

NANCY B. WHITE
General Attorney

BellSouth Telecommunications, Inc.
150 South Monroe Street
Suite 400
Tallahassee, Florida 32301
(404) 529-5387

September 29, 1995

Mrs. Blanca S. Bayo
Director, Division of Records and Reporting
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399

RE: Docket No. 950985-TP

Dear Mrs. Bayo:

Enclosed please find an original and fifteen copies of BellSouth Telecommunications, Inc.'s Rebuttal Testimony of Dr. Aniruddha (Andy) Banerjee and Robert C. Scheye in the captioned docket.

A copy of this letter is enclosed. Please mark it to indicate that the original was filed and return the copy to me. Copies have been served on the parties shown on the attached Certificate of Service.

Sincerely,

Nancy B. White (SGL)

Nancy B. White

Enclosures

- ACK _____
- AFA _____
- APP _____
- CAF _____
- CMU Chase _____
- CTR _____
- EAG _____
- LEG 1 _____
- IN 5+Orig _____
- JPC _____
- RCH _____
- REC 1 _____
- IAS _____
- ITH _____

cc: All Parties of Record
A. M. Lombardo
R. G. Beatty
R. D. Lackey

RECEIVED & FILED
man
EPSC-BUREAU OF RECORDS

Banerjee
DOCUMENT NUMBER-DATE
09715 SEP 29 95
FPSC-RECORDS/REPORTING

Scheye
DOCUMENT NUMBER-DATE
09716 SEP 29 95
FPSC-RECORDS/REPORTING

CERTIFICATE OF SERVICE
Docket No. 950985-TP

I HEREBY CERTIFY that a copy of the foregoing has been
furnished by Federal Express this 29th day of September, 1995 to:

RICHARD H. BRASHEAR
ALLTELL FLORIDA, INC.
206 WHITE STREET
LIVE OAK, FL 32060
904-364-2517

DANIEL V. GREGORY
QUINCY TELEPHONE COMPANY
107 W. FRANKLIN STREET
QUINCY, GL 32351
904-875-5214

F. B. POAG
CENTRAL TELEPHONE COMPANY
OF FLORIDA
555 LAKE BORDER DRIVE
APOPKA, FL 32703
407-889-6405

JOHN H. VAUGHAN
ST. JOSEPH TELEPHONE AND
TELEGRAPH COMPANY
502 5TH STREET
PORT ST. JOE, FL 32456
904-229-7221

LAURIE A. MAFFETT
FRONTIER COMMUNICATIONS OF
THE SOUTH, INC.
180 SOUTH CLINTON AVENUE
ROCHESTER, NY 14646
716-777-5125

FERRIN SEAY
FLORALA TELEPHONE
COMPANY, INC.
522 N. 5TH STREET
FLORALA, AL 36442
334-858-3211

BEVERLY Y. MENARD
GTE FLORIDA, INC.
106 EAST COLLEGE AVENUE
SUITE 1440
TALLAHASSEE, FL 32301
813-224-4825

LYNN B. HALL
VISTA-UNITED
TELECOMMUNICATIONS
P.O. BOX 10180
LAKE BUENA VISTA, FL 32830
407-827-2210

A. D. LANIER
GULF TELEPHONE COMPANY
115 W. DREW STREET
PERRY, FL 32347
904-584-0900

JODIE DONOVAN
TCG SOUTH FLORIDA
1133 21ST STREET, NW
SUITE 400
WASHINGTON, DC 20036

ROBERT M. POST, JR.
INDIANTOWN TELEPHONE
SYSTEM, INC.
16001 S.W. MARKET STREET
INDIANTOWN, FL 34956
407-597-3113

MICHAEL W. TYE
AT&T
106 EAST COLLEGE AVENUE
SUITE 1410
TALLAHASSEE, FL 32301
904-425-6360

JOHN T. MCGLEW
N.E. FLORIDA TELEPHONE
COMPANY, INC.
130 N. 4TH STREET
MACCLENNY, FL 32063
904-259-2261

ROBIN D. DUNSON, ESQ.
1200 PEACHTREE STREET, NE
PROMENADE I, ROOM 4038
ATLANTA, GEORGIA 30309

PATRICK K. WIGGINS
INTERMEDIA COMMUNICATIONS OF
FLORIDA, INC.
WIGGINS & VILLACORTA
501 EAST TENNESSEE STREET, #B
TALLAHASSEE, FL 32308
904-222-1534

FLOYD SELF
MCCAW COMMUNICATIONS
MESSER, VICKERS, CAPARELLO,
MADSEN, LEWIS, GOLDMAN & METZ
215 S. CALHOUN STREET, #701
TALLAHASSEE, FL 32301
904-222-0720

BOB ELIAS
FLORIDA PUBLIC SERVICE
COMMISSION
2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FL 32399
904-613-6189

Nancy S. White (Rgt)

11.22
ORIGINAL
FILE COPY

1 REBUTTAL TESTIMONY OF ANIRUDDHA (ANDY) BANERJEE
2 ON BEHALF OF BELLSOUTH TELECOMMUNICATIONS, INC.
3 BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
4 DOCKET NO. 950985-TP
5 SEPTEMBER 29, 1995
6
7

8 Q. Please state your name, address, and place of
9 employment.

10

11 A. My name is Aniruddha (Andy) Banerjee. I am a
12 Senior Consultant with National Economic Research
13 Associates, Inc., located at One Main Street,
14 Cambridge, MA 02142.

15

16 Q. Did you file direct testimony in this Docket?

17

18 A. Yes.

19

20 Q. What is the purpose of your rebuttal testimony?

21

22 A. Direct testimony has been filed in this Docket by
23 several parties on various issues relating to the
24 financial terms and conditions of interconnection
25 between BellSouth, the incumbent local exchange

1 carrier (LEC), and alternative local exchange
2 carriers (ALECs) in Florida. The following
3 testimony responds to and, where necessary, shows
4 why the positions taken by these parties are
5 inconsistent with sound economic principles.

6

7 Q. Please list the principal economic issues raised by
8 these parties to which your testimony responds.

9

10 A. The following issues were raised by various parties
11 in connection with the financial terms and
12 conditions of interconnection: (1) entry barriers,
13 (2) compensation principles, (3) bill and keep
14 compensation, (4) bill and keep practice, (5)
15 BellSouth's proposed arrangement and imputation,
16 and (6) contribution.

17

18 Q. How do you propose to respond to these issues or
19 themes in the intervenor testimonies?

20

21 A. I will first present the arguments made by various
22 parties under these themes. Then, as appropriate,
23 I will demonstrate where and how those arguments
24 are inconsistent with economic principles. The
25 positions of many of the witnesses coincide with

1 those of Dr. Nina W. Cornell (representing MCI
2 Metro Access Transmission Services, Inc.).
3 Accordingly, my rebuttal of Dr. Cornell's arguments
4 should be taken as also applying, where
5 appropriate, to the arguments of the other
6 witnesses.

7

8

ENTRY BARRIERS

9 Q. Dr. Cornell [at 5-6], the Florida Cable
10 Telecommunications, Inc., or FCTA [at 3-6], and Ms.
11 McGrath of Time Warner [at 4-5] allege the
12 existence of so-called "natural" barriers to entry
13 in local exchange markets. To support their
14 allegation, they argue that:
15 (1) entry requires very large sunk and potentially
16 unrecoverable costs,
17 (2) it takes a lot of time for an entrant to grow
18 beyond a small area,
19 (3) consumers, unfamiliar with entrants, may need
20 to be targeted in a manner that necessitates
21 substantial unrecoverable marketing costs, and
22 (4) an entrant can be successful only to the degree
23 that it can secure the cooperation of other
24 interconnecting carriers.

25

1 Q. How significant are these factors likely to be in
2 determining the prospects for entry in Florida's
3 local exchange market?
4
5 A. Dr. Cornell paints an overly pessimistic view of
6 what is likely to happen in Florida's local
7 exchange markets. First, as is evident from the
8 identities of intervenors in this Docket, the
9 likely entrants are all firms with an already
10 substantial or growing presence in the
11 telecommunications industry. Some potential
12 entrants like AT&T and MCI have world-wide name
13 recognition, reputations, and resources that match
14 or exceed BellSouth's. Firms, like Metropolitan
15 Fiber Systems and Teleport, have aggressively
16 expanded into major metropolitan markets throughout
17 the U.S. and currently have numerous customers who
18 generate both high traffic volumes and revenues.
19 These firms are technologically advanced, highly
20 experienced, and well-versed in the art of
21 competing. The inter-exchange carriers like AT&T
22 and MCI (represented in this Docket by Mr. Guedel
23 and Dr. Cornell, respectively) will be formidable
24 competitors by being able to offer local, long
25 distance, and wireless calling on a

1 "one-stop-shopping" basis. The likely entrants in
2 Florida's local exchange market are hardly
3 neophytes in the business, and can be expected to
4 expand quickly in Florida. After all, many of
5 their potential customers for local services are
6 already buying their long distance offerings.

7

8 Q. Dr. Cornell claims [at 9] that without reciprocity,
9 i.e., equal charges for interconnection between
10 BellSouth and an ALEC, there will be a serious
11 barrier to entry by an ALEC (even one that is just
12 as efficient as BellSouth). Is this a real or
13 imagined threat to entry?

14

15 A. Lack of reciprocity in this sense is not a barrier
16 to entry. BellSouth will charge more for
17 interconnection than it gets charged by the ALEC
18 for the simple reason that BellSouth's rate
19 includes contribution toward its special
20 obligations like universal service, but the rate
21 charged by the ALEC without corresponding
22 obligations, rightfully, does not. This
23 contribution is lost whenever an ALEC, rather than
24 BellSouth, provides a service to the end user.

25

1 Asymmetry in interconnection rates would be an
2 entry deterrent (raising the entrant's costs but
3 not the incumbent's) only if BellSouth were not
4 required to recover at least as much contribution
5 from its own retail services as it does from the
6 interconnection service. However, with appropriate
7 imputation of the contribution, there can be no
8 price squeeze (as parties have alleged) and,
9 therefore, no barrier to entry. I will return to
10 the imputation issue later in my testimony.

11
12 Moreover, if BellSouth's proposed "Alternative 1"
13 for Florida's universal service support mechanism
14 -- calling for the assessment of a "universal
15 service preservation charge" to inter-exchange
16 carriers (IXCs) and ALECs on the basis of their
17 state-wide revenues -- is accepted, then there will
18 no longer be a contribution element for universal
19 service support in BellSouth's switched access
20 charge. [Direct testimony of A. J. Varner at 5-6]

21
22

23 Q. Are you suggesting that BellSouth, but not the
24 ALEC, should be allowed to include that
25 contribution element in its interconnection rates?

1
2 A. No. Such contribution should only be included in
3 the interconnection rates of LECs or ALECs that
4 have special obligations like universal service or
5 carrier of last resort and are obliged to provide
6 certain types of local service at prices below
7 cost. This form of contribution will, of course,
8 be required so long as the present form of support
9 mechanism for universal service, or anything
10 resembling it, is in effect. As I stated before,
11 BellSouth's proposed Alternative 1 would make such
12 a contribution unnecessary.

13

14 **COMPENSATION PRINCIPLES**

15 Q. What principles have parties proposed for
16 determining the form of compensation for
17 interconnection?

18

19 A. Parties have proposed that the form of compensation
20 should be based on three basic principles:
21 (1) ALECs should be treated as co-carriers, not
22 customers,
23 (2) efficient firms should not be prevented from
24 entering the market, and
25 (3) entrant ALECs should not be compelled by the

1 form of compensation to choose a particular
2 technology or architecture (e.g., that of the
3 incumbent LEC) that those firms do not want.
4 [Cornell at 7-8]

5

6 Q. Do you agree with these three basic principles?

7

8 A. Not entirely. Of course, any successful
9 interconnection arrangement is predicated on there
10 being cooperation and agreement among
11 interconnected carriers. Also, I can find nothing
12 exceptionable about the idea that interconnection
13 arrangements should not deter entry by equally or
14 more efficient firms.

15

16 I cannot imagine, however, that an entrant's choice
17 of technology and architecture will depend on the
18 form of compensation chosen for interconnection.
19 In particular, I find Dr. Cornell's assertion [at
20 23-24] -- that if switched access charges were
21 chosen as the form of compensation, the entrant
22 would be forced to mirror the incumbent's
23 architecture -- to be highly contrived. In my
24 direct testimony, I critiqued Teleport's proposal
25 (supported by Dr. Gerald Brock) that the

1 interconnection charge should be based only on the
2 carrier's peak-period capacity. Instead, I
3 proposed moving toward an optimal two-part rate
4 structure in which the fixed part recovers the
5 fixed costs associated with providing
6 interconnection and the variable part recovers the
7 traffic-sensitive usage costs. There is nothing
8 preventing an entrant that wishes to combine fixed
9 plant (e.g., loops) with usage-sensitive components
10 like switching and transport in different
11 proportions than BellSouth from devising the
12 two-part rate structure that best recovers its
13 costs. In my direct testimony, I also noted that
14 BellSouth itself is moving in the direction of the
15 two-part rate structure which would give it
16 additional flexibility in setting interconnection
17 rates.

18

19 **BILL AND KEEP COMPENSATION**

20 Q. What have the parties proposed as their preferred
21 form of compensation for interconnection?

22

23 A. All parties who filed direct testimony in this
24 Docket proposed that the form of compensation be
25 "bill and keep" or, as Dr. Cornell puts it, "mutual

1 traffic exchange." [Cornell at 10-11, McGrath at
2 8, FCTA at 8, Mr. Devine of MFS of Florida at 7,
3 Guedel at 13] Under this arrangement, there is no
4 actual transfer of money among interconnecting
5 carriers; each carrier merely imposes a charge on
6 its own customers that make calls to (hence,
7 interconnect with) customers on the networks of
8 other carriers. For this form of compensation to
9 work properly, all parties agree that traffic
10 between interconnecting carriers must be roughly in
11 balance. [Cornell at 19, McGrath at 10]

12

13 Q. Dr. Cornell claims [at 12] that bill and keep or
14 "[m]utual traffic exchange is the most efficient
15 means of compensating for the termination of local
16 exchange traffic ..." because each carrier then has
17 the incentive to minimize its termination costs and
18 no unjustified costs are imposed on the system. Do
19 you agree?

20

21 A. No. Bill and keep or mutual traffic exchange is
22 definitely not the most efficient means of
23 compensating for call termination of calls
24 originating on other networks. Dr. Cornell
25 overlooks a number of critical real-world economic

1 factors that prevent bill and keep from being the
2 most efficient means of compensation. These
3 factors concern differences among (1) customer
4 characteristics, (2) incentives of carriers to
5 minimize costs, (3) carriers' cost characteristics,
6 and (4) carrier requirements for recovering
7 contribution toward the cost of special
8 obligations.

9
10 Q. When Dr. Cornell states that bill and keep will
11 avoid imposing unjustified costs on the system,
12 what is she referring to?

13
14 A. According to Dr. Cornell [at 13],
15
16 "[o]nce all the conditions for effective
17 competition have been established, it is virtually
18 certain that the amount of compensation that would
19 be due to one network would be exactly offset by
20 the amount due to the other. Unless there are
21 significant distortions between networks, the
22 traffic between networks tends to be in balance
23 over time."

24
25 Predicated on such a traffic balance, Dr. Cornell

1 believes -- a belief echoed by Mr. Devine [at 10]
2 -- that there is little to be gained by
3 instituting a costly measurement and billing system
4 simply for the purpose of assessing a
5 termination-based compensation charge to
6 interconnecting networks. Once the traffic is in
7 balance, payments would offset and no further
8 measurement or billing would be required. Dr.
9 Cornell's conclusion rests primarily on her
10 apparent conviction that:

11 (1) traffic between carriers will inevitably be in
12 balance, regardless of both the types of customers
13 involved and the relative sizes of the carriers'
14 networks

15 (2) compensation need not be linked to the actual
16 costs that a carrier will incur when it terminates
17 a call from another carrier, at any level of
18 traffic volume between the two carriers.

19 Neither of these premises is correct, nor is her
20 conclusion.

21

22 Q. Please explain why.

23

24 A. There are at least four reasons why Dr. Cornell's
25 reasoning is faulty. The so-called mutual traffic

1 exchange or bill and keep proposals do not
2 represent efficient prices, and they will certainly
3 not lead to an efficient economic outcome. First,
4 the bill and keep proposal ignores the significance
5 of differences among customer types. Second, it
6 ignores how it distorts the carriers' respective
7 incentives to minimize costs. Third, it assumes
8 implicitly that all carriers have identical cost
9 characteristics. Fourth, it fails to account for
10 BellSouth's need to recover the contribution lost
11 when it provides interconnection to an ALEC.

12

13 Q. Please explain what you mean by the bill and keep
14 proposal ignoring differences among customer types.

15

16 A. Whether terminating traffic between entrants and
17 BellSouth will be in balance -- a key assumption
18 for successful bill and keep -- will depend on the
19 types of customers that entrants will acquire. It
20 is important to note that the mix of customers (and
21 their associated origination-termination ratios)
22 selected to serve will not be independent of the
23 interconnection rates themselves. If the
24 terminating switched access charge is outrageously
25 high, the entrant would seek customers with high

1 origination-termination ratios. Conversely, if
2 terminating switched access is free (or priced
3 below the entrant's incremental cost of originating
4 traffic), the entrant would seek customers with low
5 origination-termination ratios. Therefore, the
6 extent to which any traffic balance between
7 carriers could be achieved -- if at all -- will
8 depend strongly on the mix of customers of the
9 interconnecting carriers. Specifically, the usage
10 characteristics of both a carrier's customers and
11 those on other networks that call its customers
12 will matter greatly. This means that, contrary to
13 Dr. Cornell's suggestion, traffic balance is
14 neither an independent nor an inevitable outcome.

15

16 Q. Please explain how bill and keep ignores the
17 distortion in the carriers' incentives to minimize
18 the cost of interconnection.

19

20 A. By artificially setting the termination rate to
21 zero, bill and keep will bring about inefficient
22 behavior. Under bill and keep, no payment is
23 actually made by one carrier to another. Since no
24 payment is made, neither carrier has an incentive
25 (or the means by which) to recognize the level of

1 terminating costs incurred by the other. Thus, each
2 carrier would focus only on minimizing its own cost
3 of delivering traffic to the other carrier, rather
4 than acting to minimize the total of both -- their
5 own traffic delivery costs and the other carrier's
6 terminating costs.

7
8 As an example, consider the two points of
9 interconnection proposed by BellSouth: the local
10 switch and the tandem switch. Tandem
11 interconnection, for example, requires that traffic
12 be (1) switched at the tandem, (2) transported to a
13 local switch, (3) switched again, and finally (4)
14 delivered to the called party. Thus, tandem
15 interconnection imposes additional switching costs
16 and additional transport costs, which could be
17 avoided if interconnection was to occur at the
18 local switch. Usually, when interconnection is
19 made at the local switch, it is switched once and
20 then delivered to the called party. Entrants, on
21 the other hand, would likely find it more
22 cost-effective to deliver their traffic to
23 BellSouth's tandem switches because that would
24 minimize their costs of carrying traffic to
25 multiple points of interconnection. Thus, under

1 bill and keep, entrants would not face a price
2 which reflects BellSouth's underlying costs of
3 interconnection. Entrants would minimize only
4 their own cost of delivering traffic to BellSouth,
5 but would not take into account the additional
6 interconnection costs imposed on BellSouth because
7 of their decisions. This is not efficient economic
8 behavior. Simply put, under bill and keep, no
9 single party has an incentive to minimize the total
10 end-to-end cost of a call between interconnecting
11 networks. As the example of terminating traffic at
12 tandems rather than at central offices shows,
13 incentives to act efficiently are diminished under
14 bill and keep. The price of interconnection is an
15 important signal that provides all carriers
16 information concerning the costs imposed by their
17 actions. Only when such information is available
18 and carriers face the cost consequences of their
19 actions will efficient economic decisions be made.

20

21 Q. Please explain how bill and keep is affected by
22 differences in carriers' costs?

23

24 A. Bill and keep assumes that all carriers will have
25 identical cost characteristics. It does not

1 recognize that networks developed by entrants in
2 the future are likely to have different engineering
3 and cost characteristics than the BellSouth network
4 already in place. Indeed, contrary to Dr.
5 Cornell's assertions, the competitive ALECs seeking
6 mutual interconnection will differ by basic
7 technology: we may expect to see broadband optical
8 fiber wireline networks and cellular and PCS
9 radio-based networks. It would be very unlikely
10 for ALECs based on this range of technologies to
11 have termination costs that are similar to
12 BellSouth's. As discussed in the previous
13 paragraph, ignoring cost differences will foster
14 inefficient behavior.

15
16 Dr. Cornell appears to suggest [at 11] that only
17 bill and keep will allow carriers to choose their
18 technology in a neutral fashion, i.e., without
19 being influenced by the incumbent LEC's technology
20 and architecture or by the form of compensation
21 elected for interconnection. Neither she nor any
22 of the parties provide any systematic analysis or
23 discussion of why this would be necessarily true.
24 Significantly, they also make no attempt to analyze
25 how bill and keep may break down when there are

1 differences or asymmetries in cost among the
2 interconnecting carriers.

3

4 Q. Please explain the effect of the failure of bill
5 and keep to account for BellSouth's need to recover
6 its lost contribution.

7

8 A. Bill and keep does not accommodate the requirement
9 that BellSouth be compensated for the lost
10 contribution associated with the provision of
11 interconnection or wholesale network functions.

12 Some of BellSouth's retail local exchange services
13 have always been priced above the relevant
14 incremental costs to contribute towards recovery
15 of:

16 (1) the fixed common costs of the ubiquitous
17 network,

18 (2) subsidies to services priced inefficiently
19 (e.g. basic local services and service to rural
20 customers) to achieve certain regulatory
21 objectives, and

22 (3) historical costs not yet accounted for because
23 of uneconomic regulatory depreciation rates.

24

25 Bill and keep would permit entrants' customers to

1 avoid paying this contribution despite the fact
2 that:
3 (1) by law, BellSouth must apparently continue to
4 fulfill its carrier of last resort
5 responsibilities,
6 (2) BellSouth's network (or network elements) will
7 continue to be used to provision services offered
8 by entrants, and
9 (3) BellSouth's retail customers (or its
10 stockholders) must still provide this contribution.

11

12 Q. Please summarize the principal weaknesses in the
13 bill and keep proposal.

14

15 A. The bill and keep proposal submitted by various
16 parties in this Docket is based on an
17 over-simplified view of both incentives and demand
18 and cost circumstances that are likely to prevail
19 in Florida's competitive local exchange market.
20 Indeed, Mr. Guedel [at 13] speaks admiringly of the
21 bill and keep arrangement: "The beauty of this
22 arrangement is its simplicity." In my opinion,
23 such an arrangement is more simplistic than simple.
24 Endorsing the bill and keep arrangement purely
25 because of its apparent simplicity reveals an

1 unwillingness to confront the tricky details of a
2 compensation system that can -- and should --
3 reflect accurately and fairly the variations in
4 demand, cost, and other market conditions. It is
5 doubly ironic, therefore, that Mr. Guedel (alone
6 among all parties) recommends bill and keep for the
7 initial phase of interconnection (when the traffic
8 between carriers will almost certainly be out of
9 balance) but a migration to a measured system of
10 termination charges eventually.

11

12 Q. You said earlier that, contrary to Dr. Cornell's
13 assertions, traffic balance between interconnecting
14 carriers is not an inevitable outcome. Doesn't Dr.
15 Cornell, in fact, acknowledge this possibility when
16 she says that: "[u]nless very strong incentives
17 exist to try to select customers on the basis of
18 their incoming or outgoing traffic patterns, the
19 way entrants will build their networks should
20 produce the same outcome." [at 17, emphasis in
21 original]

22

23 A. Yes, but Dr. Cornell makes it seem like traffic
24 imbalance can persist only in extreme situations,
25 i.e., traffic balance is almost inevitable. It is,

1 of course, difficult to be clairvoyant about likely
2 traffic patterns under interconnection in a
3 competitive local exchange market, particularly
4 when the interconnection arrangements themselves
5 may create uneconomic incentives to pursue
6 niche-marketing or opportunities for rate
7 arbitrage. It is certainly theoretically possible
8 for traffic to move toward balance over time.
9 There is anecdotal evidence that similarly situated
10 customers tend to call each other just as often (a
11 form of "social reciprocity compact"). However,
12 there is no reason to believe the same is
13 necessarily true for traffic between customers who
14 are not similarly situated: for example, between a
15 business and its customers, or between more
16 affluent and less affluent individuals. This would
17 be true not only for the frequency of calling, but
18 for duration as well. There is no a priori reason
19 to expect that traffic between, say, a major
20 airline or bank and its regular customers or even
21 casual information-seekers will be in balance, even
22 in the long run. The imbalance of
23 origination-termination ratios among certain
24 classes of customers is a fact of life, not an
25 unusual or extreme situation.

1
2 It is also likely for entrants to pursue a strategy
3 of seeking out niche customers that represent the
4 highest potential for revenues and profit to them.
5 The targeted success of competitive access
6 providers (CAPs) in densely-populated metropolitan
7 business centers is a case in point. By delivering
8 high-quality service based on the latest "hi-cap"
9 technology at prices that could not be matched by
10 incumbent carriers subject to rate averaging, these
11 CAPs made the most of their niche-entry strategy.
12 The fact that they have traditionally shied away
13 from the residential market is less evidence of
14 their inability to compete with the "incumbent
15 monopoly" than of a calculated decision to only
16 pursue the most remunerative markets. Therefore,
17 it is perfectly reasonable to expect entrants in
18 Florida's local exchange market to forsake entry
19 "on all fronts" in favor of profit potential-laden
20 sectors of the market. An entrant may never seek
21 to equalize market share with the incumbent; there
22 is no necessary straight-line relationship between
23 market share and profitability. In fact, it is
24 conceivable that even a "small" share of customers
25 could, if the customers are selected with care, be

1 associated with a disproportionately "large" share
2 of revenues from interconnected traffic. That is
3 why I find Dr. Cornell's example [at 19] about
4 balance despite unequal network sizes to be
5 contrived and unpersuasive. It is offered in
6 support of her point, but it definitely does not
7 exhaust all possibilities including, for example,
8 that an entrant with 10 percent of all customers
9 may have enough incoming traffic relative to
10 outgoing traffic to generate over 50 per cent of
11 local interconnection revenues.

12
13 In sum, the possibility that traffic will ever be
14 in balance cannot be taken for granted. Given
15 competitive entry, the more material question is
16 how market strategies are likely to be devised that
17 can turn information about customer demand and
18 network cost characteristics to a carrier's
19 advantage. As I remarked earlier, I do not expect
20 entrants to be neophytes. Contrary to Dr.
21 Cornell's somewhat surprising apprehension that
22 entrants "...may not have the ability to make a
23 distinction among customers based on whether they
24 have mostly incoming or outgoing traffic" [at 18],
25 I am willing to give those entrants more credit for

1 their marketing savvy.

2

3 Q. To summarize, is it your position that bill and
4 keep is an inferior alternative to BellSouth's
5 proposed terminating switched access charge?

6

7 A. Yes, it most definitely is. Bill and keep relies
8 on a very simplistic and unrealistic view of real
9 world markets. It does not generate price signals
10 that lead to efficient economic behavior. It fails
11 to account for fundamental differences in demand
12 and cost characteristics and, in particular,
13 differences in the structures, objectives, and
14 obligations between the incumbent carrier and
15 entrants. BellSouth's proposed interconnection
16 rate structure is, as I said in my direct
17 testimony, not yet textbook perfect, but it
18 properly accounts for all costs of providing
19 interconnection and, taken along with other rate
20 structures BellSouth has adopted recently in
21 Florida, is headed in the right direction.

22

23

BILL AND KEEP PRACTICE

24 Q. What have the parties claimed about the practice of
25 bill and keep in the United States?

1

2 A. Parties have claimed that bill and keep is a
3 popular arrangement for interconnection between
4 non-competing LECs in geographically contiguous
5 territories and for exchanging extended area
6 service calls. [Cornell at 12 and 31, Devine at
7 12-13, McGrath at 8] They have also listed some
8 states that have supposedly adopted bill and keep
9 for local interconnection. [Devine at 11-12, FCTA
10 at 10, McGrath at 12-13]

11

12 Q. Does this provide legitimacy to the bill and keep
13 proposal for interconnection?

14

15 A. No. It is true that there are many instances of
16 bill and keep among non-competing, contiguous LECs.
17 However, at stake in this Docket is the appropriate
18 form of compensation for interconnection among LECs
19 that (1) compete for the same set of customers, and
20 (2) operate within the same geographical territory.
21 Bill and keep is definitely not the proper model
22 for interconnection in a market with those vastly
23 different circumstances.

24

25 Competition for customers introduces a strategic

1 variable into the interconnection decisions of
2 carriers. Being in the same territory, the growth
3 of an entrant will depend on (1) the proportion of
4 customers it can entice away from the incumbent and
5 (2) the proportion of "new" customers it can sign
6 up. Therefore, just about every decision it makes
7 about niche-market or growth strategy, service
8 offerings, prices, choice of technology, etc., will
9 be driven by the fact of competition. The
10 incumbent will likely face a similar set of
11 imperatives. If bill and keep does not permit a
12 carrier (most likely the incumbent because it has
13 the ubiquitous network) to recover the true cost of
14 providing interconnection (including any lost
15 contribution), then it will be handicapped unfairly
16 in the competition for customers. These issues
17 largely do not matter when contiguous LECs merely
18 "hand off" traffic between themselves, but each has
19 a secure customer base.

20

21 Q. Parties have also cited a number of states that
22 have adopted bill and keep as the compensation
23 arrangement for interconnection under local
24 exchange competition. Why shouldn't Florida adopt
25 bill and keep?

1

2 A. The whole matter of what other states have done is,
3 in my opinion, in the eyes of the beholder.

4 Between them, parties have credited California,
5 Connecticut, Iowa, and Michigan with having
6 instituted bill and keep for interconnection. Mr.
7 Devine states [at 11]: "... the Iowa Utilities
8 Board ordered use of the bill and keep method of
9 compensation on an interim basis, pending the
10 filing of cost studies." [emphasis added] In Re
11 McLeod Telemanagement Inc., 161 PUR4th 605 (Iowa
12 U.B, Docket No. TCU-94-4, 1995), however, the Iowa
13 Utilities Board held that bill and keep was not an
14 appropriate permanent compensation measure. The
15 Board reasoned that:

16

17 "Bill and keep may have been acceptable in a
18 situation where extended area service traffic was
19 exchanged between monopoly local service providers.
20 It is an unacceptable pricing mechanism for local
21 service traffic exchange between competing local
22 exchange utilities. Cost-based pricing of the
23 services provided is essential in the competitive
24 market. Permanent bill and keep methodology would
25 be looking backward to the monopoly regulation of

1 the past, rather than forward to the regulation of
2 competitive utilities in the future."

3
4 Similarly, in Re MFS Intelenet of Maryland, Inc.,
5 152 PUR4th 102 (MD PSC, Case No. 8584, Order No.
6 7155, 1994), the Maryland Public Service Commission
7 rejected MFS's request for bill and keep
8 arrangements for termination of traffic between it
9 and Bell Atlantic and agreed with Bell Atlantic's
10 proposition that it and MFS should be able to
11 charge for access to their networks. [Id. at 120]
12 Recognizing the need for incumbent carriers to
13 recover their fixed network costs, the Maryland
14 Commission held that "a competitive carrier should
15 be required to make a contribution to that portion
16 of the joint and common costs of the ubiquitous
17 network that was heretofore provided by the local
18 business service which the incumbent carrier will
19 lose to competition." [Id. at 123]

20
21 The California Public Utility Commission (in Re
22 Competition for Local Exchange Service, (CA PUC
23 R.95-04-043 I.95-04-044, Decision 95-07-054, 1995),
24 in authorizing bill and keep on an interim basis
25 only, stated that it would, at the end of one year,

1 re-assess the effectiveness and fairness of bill
2 and keep and decide whether or not to adopt an
3 alternative call termination approach. The
4 California Commission further noted its policy
5 preference for approving tariffed service prices
6 that reflect costs and for applying the same
7 principle to call termination services. Therefore,
8 its interim bill and keep policy should in no way
9 be regarded as its final policy choice. Indeed,
10 the California Commission invited competing local
11 carriers to come up with alternatives to bill and
12 keep, provided they were not unduly discriminatory
13 or anti-competitive.

14

15 In Re Illinois Bell Telephone Company, PUR4th (IL
16 Commerce Commission, 94-0096, 94-0117, 94-0146,
17 1995), regulators in Illinois adopted a reciprocal
18 compensation scheme that sets an interconnection
19 rate which
20 (1) reflects the long run service incremental cost
21 of terminating calls,
22 (2) provides a reasonable level of contribution to
23 Illinois Bell's overhead costs, and
24 (3) allows Illinois Bell to pass an imputation test
25 for local traffic.

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

The Illinois Commission specifically rejected proposals submitted by MFS and MCI.

Finally, in Re City Signal Inc., 159 PUR4th 532, 547-48 (MI PSC, Case No. U-10647, 1995), the Michigan Public Service Commission adopted bill and keep as long as traffic between interconnecting carriers is within 5 percent of balance.

As these instances show, there has been no great rush to transfer the bill and keep in its purest form from the interconnection-among-contiguous-LECs world to the interconnection-among-competing-LECs world. Commissions that have considered the bill and keep arrangement for interconnection in local exchange competition have either adopted it on an interim basis, with reservations, or rejected it outright. This record provides no compelling reason for Florida to consider adopting bill and keep.

BELLSOUTH'S PROPOSED ARRANGEMENT AND IMPUTATION

Q. How have parties received BellSouth's proposal for a terminating switched access charge as the form of

1 interconnection compensation?

2

3 A. Parties have not found BellSouth's proposed
4 terminating switched access arrangement acceptable
5 because allegedly:

6 (1) it can cause prices of competitive retail
7 services to be higher, despite competition, than
8 they need be [Cornell at 30], and

9 (2) without imputation of the switched access rate
10 into BellSouth's retail local exchange service
11 prices, there is a strong possibility of price
12 squeeze by BellSouth against the ALECs [Cornell at
13 22-23, Devine at 14-16].

14

15 Moreover, parties claim that BellSouth's proposed
16 arrangement would force interconnecting ALECs to
17 mirror BellSouth's technology [Cornell at 21] and
18 prevent those ALECs from offering innovative new
19 local calling plans [Devine at 18, McGrath at 13].

20

21 Q. Dr. Cornell asserts [at 21] that "use of switched
22 access charges for compensation for terminating
23 local exchange traffic under Southern Bell's
24 current regulatory restrictions would deny the
25 public all of the benefits that could come from

1 local exchange competition." What do you
2 understand Dr. Cornell's concerns as being?
3
4 A. Dr. Cornell's prime concern is that BellSouth's
5 terminating switched access charge differs from the
6 total service long run incremental cost (TSLRIC) of
7 switched access by a contribution element. For
8 example, she points [at 21] to BellSouth's alleged
9 inclusion of a "universal service preservation
10 charge" in its interconnection price which,
11 however, entrants are barred from doing (lack of
12 reciprocity). Also [at 28], she concludes that any
13 markup of the interconnection rate above its
14 "direct cost" (TSLRIC?) -- as would be the case
15 with a switched access rate that includes
16 contribution -- would prevent competition for
17 retail services from achieving the lowest possible
18 retail prices. Thus, Dr. Cornell believes, the
19 switched access charge for interconnection would
20 both disadvantage competitors and hurt end-user
21 customers who buy retail services.
22
23 Q. Do you share Dr. Cornell's concerns, or consider
24 them valid?
25

1 A. No. First, Dr. Cornell is mistaken in her belief
2 that BellSouth's proposed universal service
3 preservation charge (USPC) is a contribution
4 element included in the interconnection rate,
5 specifically its switched access rate. As
6 BellSouth has made clear [Direct testimony of A. J.
7 Varner in this Docket at 5-7], the USPC is a
8 separately tariffed element that would be assessed
9 directly on the revenues of other
10 telecommunications carriers in Florida. The
11 purpose of the USPC is to raise funds for
12 supporting universal service but to do so in a
13 manner that differs fundamentally from the service
14 price-based contribution elements in effect today.
15 Under Alternative 1 in Mr. Varner's testimony, the
16 USPC would make it possible for "...[a]ccess
17 charges [to] be reduced by the amount of the
18 universal service support." [Varner at 6] Also,
19 "... the [USPC] precludes the need for any separate
20 Carrier Common Line or Residual Interconnection
21 charges for local interconnection." [Varner at 7]
22
23 Second, the lack of reciprocity that Dr. Cornell
24 alludes to is only a problem if a price squeeze on
25 the competing ALECs results. A price squeeze can

1 be eliminated by adopting principles of competitive
2 parity. Also, Dr. Cornell's lament that retail
3 prices, even under competition, will not be the
4 lowest possible ignores the fact that pricing of
5 services in the regulated telecommunications
6 industry has never followed the so-called "first
7 best" principles. Given BellSouth's regulatory
8 history and special obligations (the costs of which
9 it is entitled to an opportunity to recover),
10 efficient service prices must be determined
11 according to "second best" principles.

12

13 Q. Please explain the principle of competitive parity
14 and how it would solve the potential price squeeze
15 problem.

16

17 A. In theory, competitive parity in a market has two
18 requirements. First, there must be no price or
19 quality discrimination, overt or implicit, between
20 competitors. Second, the margin between the
21 incumbent LEC's interconnection charge (which
22 entrant ALECs must pay) and its retail price
23 (against which the entrants must compete) must
24 reflect the LEC's economic costs of performing the
25 retail function for which it will be competing with

1 entrants. One key aspect of this is the price at
2 which interconnection service is provided to
3 competitors.

4
5 Competitive parity results in two theoretical
6 pricing principles:

7 (1) where a LEC is the sole source of the service
8 required by an ALEC, the LEC's own retail services
9 must be subject to the same interconnection charges
10 as it imposes on its competitors, except to the
11 extent that the (marginal) costs of providing
12 interconnection to itself and to its competitors
13 differ, and

14 (2) the LEC's retail prices must recover both the
15 contribution included in the interconnection charge
16 and the incremental costs of its own retail
17 operations.

18
19 In economic theory, these principles are both
20 necessary and sufficient to ensure that competitors
21 (incumbent LECs) be neither advantaged nor
22 disadvantaged in their retail markets because (1)
23 they supply an input (interconnection) that other
24 competitors (entrant ALECs) must purchase, and (2)
25 they charge an input price (interconnection rate)

1 that exceeds the incremental cost of that input.

2

3 These pricing principles eliminate the possibility
4 of price squeeze because the incumbent LEC is
5 obliged to recover at least as much contribution
6 from its retail service as it does from its
7 interconnection service (implying, thereby, that
8 the "real" competition is between the incumbent's
9 and the entrant's incremental costs). If the
10 incumbent's costs of providing interconnection to
11 the entrant and to itself are the same, this rule
12 amounts to imputation of the interconnection charge
13 in the incumbent's retail service price. If the
14 two costs are different, then this amounts to
15 imputation of the interconnection charge adjusted
16 for the cost differential. Either way, the
17 contribution in the retail price is at least as
18 large as that in the price of interconnection and a
19 price squeeze cannot occur.

20

21 All of this would, of course, be moot if the USPC
22 were to eliminate the need for including a
23 contribution element in the price of a service.

24

25 Q. Please explain what "second best" pricing

1 principles are and why they, and not Dr. Cornell's
2 prescription of pricing interconnection at TSLRIC,
3 should apply.

4

5 A. First best pricing principles apply to competitive
6 markets where there are no "market distortions."
7 The regulatory process is a prime source of such
8 distortions. For example, regulation often (1)
9 constrains the regulated firm's price-setting
10 freedoms, (2) imposes special obligations (e.g.,
11 below-cost pricing of basic residential service
12 financed by artificial contributions from prices of
13 other services), and (3) requires the regulated
14 firm to depreciate its assets at less than the
15 economic rate of depreciation. Other distortions
16 arise from the special nature of certain firms,
17 e.g., those with economies of scale which cannot
18 recover all of their fixed costs by setting prices
19 at no higher than marginal costs. When such
20 distortions are present, economists recommend the
21 use of "second best" pricing principles which set
22 the lowest possible prices, recover all costs, and
23 minimize the efficiency losses caused by the
24 distortions. Second best prices, as Dr. Cornell
25 correctly points out, are not as low as first best

1 prices -- even with competition -- but they are the
2 lowest they can be when market distortions are
3 present. Hence, what Dr. Cornell is lamenting is
4 nothing less than the influence of regulation on
5 the prices of regulated firms with special
6 obligations.

7
8 Finally, Dr. Cornell's suggestion that
9 interconnection be priced exactly at TSLRIC is a
10 departure from second best pricing. By not
11 requiring interconnection to raise its share of the
12 total contribution needed, it would be virtually
13 impossible for BellSouth to cover all of its costs,
14 including those due to its special obligations and
15 regulatory legacy. This, in effect, would mean
16 requiring BellSouth's other services to compensate
17 by raising inefficiently high levels of
18 contribution in their prices and exposing them,
19 thereby, to greater competitive risks. Again, if
20 the funds required for supporting the special
21 obligations were to be raised by methods like the
22 USPC, the interconnection rate could be brought
23 down toward cost.

24

25 Q. So what ensures that second best prices will result

1 if BellSouth's proposed terminating switched access
2 rate is adopted as the interconnection rate?

3

4 A. There are various ways to set second best prices,
5 the best known being Ramsey pricing (that marks up
6 the price of each service -- wholesale or retail --
7 in inverse proportion to its price elasticity of
8 demand) and non-linear pricing schemes (of which
9 the two-part rate structure that I proposed in my
10 direct testimony is a special case). The end
11 result is that as long as BellSouth must (1)
12 provide universal service and price certain basic
13 services below cost, and (2) follow slower than
14 economic depreciation schedules, it has a
15 legitimate additional cost recovery problem that
16 unencumbered-by-regulation firms in competitive
17 markets do not.

18

19 What ensures that BellSouth cannot raise any more
20 contribution in its service prices than is
21 warranted by second best efficient pricing? There
22 are several factors. First, imputation ensures
23 that BellSouth will recover at least as much
24 contribution in its retail prices as it does in its
25 interconnection rate. Facing potentially strong

1 retail competition, it is unlikely that BellSouth
2 will mark up its retail prices by any more than it
3 absolutely has to. Thus, BellSouth will not have
4 an incentive to recover unduly high contributions
5 in its prices.

6
7 Second, regulatory oversight of BellSouth's prices
8 is not likely to disappear any time soon. Given
9 the Commission's interest in approving only just
10 and reasonable rates and allowing recovery of only
11 prudently incurred costs, the opportunity to unduly
12 raise contributions will be minimal as well.

13
14 Third, there will be increasing pressure from
15 alternative technologies to keep the prices of
16 wholesale services like interconnection down in
17 general. Local interconnection charges are subject
18 to the same competitive forces that led to the
19 construction of bypass facilities when switched
20 access rates were very high relative to costs.
21 Higher than warranted markups will be quite
22 unlikely in that environment.

23
24 Finally, under Florida law and in compliance with
25 the Commission's Order No. 91-0172, network access

1 rates will be capped for three years, and allowed
2 to rise no more than 3 percent annually thereafter.
3 If annual inflation runs above 3 percent per year,
4 this amounts to network access charge reductions in
5 real terms. Provisions like these make it almost
6 impossible for BellSouth to raise access charges
7 through higher than justifiable markups.

8

9

CONTRIBUTION

10 Q. Please summarize the positions of parties opposed
11 to BellSouth's proposed arrangement on the matter
12 of contribution.

13

14 A. Parties oppose including a contribution element in
15 the interconnection charge. Contribution is
16 alleged to be:

17 (1) an irreducible component, not subject to
18 competition, that inflates the terminating switched
19 access charge and prevents retail competition from
20 producing the lowest possible retail service prices
21 [Cornell at 28-29, Guedel at 16-17],

22 (2) a factor only in BellSouth's interconnection
23 rate to an ALEC but not in that ALEC's rate to
24 BellSouth, creating an additional cost and an entry
25 barrier for the ALEC [Cornell at 21], and

1 (3) appropriately recovered only from retail
2 services, rather than wholesale services like
3 interconnection [Cornell at 28].

4

5 In addition, parties ask for contribution toward
6 BellSouth's special obligations (universal service)
7 to be de-linked from interconnection rate matters.
8 [FCTA at 6-7, McGrath at 13]

9

10 Q. You have already addressed a number of these
11 concerns with the contribution element in the
12 switched access charge. Do you have any other
13 comments with respect to those concerns?

14

15 A. Yes. The first general concern is that
16 contributions will cause local exchange service
17 rates to be higher than they need be [Cornell at
18 22-25]. While I have argued above that they need
19 not be any higher than warranted in a second best
20 world, it is worthwhile to remember that under
21 Florida law, and in compliance with the
22 Commission's Order No. 91-0172, BellSouth's basic
23 local exchange service rates will stay capped until
24 January 1, 2001 (tantamount to a decline in rates
25 in real terms). Moreover, these rates are already

1 below cost and below where they would have been in
2 a first best, unencumbered, competitive market.
3 Therefore, the prospect of these rates rising
4 toward cost -- even if the rate cap were not in
5 effect -- is hardly cause for concern on economic
6 efficiency grounds.

7

8 The second general concern is that if the
9 contribution-laden switched access rate is adopted
10 for interconnection, BellSouth will lose the
11 incentive to reduce costs and act efficiently
12 [Cornell at 21]. Here, too, there may be less than
13 meets the eye. The contribution included in
14 BellSouth's switched access price today is equal to
15 the average retail contribution from all of
16 BellSouth's customers. Actual contribution,
17 however, varies widely over the customer base: it
18 varies directly with a number of customer
19 characteristics, namely, size, usage volume, and
20 the cost to serve. Since new entrants will more
21 than likely concentrate their efforts on the more
22 profitable customers -- those that generate
23 above-average amounts of contribution -- the amount
24 of contribution collected by BellSouth in its
25 interconnection price will be, on average, less

1 than the amount of contribution actually forgone
2 when the more profitable customers are served by an
3 alternative carrier. Hence, BellSouth will not be
4 truly compensated for the lost contribution unless
5 entrants also serve a customer mix that corresponds
6 to the average BellSouth customer today.

7
8 Finally, it bears repeating that the USPC or a
9 similar means for raising support toward
10 BellSouth's special obligations will greatly
11 attenuate the need for contribution-laden pricing
12 of BellSouth's services. If such a mechanism is
13 adopted, issues like imputation and other
14 competitive safeguards against price squeeze would
15 become even less important. As it stands, I
16 believe, there are sufficient safeguards available
17 even if contribution toward special obligations was
18 to remain a fixed part of BellSouth's service
19 prices.

20

21 Q. Some parties have argued for de-linking the
22 interconnection rate from universal service
23 considerations and, therefore, to the contribution
24 element. Others have argued that the contribution
25 should be included in the prices only of retail

1 services, not wholesale services like
2 interconnection. Do you agree?

3

4 A. No. Universal service considerations cannot be
5 ignored because, as long as USPC or similar
6 mechanisms are not adopted, interconnection
7 service, like all other BellSouth non-subsidized
8 services, must continue to contribute toward
9 universal service.

10

11 Furthermore, it is perfectly appropriate to require
12 wholesale services to contribute as well.

13 Wholesale services like interconnection are, in
14 general, far less price-elastic than retail
15 services. Efficiency losses from contributions
16 (analogous to per-unit taxes) are minimized when
17 the greatest (least) amount of contributions are
18 assessed to the least (most) price-elastic
19 services. Recovering contribution from
20 interconnection can lead to inefficient behavior
21 only to the extent that firms can actually avoid
22 interconnection. As long as contribution is
23 confined mainly to unavoidable services (like
24 interconnection or essential network facilities),
25 the distortions imposed on carriers would be

1 minimal, and the associated welfare losses from
2 recovering contribution from these services should
3 be small. In contrast, recovering contribution
4 only, or mainly, from more price-elastic retail
5 services (which, in many cases, are already priced
6 well above costs) will be correspondingly
7 inefficient and welfare-reducing.

8

9

SUMMARY

10 Q. Please summarize your testimony.

11

12 A. Parties have filed direct testimony in this Docket,
13 generally in support of Teleport's petition and
14 against some of BellSouth's proposed arrangements
15 for interconnection. In my testimony, I responded
16 to these parties, primarily by way of rebutting Dr.
17 Cornell's direct testimony.

18

19 This rebuttal testimony was directed at six broad
20 categories of issues raised by the intervenors.
21 These included (1) entry barriers, (2) compensation
22 principles, (3) bill and keep compensation, (4)
23 bill and keep practice, (5) BellSouth's proposed
24 arrangements and imputation, and (6) contribution.

25

1 The thrust of my arguments was that the alleged
2 entry barriers are more imagined than real, given
3 the likely nature of entrants and the regulatory
4 strictures that will continue to apply to BellSouth
5 (particularly under its price regulation plan). I
6 argued that the bill and keep arrangement proposed
7 by the intervenors would be inefficient,
8 self-serving, and likely to be inferior to the
9 BellSouth proposed switched access charge
10 arrangement. I pointed out the numerous errors of
11 omission and commission in the economic analysis of
12 bill and keep compensation, notably, the failure to
13 take account of real-world differences in customer
14 demand and network cost characteristics. I showed
15 that by applying principles of competitive parity,
16 imputation, and second best pricing, the BellSouth
17 interconnection compensation alternative would
18 promote efficient competition and provide
19 incentives for minimizing costs, without penalizing
20 BellSouth for its historical regulatory commitments
21 and special obligations. However, even the need
22 for imputation or other safeguards against price
23 squeeze would disappear if universal service
24 support were to be raised through separate elements
25 like the universal service preservation charge,

1 rather than through contributions included in
2 service prices. Contrary to the fears expressed by
3 Dr. Cornell and others, BellSouth's proposed
4 arrangement would be a further step in the
5 direction of the optimal interconnection rate
6 structure and maximize the benefits to the public
7 of local exchange competition.

8

9 Q. Does this conclude your testimony?

10

11 A. Yes.

12

13

14

15

16

17

18

19

20

21

22

23

24

25