from competition. It is a rate of return, not a pricing issue. The GTE ECPR based proposal is intended to accomplish this revenue and earnings protection by shifting profits from the end use market to the unbundled network or wholesale market. Under GTE's pricing proposal, the LEC is able to retain the same total profit as it would operating under regulation at the retail level.¹⁹

HOW IS THIS ACCOMPLISHED?

A. Stated most simply, the total revenues and profit or net operating margin resulting from operating in the pre-TA96 end use market is determined and a 'contribution' is added to the TSLRIC/TELRIC of the unbundled network element or wholesale market activity to establish a price in that market which keeps the Company whole. In this manner, the potential profit from operating in the wholesale market or in the retail market is roughly the same as what would have been expected prior to the required unbundling. That is, the LEC is able to accrue the same expected profit whether it operates in one or both markets. If the procedure were to work "perfectly," the LEC would be indifferent between operating in only the retail market at regulated rates or operating in both the wholesale or retail market.

¹⁹GTE claims that its ECPR is constrained by the market and therefore constrained to something less than the regulated retail monopoly level of profits by implication. However, there is no evidence of any such market restraint in any of its testimonies or studies.

1 Q. GTE WITNESSES MICHAEL DOANE AND DENNIS TRIMBLE CLAIM THAT
2 GTE'S PRICING PROPOSAL IS A MARKET-BASED METHOD FOR
3 DETERMINING RATES. DO YOU AGREE?

4 A. No. The pricing proposal is an undisguised attempt to allow full recovery of total
5 historical costs through the add-ons to the TELRIC. The M-ECPR, as it is referred to by
6 GTE, enables the incumbent LEC to recover its "incremental costs and opportunity
7 costs," plus any additional so-called "stranded costs,"²⁰ where stranded costs are defined
8 as (1) the present value of net revenues for the incumbent under regulation minus (2) the
9 present value of net revenues under competition. Although GTE refers to the stranded
10 cost recovery portion of its pricing proposal independently from the "M-ECPR," the
11 bottom line is recovery of the full incumbent level of revenues under regulation.

12 Mr. Trimble discusses the "upper bound" loop price presented in the "Economic
13 Presentation."²¹ The "upper bound" loop price is simply the price level that would
14 preserve GTE's overall levels of contribution to common costs.²² Thus, although GTE
15 refers to their ECPR as being market constrained, and thus different from the ECPR
16 rejected by the FCC, the GTE ECPR is based on a pricing policy designed to preserve
17 GTE's overall levels of contribution to common cost. In addition, to the extent that the
18 rate may not preserve GTE's overall levels of contribution to common costs, GTE would
19 introduce an end-user charge to ensure recovery of any differential between net revenues
20 under regulation and net revenues obtained from pricing designed to recover forward-
21 looking common costs under the new environment.

²⁰Attachment to Mr. Doane's testimony (incorporated by reference), p. 3, Executive Summary.

²¹Trimble, p. 18, lines 8-19.

²²Trimble, p. 18, lines 23-25.

1 Q. WHAT IS THE BASIS OF THE ECPR?

2 A. The ECPR is premised on the recognition that the typical local exchange customer takes
3 many services in addition to local basic exchange. Residential customers will take long-
4 distance, TouchTone, call waiting and any number of other central office based vertical
5 services along with local basic service. Business customers will also take toll and vertical
6 services along with WATS, private line and Centrex services. In addition, each of these
7 customers generate access revenue by making interLATA long-distance calls. The
8 purpose of the ECPR is to promote the probability that the LEC will retain the same net
9 operating margin that results from providing these services, even if that customer has
10 selected an alternative local exchange carrier. This is accomplished through the
11 establishment of a mark-up which is added to TSLRIC/TELRIC of the unbundled
12 network elements that the alternative local exchange carrier must take from the ILEC.

13 Q. IS THIS PRICING PHILOSOPHY APPROPRIATE?

14 A. No it is not. There are at least three reasons why ECPR should be rejected. First, the
15 resulting prices are inefficient. Through the construct of ECPR, cost changes are not
16 reflected in changes in retail prices, but rather changes in the mark-up over
17 TSLRIC/TELRIC for unbundled network elements. Second, ECPR is discriminatory. As
18 typically applied by the ILECs, ECPR will result in differential mark-ups to services
19 based entirely on differences in the degree of market competition faced. Third, ECPR
20 will result in greater and unnecessary regulatory activity. For these reasons, ECPR is not
21 appropriate to establish rates for unbundled network elements and especially so in a
22 market where competition is newly emerging.

23 Q. PLEASE EXPLAIN YOUR CONCLUSION THAT ECPR WILL NOT RESULT IN
24 EFFICIENT RATES.

1 A. ECPR establishes rates based upon the ILEC's estimate of the contribution foregone
2 under the regulated retail scenario. Hence, changes in costs may result in changes in the
3 net operating margin which is incorporated into the unbundled element rate, rather than
4 changes in prices to end users which is the promise of competitive market activity.

5 Consider the following simple example. A firm produces two unbundled network
6 elements, which we simply referred to as A and B, at costs of 3 cents and 4 cents,
7 respectively. Unbundled elements A and B can be sold separately or as a bundled
8 service. The bundled service made up of A and B costs 7 cents and is sold for 10 cents.²³
9 The firm faces competition in the market for element B, but has a monopoly in the market
10 for A. If the ILEC were to sell element A to a competitor, the ILEC would forego the
11 opportunity of providing element B or the end use service.

12 The operating margin or profit from the end use service is 3 cents. Hence, using
13 ECPR, the price suggested for unbundled network element A would be six cents, the sum
14 of its cost (3 cents) plus the foregone earnings (3 cents).

15 Consider now the implication of a reduction in underlying costs. Assume that the
16 cost of providing unbundled network element B falls from 4 cents to 2 cents. In a
17 competitive market, the price of the end use service would necessarily fall. Under ECPR
18 the operating margin of providing the bundled element in this market would grow from 3
19 cents to 5 cents. Under that circumstance, the suggested price for unbundled network
20 element A would increase from 6 cents to 8 cents. That is, with ECPR, the ILEC is able
21 to capture as part of the price of the monopoly element any cost reductions to the
22 competitive element. Hence, the reduction in the cost of network element B would not
23 necessarily accrue to the benefit of the end user, which is the expected competitive

²³For simplicity, we assume no economies or diseconomies of bundling the network elements. That is, the cost of providing the bundled network element is simply the sum of the cost of the unbundled network elements, or 7 cents.

1 market outcome. Instead, it would accrue to the benefit of the ILEC, which is simply the
2 result of the monopoly pricing. This is obviously inconsistent with the pro-competitive
3 goals of the Act and the Act's objectives of promoting competition.

4 Q. ARE THE ECPR RATES COST-BASED?

5 A. No. The FCC concluded that ECPR is an improper method for setting prices for
6 interconnection and unbundled network elements because the existing retail prices that
7 are used to compute the opportunity cost underlying ECPR are not cost-based.²⁴ The
8 record in that proceeding indicates that both incumbent LECs and new entrants agreed
9 that regulated retail prices are not based on costs.²⁵ The ECPR will discourage
10 competition because it relies on retail prices which are not cost-based. As the FCC
11 concluded, the impact of ECPR pricing is to protect the ILECs from competition.²⁶ The
12 Act, however, specifically requires that prices for interconnection and unbundled network
13 elements be cost-based.

14 Q. WHAT IS THE BASIS OF YOUR STATEMENT THAT ECPR RESULTS IN
15 DISCRIMINATORY PRICING?

16 A. The ECPR rule generally recognizes the real world constraint of market realities. That is,
17 the extent to which foregone contribution can be included in establishing the price for an
18 unbundled element is subject to the restrictions of the market.

²⁴Opportunity costs are added to the estimate of TELRIC to obtain the ECPR rates. As noted, GTE argues that "opportunity costs," as used by GTE, are in some way market constrained and therefore are not based 100 percent on regulated retail rates and revenues. However, it appears from Mr. Doane's and Mr. Trimble's testimonies that no market adjustment has been made to regulated revenues in determining opportunity cost.

²⁵FCC Order, CC Docket 96-98, ¶709.

²⁶*Id.*, ¶710. GTE's proposal is no different since it would make the Company whole relative to net revenues anticipated under regulation.

1 GTE's proposal is no different. At page 12, Mr. Doane describes the allocation
2 process used to establish the opportunity cost as being constrained by the market. This is
3 simply another way of saying that opportunity costs would be recovered based on the
4 relative elasticity of demand for the various elements. Stated differently, the resulting
5 mark-up of price over direct cost is based on relative elasticity of demand or Ramsey
6 pricing principles.

7 In a competitive market, prices conform more closely to the costs incurred, rather
8 than the contribution foregone in any upstream or downstream market. This type of
9 pricing can prevail only where monopoly power exists. Consequently, to the extent this
10 type of mark-up over cost does exist, it will be related almost entirely to the extent of
11 monopoly power retained by the ILEC in the market in question.

12 Q. PLEASE DESCRIBE THE NATURE OF THE DISCRIMINATION IN RATES
13 PRESENTED BY THE ECPR METHODOLOGY AS IT RELATES TO
14 UNBUNDLED LOOPS.

15 A. Consider the example of loops and ports. Generally, the ILECs have recognized that
16 there is greater competition in the market for ports than in the market for loop facilities.
17 Consequently, the ILECs have generally proposed that the price for unbundled ports
18 approximate the TSLRIC/TELRIC, whereas they have proposed that the price for loops
19 be set well above the reported direct cost. Market conditions, not costing conditions have
20 been the basis of the relative mark-ups for loops and ports.

21 Q. ECPR WILL ALLOW THE ILEC DISCRETION IN SETTING THE MARK-UP
22 OVER DIRECT COST FOR UNBUNDLED NETWORK ELEMENTS. IS SUCH
23 DISCRETION APPROPRIATE?

24 A. No. Where firms have the discretion to set mark-ups, it is expected that mark-ups will be
25 set based on what the market itself will allow. This is the case not only with regard to

1 ILECs, but also of all firms. This is not a matter of concern where there is free entry into
2 and exit from a market (that is, where firms can react to competitively determined price
3 signals). It is only a matter of concern where firms have monopoly control in some or all
4 of the markets served. In those circumstances where firms have substantial market
5 power, high prices due to ECPR will not result in entry and the diminution of monopoly
6 power, monopoly prices and monopoly control on output.

7 The FCC proposal of an equal mark-up to all network elements for the recovery of
8 joint and common cost is designed to prevent this very type of monopoly abuse. My
9 proposal of establishing an equal mark-up for each service, and using competitive market
10 data to determine the appropriate mark-up, is consistent with market realities and the
11 FCC requirement.

12 Q. IS THE ECPR CONSISTENT WITH THE 1996 ACT?

13 A. No it is not. In addition to the cost-based requirement discussed above, the Act requires
14 that barriers to entry into the market for local exchange services be eliminated.²⁷ ECPR,
15 however, constitutes a very real barrier to entry. In addition, the Act contains anti-
16 discrimination provisions. For instance, Section 252(d)(1)(A) requires that prices for
17 unbundled network elements be "based on cost" and be "non-discriminatory." There is
18 no question that prices consistent with ECPR are based not on cost, but market
19 opportunities and that the resulting mark-ups will vary by the degree of competition
20 faced. The result is price discrimination.

21 Q. PLEASE EXPLAIN YOUR CONCERNS WITH REGARD TO ENTRY
22 BARRIERS.

23 A. The application of ECPR constitutes a potential barrier to entry. ECPR is based upon the
24 operating margin foregone from the bundle of end user services currently provided by the

²⁷Section 253(a).

1 ILEC and taken by its end use customers. If that foregone operating margin is to be
2 included in the price of the unbundled network element provided, then the competitive
3 carrier that takes that unbundled network element must be prepared to provide a volume
4 of services that is comparable in style and in quantity to that which the ILEC provides.
5 That is, the CLEC cannot offer a different and potentially smaller quantity of services,
6 otherwise it would not earn sufficient contribution from the other services to afford to pay
7 off the ILEC's foregone earnings. In this situation, relative efficiencies will not be the
8 determinant of market entry or market success. Hence, entry by carriers that are more
9 efficient than the ILEC may well be barred, if ECPR is adopted.

10 Q. YOU COMMENTED ON THE REGULATORY BURDEN THAT RESULTS
11 FROM APPLICATION OF ECPR. PLEASE EXPLAIN THE BASIS OF THAT
12 STATEMENT.

13 A. As I describe earlier, the determination of a rate based on ECPR requires information on
14 the cost of the unbundled network element in question, as well as the cost and revenue for
15 all other services that constitute the end use. To properly establish the price based on
16 ECPR requires that the Commission have a continual flow of information on costs and
17 revenues for each of the many services involved. For the typical residential customer, for
18 instance, this will require information be made available to the Commission on the direct
19 cost of unbundled loops, local exchange usage, toll usage, as well as various vertical
20 services. It will further require information on the volumes of each of these. Finally,
21 information on revenues from each of these is necessary so that foregone contribution or
22 operating margin can be determined.

23 Alternatively, if prices for unbundled network elements are based upon their own
24 costs plus a competitively determined mark-up, the only information needed by the
25 Commission are levels of and trends in the cost incurred. Information on cost of other

1 services, volumes of other services, revenues of other services and operating margins of
2 other services are absolutely unnecessary to the determination of cost based prices for
3 unbundled network elements.

4 Q. GTE WITNESS MR. DOANE STATES THAT IT IS NECESSARY TO
5 ESTABLISH A COMPETITIVELY NEUTRAL, NON-BYPASSABLE END USER
6 CHARGE TO ALLOW GTE TO RECOVER ITS TOTAL COSTS, INCLUDING
7 STRANDED COSTS, IN THE EVENT THAT ITS M-ECPR DOES NOT DO SO
8 (PAGE 13). DO YOU AGREE?

9 A. No. There are a number of reasons why such a charge is inconsistent with sound
10 economic and ratemaking policy and should not be established. First, it is not at all clear
11 that on net there are stranded costs, or at least not in the magnitudes suggested by GTE.
12 Further, if there are any stranded costs that are appropriately recovered through regulated
13 activities, the ability to recover these costs should be subject to competitive market rules.
14 The recovery mechanism should not be non-bypassable. Finally, an end use surcharge is
15 wholly inappropriate. It is simply a means of ensuring the make-whole, regulated
16 outcome for the ILEC in the event its so-called M-ECPR fails to generate that level of
17 revenue.

18 Q. PLEASE EXPLAIN WHAT YOU MEAN BY THERE NOT BEING NET
19 STRANDED COSTS.

20 A. Yes. GTE asserts that the impact of the Act is to reduce its ability to recover costs
21 prudently incurred and earn a reasonable return in the provision of basic telephone
22 service. This is what it means by stranded costs.

23 While making the assertion, GTE has presented no evidence of significant stranded
24 costs. In that regard, it should be noted that investment is made with an eye toward
25 meeting future demands. These include demands for other than basic local service.

1 These investments are made recognizing the business risks associated with services such
2 as ISDN, high-speed data, and possibly various broadband applications. Any measure of
3 stranded costs must be adjusted for these risks.

4 Moreover, a determination of what effect the opening of the market to competition
5 may have on the recovery of costs must be based on an examination of total company, not
6 jurisdictional operations. The Telecommunications Act, not the Florida PSC, mandated
7 the opening of the market for local services to competition -- and in doing so also opened
8 other aspects of the communications industry to GTE. If one is to assess the potential
9 impact of the Act on GTE in a fair and even-handed manner, one must consider the
10 revenue potential to GTE from entering the long distance market, the Cable TV market
11 and even the local exchange territory of neighboring LECs.

12 Any assessment of potential stranded costs should also recognize the impact of
13 impending changes to the regulatory structure. Movement toward incentive regulation
14 and price cap structures will tend to lift earnings restrictions. The resulting incentives for
15 more efficient operations and greater earnings will act as a further offset against any
16 potential "stranded" costs.

17 Finally, recognize that the FCC also questioned the extent to which stranded costs
18 might result. The FCC noted that the record in the interconnection docket failed to
19 support any conclusion that significant residual embedded costs would result from
20 opening the market to competition and pricing network elements at TELRIC.²⁸

21 Q. IF THE PSC CONCLUDES THAT THERE ARE STRANDED COSTS THAT ARE
22 TO BE RECOVERED THROUGH REGULATED OPERATIONS, SHOULD
23 RECOVERY BE PERMITTED TO OCCUR THROUGH AN END USER
24 SURCHARGE?

²⁸First Report and Order, ¶707.

1 A. No. First, recognize that adding this type of surcharge cuts against the concept of a
2 Universal Service program. Adding an end user surcharge makes promoting Universal
3 Service more difficult and more complex.

4 Second, to be fair, an end user surcharge should be levied on all customers, those
5 who take service from GTE and those who once did, but no longer do. It is wholly
6 inconsistent with the workings of a competitive market to allow GTE to add a surcharge
7 to the bill of customers who no longer take service from it. At the very least, the result
8 will be customer confusion.

9 Third, the concept of economic regulation is not to guarantee the recovery of costs,
10 but rather to provide a reasonable opportunity for such recovery. In that regard, the
11 opportunity to recover stranded costs should be subject to the possibility of competitive
12 market erosion and should not be set up as a non-bypassable end user surcharge. Doing
13 otherwise would limit the benefits that are expected to result from competition. If a
14 recovery mechanism is put in place, it should be bypassable.

15 Q. WHAT IS YOUR RECOMMENDATION WITH REGARD TO GTE'S PRICING
16 PROPOSAL AND THE APPLICATION OF ECPR IN ESTABLISHING RATES
17 FOR UNBUNDLED NETWORK ELEMENTS?

18 A. It is my recommendation that ECPR be rejected as a method of establishing prices for
19 unbundled network elements. Prices so established are inefficient, they are
20 discriminatory and have the potential of resulting in increased and unnecessary regulatory
21 activity. ECPR is inconsistent with the Act and has been considered and rejected by the
22 FCC. GTE's version of the ECPR does not satisfy the criticisms which led the FCC to
23 reject ECPR as a cost-based methodology for setting rates.

1 **IV. Joint and Common Costs**

2 Q. WHAT IS THE GTE PROPOSAL WITH REGARD TO RECOVERY OF JOINT
3 AND COMMON COSTS?

4 A. GTE's approach to estimating joint and common costs is to calculate the difference
5 between current annual revenues and the sum of its TSLRICs to obtain total 'common
6 cost' which is also its estimate of 'contribution.'

7 Q. WHAT IS THE BASIS OF THE GTE POSITION THAT COMMON COSTS ARE
8 A LARGE PERCENT OF ITS DIRECT COSTS?

9 A. GTE argues that the difference between its revenues and its estimate of direct costs is
10 \$455 million.²⁹ The assertion is simply that this difference provides an indication of the
11 extent of joint and common costs that must be covered in prices.

12 Q. DO YOU AGREE WITH THE GTE ANALYSIS IN THIS REGARD?

13 A. No, I do not. The assertion that the difference between revenues realized at a recent point
14 in time and direct costs which are based on a forward-looking, efficient technology will
15 yield an estimate of common costs (or joint and common) is far fetched. Any
16 relationship between the remainder so calculated and the volume of forward-looking
17 efficiently incurred common costs is purely coincidental. Further, this type of analysis
18 rests on a series of arbitrary assumptions. Slight changes in any of these would yield a
19 different remainder, suggesting that the volume of common costs has somehow magically
20 changed also. For these reasons alone, the GTE assertion with regard to common costs
21 cannot be relied upon as a basis for establishing cost based rates consistent with the Act,
22 the FCC Order or the promotion of competition in the market for local exchange services.
23

²⁹Exhibit DBT-1, page 1 of 2.

1 Q. WHY WOULD ANY RELATIONSHIP BETWEEN THE VOLUME OF
2 COMMON COSTS AND THE REMAINDER CALCULATED BY
3 SUBTRACTING DIRECT COSTS FROM REVENUES BE COINCIDENTAL?

4 A. The volume of Company revenues is based in large part on the rates that this Commission
5 and the FCC have previously established. These rates, in turn, were based upon some
6 type of rate-based revenue requirement analyses. There is, however, no theoretical
7 relationship between forward-looking incremental costs and revenue requirements or
8 embedded costs. In fact, this is an argument that has been raised by the LECs on any
9 number of occasions in the past. Since there is no relationship between revenue
10 requirements and direct incremental costs, no meaning can be attributed to the arithmetic
11 difference between them. The arithmetic difference between them has no bearing on the
12 level of "accounting" common costs, on the level of "incremental" common costs or on
13 the level of forward-looking, efficiently incurred common costs. In short, if at any point
14 in time they are found to be similar in magnitude, the finding is purely coincidental.

15 Q. WHAT ARE YOUR OTHER COMMENTS IN THIS REGARD?

16 A. It should be noted that the Company's claim in this matter is disingenuous. The LECs
17 have regularly taken the position that the rates allowed by regulators are insufficient to
18 meet the total costs that these companies incur. What that suggests is the difference
19 between the revenues received and any measure of cost will provide an imprecise
20 measure of anything. In fact, if the revenues were set at a level that the Company would
21 seem to argue to be appropriate, the arithmetic difference between the revenues received
22 and the direct incremental costs identified would be even greater. Under that
23 circumstance, would it be GTE's position that the volume of common costs had
24 increased? Consider also the possibility that regulated rates are theoretically always set

1 to perfectly cover cost (allowing a normal return). Would it be GTE's position that
2 "common" costs are always theoretically equal to a normal return?

3 Second, information such as rate of return and depreciation rates may be set by
4 prescription at lower rates than GTE used in its common cost calculation. Under that
5 circumstance, it would mean that the Company's direct cost estimate was, in its own
6 view, downward biased. If direct costs were increased, as GTE might suggest that they
7 should be, the resulting calculation of common costs would be smaller. Again, this
8 illustrates the disingenuous nature of the argument, as well as its arbitrariness. In short,
9 the GTE assertion with regard to joint and common costs cannot be used as a basis for
10 establishing cost based rates.

11 Q. DR. KAHN, IN YOUR DIRECT TESTIMONY, YOU DISCUSSED THE
12 APPROPRIATE MARK-UP OVER DIRECT COSTS. DO YOU HAVE ANY
13 ADDITIONAL EVIDENCE TO SUPPORT YOUR INITIAL CONCLUSION?

14 A. Yes. As discussed in my direct testimony, the appropriate mark-up over direct costs is
15 the mark-up accepted by the LEC on its most competitive network services.³⁰ That
16 proposed mark-up provides a competitive market surrogate for the limit to which joint
17 and common costs could be recovered through prices in a competitive market. In that
18 testimony, I proposed a mark-up in the 10-15 percent range based on my analysis of
19 contracts entered into by GTE and Pacific Bell in California for their Centrex service and
20 supported by the mark-up proposed by Bell-Atlantic-Pennsylvania.³¹

21 Since that time, I have had the opportunity to evaluate information provided by
22 BellSouth Alabama (in response to data requests) on customer specific service contacts.
23 These documents involved a variety of services including ESSX (a version of Centrex

³⁰Testimony of Dr. Marvin H. Kahn, pp. 24-25.

³¹Testimony, p. 25.

1 service) and various ESSX add-ons (including ISDN), direct inward dialing, and various
2 digital and other dedicated line services. These documents support the results of the
3 research which I reported regarding the mark-up. The results of the BellSouth
4 investigation supported a mark-up no greater than 15 percent.

5 Q. HAS THERE BEEN ANY OTHER DEVELOPMENTS SUBSEQUENT TO YOUR
6 DIRECT TESTIMONY WHICH ALSO SUPPORT YOUR ORIGINAL
7 CONCLUSIONS?

8 A. Yes. There have been additional developments which support my original conclusion
9 and recommendation regarding the appropriate mark-up. First, the California Public
10 Utilities Commission arbitrators have recommended interim rates in the GTE-AT&T case
11 based on TSLRIC plus a 16 percent mark-up for shared and common costs.³²

12 Second, the Arbitration Award covering multiple consolidated petitions in Texas
13 recommended a range of 10.0 - 15.5 percent as a reasonable common cost allocator.³³
14 Third, in response to data requests, GTE Southwest, Inc. has indicated that it has an
15 expected range of mark-up over cost on individual contracts or special assembly
16 contracts. The range indicates a preferred outcome and a lower end suggesting a minimal
17 acceptable mark-up.³⁴ A proposed mark-up of 15 percent would certainly be consistent
18 with this information provided by GTE Southwest.

19 All of the above-mentioned developments support my original recommendation of a
20 15 percent mark-up for common costs.

³²TR Daily (Telecommunications Reports, Inc.) November 5, 1996, p. 3.

³³Texas PUC Docket Nos. 16189, 16196, 16226, 16285 and 16290, FTA 96 § 252
Arbitration Panel, Arbitration Award, ¶72.

³⁴Response by GTE Southwest to ACSI-1-12, ACSI's First Request for Information to
GTE Southwest, Public Utility Commission of Texas, Docket No. 16473.

V. Interim Loop Rates

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Q. IN THE ABSENCE OF VERIFIABLE COST INFORMATION ON GTE OPERATIONS, WHAT OPTIONS ARE AVAILABLE TO THE COMMISSION TO SET COST BASED RATES?

A. As I noted in my direct testimony, verifiable LEC specific costs should be used in establishing such rates. However, in the absence of such LEC specific cost data, alternative sources of cost information should be used. There are three possible alternatives: studies prepared by other LECs publicly available models such as the Hatfield Model, and interim rates.

Q. HOW CAN COST DATA FROM OTHER LECS BE USEFUL?

A. The forward-looking incremental costs of GTE and BellSouth operations should be approximately the same, if the cost studies focus on similarly situated service territories. Loop costs, for instance, are generally driven by characteristics at the wire center and subwire center level. These characteristics include wire center size, loop length, loop density, loop type, and terrain. GTE, for instance, notes that in its model, the primary loop cost drivers are broadband, loop length and density.³⁵ Hence, if one were to focus on two wire centers or on two CBGs with one served by BellSouth and the other by GTE, and these were similar in terms of size, loop length, loop density and mix of facility type, the incremental cost of serving each should be approximately the same.

What this means is that the results from properly structured BellSouth studies can be used with confidence as a proxy for costs for GTE operations, and as a basis for setting cost based rates for GTE network elements. Moreover, it also suggests that BellSouth study results can serve as a check against GTE cost study results. If the results for

³⁵GTE Florida TSLRIC Supp. Materials, Book 1, Tab 1, Preface 2.19.

1 similarly situated areas differ, the Commission should require an acceptable explanation
2 of the difference, or dismiss one (or possibly both) studies from consideration.

3 The difficulty, as noted, is that BellSouth and GTE each assert that its study is
4 proprietary. Hence, a petitioner cannot bring a BellSouth study into this proceeding for
5 comparative purposes, or bring a GTE study into a BellSouth proceeding.

6 Q. HAVE YOU ANALYZED THE COST CHARACTERISTICS OF GTE AND
7 BELLSOUTH?

8 A. Yes, I have. As I just noted, GTE and BellSouth assert that their studies are proprietary,
9 meaning that major portions of these studies cannot be directly compared -- at least not in
10 a proceeding such as this.

11 On the other hand, there is publicly available information from other sources that can
12 be used in modeling costs to test the similarity of the cost characteristics of BellSouth and
13 GTE on a forward-looking, long run incremental cost basis. The Hatfield and BCM2
14 models, NECA data and ARMIS data are such sources. I have made use of each of these
15 for such comparisons.

16 Q. PLEASE EXPLAIN THE ANALYSIS YOU UNDERTOOK WITH REGARD TO
17 THE HATFIELD MODEL.

18 A. The Hatfield Model is open, relying primarily on publicly available information. As I
19 noted in my initial testimony, one of the strengths of the Hatfield Model is that it allows
20 comparisons of costs across operating companies as well as across states or other
21 geographic regions. I make use of this model with that particular purpose in mind.

22 Specifically, I identified the costs in each of the six density zones identified within
23 the Hatfield Model for BellSouth operations and, separately, for GTE operations. The
24 data used in each of the cost study runs was company specific, but used the methodology
25 inherent in each of these models. Any differences found in cost estimates is then due to

1 differences in cost characteristics, not data inputs or methodology. The cost results are
2 presented as my Exhibit 7.

3 Q. WHAT WAS THE RESULT OF THIS COST COMPARISON USING THE
4 HATFIELD MODEL RESULTS?

5 A. As Exhibit 7 demonstrates, the cost of unbundled loops in the GTE and BellSouth service
6 territories are similar, when viewed on a density cell basis. In general, the estimates of
7 GTE loop cost are typically less than the estimates of BellSouth loop costs for the same
8 density zones. The loop cost differences are greatest at the low end of the density
9 distribution, that is, in the least dense zone. The loop cost differences are least in the one
10 density zone where GTE has the greatest percent of loops.

11 Q. YOU INDICATED THAT AN ANALYSIS WAS PERFORMED USING BCM2.
12 WHAT WAS THAT ANALYSIS?

13 A. I drew upon the BCM2 cost model to perform a similar analysis. That is, using the
14 BCM2 model results, I estimated the cost for BellSouth and for GTE in each of the
15 density zones developed in BCM2. In this exercise, I used the BCM2 default inputs. The
16 results are presented on my Exhibit 8. As indicated there, for each of the six density
17 zones identified by BCM2, the costs per loop were approximately the same for GTE and
18 for BellSouth.³⁶

19 The analyses reported on Exhibits 4, 7 and 8 are based on the density zones
20 identified in the Hatfield and the BCM2 models. In Exhibit 9, I made use of a third
21 density zone structure that was used by GTE in its own cost studies. Using the BCM2

³⁶There is an important difference between BCM2 and Hatfield that should not affect the usefulness of BCM2 for these comparisons. Whereas Hatfield focuses on the cost of the loop, BCM2 focuses on the combined cost of services which include the loop, local usage and several other local basic service components. However, the loop represents approximately 88 percent of total investment as calculated by BCM2 for GTE.

1 cost model, I structured the results to conform with the wire center groups known to be
2 used by GTE.³⁷ I calculated costs for BellSouth per loop in each of those zones as well as
3 for GTE. Again, the results indicate similarity of costs within each density zone. While
4 statewide average costs for GTE and BellSouth may differ slightly, the difference will be
5 due to the distribution of loops across areas served, not costs within each density area.

6 Q. WHAT WAS THE OTHER PUBLICLY AVAILABLE DATA YOU DREW
7 UPON?

8 A. I have drawn on two other publicly available sources of data to compare the two
9 companies' cost characteristics. The first is the National Exchange Carrier Association
10 (NECA) database. The RBOCs file cost and expense information with NECA
11 companies. These data allow a cost per loop to be calculated for each company in the
12 database, which includes both GTE-FL and BST-FL. It should be noted that these are
13 embedded rather than incremental cost data. The second source is the ARMIS reports
14 filed annually with the FCC by "Tier 1" local exchange companies. ARMIS Form 43-03
15 provides a variety of plant investment, revenue, and expense information, and ARMIS
16 Form 43-08 provides, among other things, access line data for the company in question.

17 Q. WHAT DO THESE DATA REVEAL WITH REGARD TO GTE AND
18 BELL SOUTH COSTS?

19 A. I have calculated three measures of costs per loop for both GTE-FL and BST-FL. As
20 summarized in the table below, these calculations suggest that GTE's costs per loop are

³⁷In ACSI's Arbitration proceeding with GTE in Texas and in Kentucky, GTE has described the deaveraged wire center groups used for costing purposes in a manner similar to the company's description in Florida. GTE advised ACSI in Texas and in Kentucky that its three deaveraged zones, termed High, Medium and Low, are defined as those wire centers characterized by 1,000 lines per square mile, 50-1,000 lines per square mile, and 0-50 lines per square mile, respectively. I have assumed the same definitions apply in GTE's Florida cost studies.

1 no higher than are BellSouth's. If anything, these measures raise the possibility that
 2 GTE may face lower costs per telephone line provided than does BellSouth. These
 3 results suggest that any cost based rate established for GTE should be no greater than and
 4 possibly less than that set for BellSouth.

5 **EMBEDDED COST COMPARISONS**
 6 **GTE-FL AND BST-FL**

Category	GTE-FL	BST-FL
Cost per Loop, 1994 ¹	\$300.58	\$307.52
Telecommunications Plant in Service per Access Line, 1995 ²	\$ 1,945	\$ 1,892
Total Operating Expenses per Access Line, 1995 ²	\$ 475	\$ 487

¹National Exchange Carrier Association database, 1st quarter 1995 submissions.
²FCC ARMIS Reports 43-03 and 43-08 for the year ending December 31, 1995.

14 **WHAT CONCLUSIONS DO YOU DRAW FROM THIS ANALYSIS?**

15 Q.
 16 A.

17 What this analysis reveals is that the incremental cost on a forward-looking basis will be
 18 largely the same across companies serving similar geographic areas. This is not
 19 surprising, and in fact is the result that should be anticipated. That is, the costs represent
 20 what can be expected of any efficiently operating entrant into the market. They do not
 21 reflect the idiosyncracies of any specific participant, they do not reflect any idle capacity
 22 on hand to meet the strategic service requirements of any one participant, and they do not
 23 reflect the inefficiencies or the operating characteristics of any participant. Again, similar
 24 results should be anticipated where companies are similarly situated.

25 Since the cost of providing service in any specific geographic area would be
 26 approximately the same on a long run incremental cost basis, irrespective of the service
 27 provider, the price charged for that service in that area should also be the same

1 irrespective of the individual service provider. Therefore, for a given level of density (or
2 a given zone), a properly structured BellSouth TELRIC model should produce the same
3 or similar results for GTE.

4 Q. WHAT THEN IS YOUR RECOMMENDATION WITH REGARD TO THE
5 UNBUNDLED LOOP RATE FOR GTE?

6 A. ACSI recommends that the Commission establish statewide and geographically
7 deaveraged rates for the unbundled loop element as developed by the Hatfield Model and
8 depicted on my Exhibit 4. As I noted in my direct and in this rebuttal testimony, ACSI is
9 prepared to rely on Company specific data based on LEC cost studies to establish these
10 rates -- but if and only if those studies are open and all data and calculations verifiable.

11 If the Commission chooses to set these rates on any other basis, we recommend that
12 the Commission consider that GTE costs in Florida appear to be approximately equal to if
13 not somewhat less than those incurred by BellSouth. This appears to be the case on a
14 density-cell-by-density-cell basis, as well as on a statewide basis. Recognizing this, any
15 rate established for GTE should be no greater than that set for BellSouth.

16 Q. WHAT IS SHOWN AS YOUR EXHIBIT 10?

17 A. Exhibit 10 shows the ACSI proposed geographically deaveraged rates, in the event the
18 Commission establishes a statewide rate of \$17.00 for the unbundled loop. The
19 relationship among the rates by density zone derived on my Exhibit 4 is retained here.

21 **VI. Number Portability**

22 Q. WHAT IS GTE'S POSITION WITH REGARD TO THE RECOVERY OF THE
23 COSTS OF INTERIM NUMBER PORTABILITY?

24 A. As explained in the testimony of Beverly Menard, it is GTE's position that it should be
25 allowed to provide for interim number portability (INP) using either remote call

1 forwarding (RCF) or direct inward dialing (DID). GTE proposes to recover all of the
2 costs associated with INP directly from ACSI and other competitive local exchange
3 carriers (CLECs) through existing tariffed rates (to the extent such tariffs exist)³⁸ or
4 through a cost pooling system. It is GTE's position that the costs to be recovered from
5 ACSI and other CLECs include not only the incremental costs of providing INP, but also
6 the opportunity costs attributable to GTE's loss of the customer for which number
7 portability is required.

8 Q. IS IT APPROPRIATE FOR GTE TO RECOVER ALL COSTS OF PROVIDING
9 INP FROM ACSI AND OTHER CLECs?

10 A. No. As discussed in my direct testimony, the FCC addressed the recovery of INP costs in
11 its First Report and Order in CC Docket No. 95-116 regarding Telephone Number
12 Portability (the "TNP Order").³⁹ In that Order, the FCC concluded that to 'ensure that the
13 costs of number portability are allocated on a "competitively neutral basis", we [the
14 FCC] should adopt guidelines that the states must follow in mandating cost recovery
15 mechanisms for currently available number portability methods.'⁴⁰

16 For a cost recovery mechanism to qualify as competitively neutral, the FCC
17 determined that "... the cost of number portability borne by each carrier does not affect
18 significantly any carrier's ability to compete with other carriers for customers in the

³⁸Ms. Menard indicates that a tariff for RCF has been filed in Docket No. 950737-TP. However, we were unable to establish the existence of a tariff in that docket.

³⁹In the Matter of Telephone Number Portability, First Report and Order and Further Notice of Proposed Rulemaking, 11 F.C.C. Rcd. 8352 (1996).

⁴⁰TNP Order at ¶126-127.

1 marketplace."⁴¹ The FCC went on to establish two criteria which should be satisfied for a
2 cost recovery mechanism to qualify as competitively neutral.

3 Q. WHAT WAS THE FIRST CRITERION ESTABLISHED BY THE FCC?

4 A. The first criterion set forth by the FCC is that "a "competitively neutral" cost recovery
5 mechanism should not give one service provider an appreciable incremental cost
6 advantage over another service provider, when competing for a specific subscriber."⁴²
7 According to the FCC, this means that "the incremental payment by the new entrant if it
8 wins a customer would have to close to zero, to approximate the incremental number
9 portability cost borne by the incumbent LEC if it retains the customer."⁴³

10 Q. DID THE FCC ADDRESS WHETHER A MECHANISM SUCH AS THAT
11 PROPOSED BY GTE WHICH IMPOSES ALL COSTS ON ACSI AND OTHER
12 CLECS MEETS THIS FIRST CRITERION?

13 A. Yes, in ¶134 of the TNP Order, the FCC stated "a cost recovery mechanism that imposes
14 the entire incremental cost of currently available number portability on a facilities-based
15 new entrant would violate this criterion." This is because such a "cost recovery
16 mechanism would impose an incremental cost on a facilities-based entrant that neither the
17 incumbent, nor an entrant that merely resold the incumbent's service, would have to
18 bear." The FCC further noted that "imposing the full incremental costs of interim
19 number portability solely on new entrants would contravene the statutory mandate that all
20 carriers share the cost of number portability."⁴⁴

⁴¹TNP Order at ¶131.

⁴²Id., ¶132.

⁴³Id., ¶133.

⁴⁴Id., ¶138.

1 Q. WHAT IS THE SECOND CRITERION FOR A COMPETITIVELY NEUTRAL
2 COST RECOVERY MECHANISM?

3 A. The second criterion for a competitively neutral cost recovery mechanism established by
4 the FCC is that the mechanism should not have a disparate effect on the ability of
5 competing service providers to earn normal returns on equity.⁴⁵ Dividing number
6 portability costs equally among all competing local exchange carriers was provided by
7 the FCC as one example of a cost recovery mechanism which would not satisfy this
8 criterion. This is because a new entrant's costs may be so large relative to its profits that
9 the entrant could not enter the market. The FCC also noted that rates for interim number
10 portability which approximate the retail price of local service would not satisfy this
11 criterion.⁴⁶

12 Q. MS. MENARD ARGUES THAT ACSI'S PROPOSAL THAT INP COSTS BE
13 SHARED BY ALL CARRIERS, INCLUDING GTE, PUTS GTE AT A
14 COMPETITIVE DISADVANTAGE.⁴⁷ DID THE FCC ADDRESS THIS
15 CONCERN ABOUT NOT ALLOWING THE INCUMBENT LEC TO ASSESS
16 OTHER CARRIERS FOR THE FULL COST OF INP AND REQUIRING THE
17 INCUMBENT TO BEAR SOME OF THE COSTS?

18 A. Yes. The FCC directly addressed this issue when it stated:⁴⁸

19 Congress mandated the use of number portability so that customers
20 could change carriers with as little difficulty as possible. Our
21 interpretation of "borne ... on a competitively neutral basis" reflects the
22 belief that Congress's intent should not be thwarted by a cost recovery
23 mechanism that makes it economically infeasible for some carriers to

⁴⁵Id., ¶135.

⁴⁶Id., ¶138.

⁴⁷Direct testimony of Beverly Menard at p. 9.

⁴⁸TNP Order at ¶131.

1 utilize number portability when competing for customers served by other
2 carriers. Ordinarily the Commission follows cost causation principles,
3 under which the purchaser of a service would be required to pay at least
4 the incremental cost incurred in providing that service. With respect to
5 number portability, Congress has directed that we depart from cost
6 causation principles if necessary in order to adopt a "competitively
7 neutral" standard, because number portability is a network function that
8 is required for a carrier to compete with the carrier that is already serving
9 a customer. Depending on the technology used, to price number
10 portability on a cost causative basis could defeat the purpose for which it
11 was mandated.
12

13 The FCC also noted that "if incumbent LECs were not required to bear a portion of the
14 incremental costs of currently available number portability measures, they would have an
15 incentive to delay implementation of a long-term number portability method."⁴⁹

16 Q. DID THE FCC IDENTIFY ANY COST RECOVERY MECHANISMS WHICH
17 WOULD SATISFY THE TWO CRITERIA NECESSARY FOR THE
18 MECHANISM TO QUALIFY AS COMPETITIVELY NEUTRAL?

19 A. Yes. As noted in my direct testimony, the FCC discusses four methods which would
20 result in INP costs being assessed on a competitively neutral basis. They include cost
21 recovery mechanisms which recover the costs of current number portability in the
22 following ways:⁵⁰

- 23 • through a uniform assessment on the revenues of all telecommunications carriers, net
24 of charges paid to other carriers;
- 25
- 26 • based on each local exchange carrier's relative number of active telephone numbers
27 or lines;
- 28
- 29 • based on the ported telephone numbers of each carrier relative to the total number of
30 active telephone numbers in the local service area; and
- 31
- 32 • each carrier pays for its own costs (and does not charge other carriers at all).
33
34

⁴⁹Id., ¶138.

⁵⁰Id., ¶136.

1 Q. HAVE YOU DEVELOPED ANY ESTIMATES OF THE APPROPRIATE RATES
2 FOR INP CONSISTENT WITH THE FCC'S GUIDELINES?

3 A. Yes. Under the FCC's guidelines, the incremental costs of providing INP are to be borne
4 by all carriers. Therefore, determining the appropriate INP rate requires an estimate of
5 the number of lines which will be served by facilities-based competitors. Rather than
6 making a specific estimate of the number of lines which will be served by such
7 competitors prior to the time permanent number portability is provided, I have developed
8 estimated rates based on a range of 2 to 10 percent of GTE's current lines being served by
9 facilities-based competitors.

10 Exhibit 11 presents the derivation of both the recurring and non-recurring charges for
11 INP based on different levels of customers being served by facilities-based competitors of
12 GTE. To develop these rate estimates, I multiplied GTE's claimed recurring and non-
13 recurring costs per line by the estimated number of lines served by facilities based
14 competitors at varying levels of market penetration to determine incremental INP costs. I
15 then divided the incremental costs by the total number of lines to determine the
16 applicable per line rates. As shown there, the appropriate monthly recurring charge varies
17 from \$0.06 per line if facilities-based competitors serve 2 percent of the market to \$0.29
18 per line if they serve 10 percent of the market. The non-recurring charges range from
19 \$0.21 to \$1.05 over the same range of market share.

20 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

21 A. Yes, it does.

BEFORE THE FLORIDA
PUBLIC SERVICE COMMISSION

DOCKET NO. 961537-TP
FLORIDA ARBITRATION
GTE

EXHIBITS ACCOMPANYING THE
REBUTTAL TESTIMONY OF
DR. MARVIN H. KAHN

ON BEHALF OF
AMERICAN COMMUNICATIONS SERVICES, INC.

FEBRUARY 1997

DOCUMENT NUMBER-DATE

01459 FEB-76

FPSC-RECORDS/REPORTING

**Hatfield Default Proxies for GTE-Florida
Density Zone Results and Statewide Average**

Density Zone (lines/sq. mi.)	Six Density Zone Results <u>Loop Cost/Month (\$)</u>
0-5	\$71.04
5-200	24.71
200-650	14.07
650-850	11.02
850-2550	10.19
>2550	9.81

	Three Density Zone Results <u>Loop Cost/Month (\$)</u>
0-200	\$25.63
200-850	13.31
>850	9.96

	Statewide Average <u>Loop Cost/Month (\$)</u>
Hatfield Statewide Weighted Average - GTE	\$11.45
FCC Proxy Ceiling	13.68

Sources:

- (1) Hatfield Model Version 2.2, Release 2, submitted by AT&T on September 10, 1996, as an Ex Parte Presentation to the FCC in CC Docket No. 96-45.
- (2) First Report and Order, Released August 8, 1996, In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, Appendix D, "State Proxy Ceilings for the Local Loop."

Effect of Using GTE Proposed Depreciation Rates

<u>GTE - FLORIDA</u>		<u>FCC-Prescribed Depreciation Parameters</u>			<u>Company Proposed Depreciation Parameters</u>			<u>Weighted Average Depreciation Rates</u>		
<u>Plant Category</u>	<u>USOA Account</u>	<u>1995 Booked Assets (\$000s)</u>	<u>"Economic" Life (P-Life)</u>	<u>Future Net Salvage (%)</u>	<u>Depreciation Rate</u>	<u>"Economic" Life (P-Life)</u>	<u>Future Net Salvage (%)</u>	<u>Depreciation Rate</u>	<u>Under FCC Prescribed Rates</u>	<u>Under GTE Proposed Rates</u>
Circuit Equipment	2232	\$510,908	9	3	0.10778	6.28	11	0.14172	0.02602	0.03421
Aerial Cable	2421	\$193,975	20	-35	0.06750	13.08	-18	0.09021	0.00619	0.00827
Underground Cable	2422	\$345,927	25	-17	0.04680	14.28	-2	0.07143	0.00765	0.01167
Buried Cable	2423	\$1,065,727	20	-10	0.05500	13.42	-3	0.07675	0.02769	0.03865
TOTALS		\$2,116,537							0.06755	0.09280

Company/FCC Depreciation Rate Ratio:	1.37
--------------------------------------	------

SOURCES: GTE Depreciation Service Lives, Bates #0000326, provided in response to ACSI data requests.
 FCC Three Way Meeting Results for GTE-Florida, Parameter Report, p. 8, May 4, 1995.

GTE-FLORIDA

Fill Factor Analysis

a. GTE Average Economic Life, Aerial and Buried Cable-Metal ¹	13.25 Years
b. Annual Demand Growth, ² Loop Plant	2.68%
c. Spare Capacity	30.0%
d. Unit Demand at Installation	100
e. Unit Requirement at Installation ³	130
f. Unit Demand at End of Economic Life ⁴	141.97
g. Unit Requirement at End of Economic Life ⁵	184.56
h. Fill at End of Economic Life ⁶	76.92%
i. Fill at Installation ⁷	54.2%
j. Average Fill ⁸	65.6%

¹ Company response to ACSI data requests, Bates #0000326. This represents an average of the service life GTE has assumed for aerial cable (13.08 years) and buried cable (13.42 years).

² ARMIS 43-08: represents growth in number of residential lines from 1994 to 1995.

³ $d * (1.00 + c) = 100 * 1.3$

⁴ $(100 * (1.00 + b)^{13.25}) = 141.97$

⁵ $f * (1.00 + c) = 141.97 * 1.3$

⁶ $f/g = 141.97/184.56$

⁷ $d/g = 100/184.56$

⁸ $(i + h)/2 = (76.92 + 54.2)/2$

**Comparison of GTE-FL and BellSouth-FL Loop Costs by Density Zone
 Hatfield Model Results Using Hatfield Density Zones**

	<u>GTE Hatfield Release 2 \$/month</u>	<u>BST Hatfield Release 2 \$/month</u>	<u>GTE/BST Ratio</u>
Three Density Zone Results (lines/mi²)			
0-200	\$25.63	\$28.39	0.90
200-850	13.31	14.40	0.92
> 850	9.96	10.33	0.96
Six Density Zone Results (lines/mi²)			
0-5	\$71.04	\$82.80	0.86
5-200	24.71	26.91	0.92
200-650	14.07	15.22	0.92
650-850	11.02	12.44	0.89
850-2550	10.19	11.43	0.89
> 2550	9.81	9.79	1.00

Hatfield Model, Version 2.2., Release 2.

Comparison of GTE-FL and BellSouth-FL Costs by Density Zone
BCM2 Model Results Using BCM2 Density Zones

Six Density Zone Results (lines/mi ²)	<u>GTE BCM2</u> <u>\$/month⁽¹⁾</u>	<u>BST BCM2</u> <u>\$/month</u>	<u>GTE/BST</u> <u>Ratio</u>
0-5	\$102.43	\$123.23	0.83
5-200	46.47	48.53	0.96
200-650	32.96	32.86	1.00
650-850	27.67	28.23	0.98
850-2550	27.63	28.41	0.97
> 2550	24.06	24.11	1.00

Source:

(1) Benchmark Cost Model 2, filed with the FCC in CC Docket No. 96-45 on July 3, 1996.

Docket No. 961537-TP
Rebuttal Testimony of Marvin H. Kahn
Exhibit MHK-9
PSC Exhibit No. _____

**Comparison of GTE-FL and BST-FL BCM2 Cost Results
BCM2 Model Using GTE's Cost Study Density Zones**

Density Zone (lines/mi ²)	<u>GTE BCM2</u> <u>\$/month</u>	<u>BST BCM2</u> <u>\$/month</u>	<u>GTE/BST</u> <u>Ratio</u>
Low (0-50)	\$60.64	\$63.99	0.95
Medium (50-1000)	33.98	34.26	0.99
High (> 1000)	25.49	25.55	1.00

**GTE-FL Proxy Loop Rates
Applying \$17.00 Statewide Rate**

Density Zone (lines/sq. mi.)	Six Density Zone Results <u>Loop Cost/Month (\$)</u>
0-5	\$105.47
5-200	36.68
200-650	20.89
650-850	16.36
850-2550	16.13
>2550	14.57

	Three Density Zone Results <u>Loop Cost/Month (\$)</u>
0-200	\$38.05
200-850	19.76
>850	14.79

	Statewide Average <u>Loop Cost/Month (\$)</u>
Statewide Weighted Average - GTE	\$17.0

Sources:

- (1) The proxy rates shown are calculated by adjusting the Hatfield Model results shown on Exhibit 4 upward to equal the statewide proxy rate of \$17, using a scaling factor of $(\$17/\$11.45)$ 1.485.

GTE FLORIDA

**Calculation of Rates and Charges for
 Interim Number Portability**

	<u>Market Share of Competitors</u>		
	<u>2 Percent</u>	<u>5 Percent</u>	<u>10 Percent</u>
<u>Recurring Charge</u>			
Total Number of Lines	1,980,859	1,980,859	1,980,859
Percent Served Facilities-Based Competitors	2.00%	5.00%	10.00%
Monthly Recurring Cost	\$2.93	\$2.93	\$2.93
Incremental Cost of INP	\$116,078	\$290,196	\$580,392
Total Number of Lines	1,989,859	1,980,859	1,980,859
Monthly Recurring Charge	\$0.06	\$0.15	\$0.29
<u>Non-Recurring Charge</u>			
Total Number of Lines	1,980,859	1,980,859	1,980,859
Percent Served Facilities-Based Competitors	2.00%	5.00%	10.00%
Non-Recurring Cost	\$10.47	\$10.47	\$10.47
Incremental Cost of INP	\$414,792	\$1,036,980	\$2,073,959
Total Number of Lines	1,980,859	1,980,859	1,980,859
Non-Recurring Charge	\$0.21	\$0.52	\$1.05

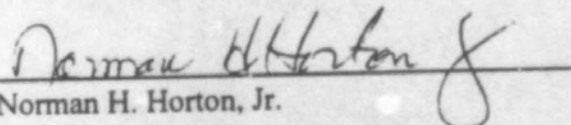
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Rebuttal Testimony of Dr. Marvin H. Kahn on behalf of American Communications Services, Inc. in Docket No. 961537-TP has been furnished by Hand Delivery (*) and/or Overnight Delivery (**) on this 7th day of February, 1997 to the following parties of record:

Monica Barone, Esq.*
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Blvd., Room 370
Tallahassee, FL 32399-0850

Mr. Ken Waters*
GTE Florida, Inc.
106 E. College Ave., Ste. 1440
Tallahassee, FL 32301

Anthony Gillman, Esq.**
GTE Florida, Inc.
One Tampa City Center
201 N. Franklin St.
Tampa, FL 33602


Norman H. Horton, Jr.

LAW OFFICES
MESSER, CAPARELLO, METZ, MAIDA & SELF
A PROFESSIONAL ASSOCIATION

215 SOUTH MONROE STREET, SUITE 701
POST OFFICE BOX 1876
TALLAHASSEE, FLORIDA 32302-1876
TELEPHONE: (904) 222-0720
TELECOPIERS: (904) 224-4359; (904) 425-1942

ORIGINAL
FILE COPY

February 7, 1997

Ms. Blanca Bayo, Director
Division of Records and Reporting
Room 110, Easley Building
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850

BY HAND DELIVERY

Re: Docket No. 961537-TP

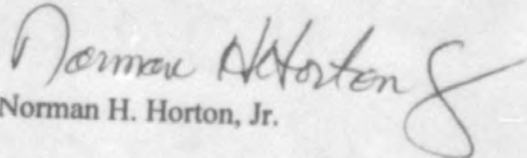
Dear Ms. Bayo:

Enclosed for filing is an original and fifteen copies of the Rebuttal Testimony of Dr. Marvin H. Kahn, the Rebuttal Testimony of C. William Stipe, III and the Rebuttal Testimony of Richard Robertson on behalf of American Communications Services, Inc. in the referenced docket.

Please indicate receipt of this document by stamping the enclosed extra copy of this letter.

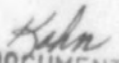
Thank you for your assistance in this matter.

Sincerely,


Norman H. Horton, Jr.

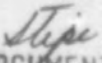
NHH:amb
Enclosures

H:\USERS\ANN\FORMS\BAYO.LTR


DOCUMENT NUMBER-DATE

01459 FEB-76

FPSC-RECORDS/REPORTING


DOCUMENT NUMBER-DATE

01460 FEB-76

FPSC-RECORDS/REPORTING


DOCUMENT NUMBER-DATE

01461 FEB-76

FPSC-RECORDS/REPORTING

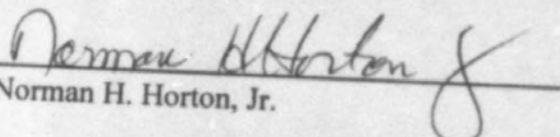
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Rebuttal Testimony of Dr. Marvin H. Kahn on behalf of American Communications Services, Inc. in Docket No. 961537-TP has been furnished by Hand Delivery (*) and/or Overnight Delivery (**) on this 7th day of February, 1997 to the following parties of record:

Monica Barone, Esq.*
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Blvd., Room 370
Tallahassee, FL 32399-0850

Mr. Ken Waters*
GTE Florida, Inc.
106 E. College Ave., Ste. 1440
Tallahassee, FL 32301

Anthony Gillman, Esq.**
GTE Florida, Inc.
One Tampa City Center
201 N. Franklin St.
Tampa, FL 33602


Norman H. Horton, Jr.

DND1459-97
2/7/97