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BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of : DOCKET NO. 960847-TP  
Petitions by AT&T Communications of : DOCKET NO. 960980-TP  
the Southern States, Inc., MCI :  
Telecommunications Corporation, MCI :  
Metro Access Transmission Services, :  
Inc., for arbitration of certain :  
terms and conditions of a proposed :  
agreement with GTE Florida :  
Incorporated, concerning :  
interconnection and resale under :  
the Telecommunications Act of 1996. :  
:

FIRST DAY - AFTERNOON SESSION

VOLUME 3

PAGE 272 through 393

PROCEEDINGS: HEARING  
BEFORE: CHAIRMAN SUSAN F. CLARK  
COMMISSIONER J. TERRY DEASON  
COMMISSIONER JULIA L. JOHNSON  
COMMISSIONER DIANE K. KIESLING  
COMMISSIONER JOE GARCIA  
DATE: Monday, October 14, 1996  
PLACE: Betty Easley Conference Center  
Room 148  
4075 Esplanade Way  
Tallahassee, Florida  
REPORTED BY: NANCY S. METZKE, RPR, CCR  
APPEARANCES:

(As heretofore noted.)

BUREAU OF REPORTING

RECEIVED 10-15-96

DOCUMENT NUMBER-DATE

10989 OCT 14 96

FPSC-RECORDS/REPORTING

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1                   P R O C E E D I N G S

2  
3                   (Transcript follows in sequence from Volume 2)

4  
5                   RONALD SHURTER

6                   having been called as a witness on behalf of AT&T, and  
7                   being duly sworn, continues his testimony as follows:

8                   CONTINUED CROSS EXAMINATION

9                   BY MS. CASWELL:

10                  Q       Okay. I think it's line 8. It says, "GTE has  
11                   refused to agree to an interim solution until the parties  
12                   reach agreement on pricing issues." That's not true, is it?

13                  A       It was true, and we were in the process of  
14                   working towards the type of agreement that we needed for  
15                   the electronic to electronic interface. What was agreed to  
16                   at this point was the very basic capability of manual and  
17                   some network data mover capability that we had reached some  
18                   agreement on, but that was not a fact of what we needed to  
19                   be able to provide the system to system capability to be  
20                   able to get into the market.

21                               Now negotiations have continued in parallel to  
22                   the filing of these testimonies in this arbitration case,  
23                   so my comments to the point that we are nearing agreement  
24                   as it relates to what that electronic platform would look  
25                   like for electronic interface is a fact that negotiations

1 continue.

2 Q I want to be clear on one thing. We are talking  
3 about interim solutions and we're talking about long-term  
4 solutions. As far as the interim solutions go, AT&T and  
5 GTE have agreed to certain interim solutions to allow you  
6 access to our support systems; is that true?

7 A We have agreed to -- yes, we have agreed to a  
8 manual process for the 800 number calling that I talked  
9 about to centers as well as for ordering an electronic  
10 transport of the order.

11 Q And we have done that despite the fact that we  
12 have no agreement on cost recovery or how you are going to  
13 pay for that, right?

14 A Yes, that's true.

15 Q And are you aware that we spent well over a  
16 million dollars on systems changes so far?

17 A I do not know what you have spent.

18 Q But you do know, don't you, that we have  
19 established the National Open Market Center just to process  
20 ALECs orders, don't you?

21 A Yes.

22 Q Okay. So again, Mr. Carroll's testimony is  
23 incorrect to the extent that he states explicitly otherwise?

24 MR. LOGAN: Object that the witness has already  
25 answered this question.

1 MS. CASWELL: Okay. Then I'm a little puzzled as  
2 to why the testimony wasn't changed in the beginning, and I  
3 would like to strike that testimony if it's no longer true.

4 CHAIRMAN CLARK: Mr. Logan.

5 MR. LOGAN: I think the witness has testified  
6 that the testimony was filed at a specific date, that  
7 negotiations have gone on to that point. She is,  
8 Ms. Caswell has asked some questions about the interim  
9 solutions. I think the statement still -- I think the  
10 witness has correctly described what has happened with  
11 respect to that issue and to that statement.

12 CHAIRMAN CLARK: Ms. Caswell.

13 MS. CASWELL: As long as we understand that this  
14 testimony is no longer correct, that is fine because it  
15 goes on for quite a while talking about interim solutions  
16 and GTE's resistance to even talking to AT&T about those  
17 solutions until we have agreed on pricing. If that is no  
18 longer true and everybody understands that and they won't  
19 argue it in their brief because it's in the record now,  
20 then I'm fine with it.

21 CHAIRMAN CLARK: I think we have the statements  
22 by Mr. Shurter explaining the genesis of that statement and  
23 explaining the evolution of the negotiations to this point.

24 MS. CASWELL: Okay. Thank you.

25 BY MS. CASWELL:

1           Q     I think you mentioned a second step, interim  
2 process, and that's what we are going through now trying to  
3 take out the human intervention in some of the ways that  
4 you are accessing the systems now or that you can access  
5 the systems now; is that right?

6           A     Yes, and I think your use of the word "interim"  
7 also relates back to some of the confusion of the last  
8 statement. In other words, you are using the word  
9 "interim" as related to an initial step and "interim" as it  
10 relates to the ongoing. So, yes, the interim covers both.

11          Q     So are you saying I was confused about what this  
12 testimony reads here?

13          A     I was only making the point that the use of the  
14 word "interim" to refer to a first-step electronic  
15 implementation and a second step could be confusing.

16          Q     Okay. So I'm trying to go by what you're  
17 referring to these as. There is a first-step interim and a  
18 second-step interim; is that correct?

19          A     Yes.

20          Q     Okay. And with regard to the second-step  
21 internal negotiations to remove the human intervention, if  
22 you will, would you say those negotiations are progressing  
23 quite well?

24          A     Yes, I like the degree of joint cooperation that  
25 is now occurring and the fact that we do and have been

1 receiving commitments and a commitment plan as to when  
2 functionality and capability is going to be available on a  
3 date certain. That kind of discipline is very helpful, and  
4 that kind of commitment from GTE I believe is important.  
5 We -- I should comment is that we are here far after the  
6 end of the negotiation period in arbitration before we are  
7 able to get those kind of committed plans. So as we look  
8 forward to what we need to have the support total service  
9 resale and unbundled network element, it is in fact this  
10 commitment to a plan with date certain for implementation  
11 that I believe is essential for AT&T's market entry.

12 Q Okay. So just to be clear, because it's not  
13 entirely consistent with the testimony submitted, the only  
14 thing we are disagreeing about at this point is the  
15 permanent electronic interfaces; isn't that true?

16 A I should say that the interim step 2 that we just  
17 talked about here is not finalized in terms of agreement.  
18 We are in negotiation.

19 Q Right.

20 A It is my expectation based on what I see in  
21 negotiation that that should be finalized in the next  
22 couple of weeks.

23 Q Okay.

24 A So we are not totally in agreement. I do like  
25 what I've seen relative to commitment, joint working and a

1 plan, and I believe that is required, not only to cement  
2 the step 2 on interim but also to provide the electronic  
3 interface for unbundled network elements as well.

4 Q Okay. In regard to the long-term solution, the  
5 permanent electronic interfaces that you want, don't they  
6 depend to some extent on industry standards for that sort  
7 of thing, or do you want a unique way of access just for  
8 yourself?

9 A Yes, they should depend on industry standards.  
10 No, AT&T does not want a unique implementation for itself.  
11 And what we are sharing and will be sharing with GTE are  
12 some specifications and requirements that we've developed  
13 in conjunction and discussions with others in the industry  
14 that really take advantage of recommendations and positions  
15 that the OBF has taken, has taken advantage of standards in  
16 and around what these gateways should look like and what  
17 should be the information and the protocols of information  
18 that is passed forward to that or taken advantage of the  
19 kind of standards that have been put in place in support of  
20 access type of services where we could use the access  
21 service request process and some of the billing systems,  
22 like the CABS system that supports that as the standard.  
23 So what our specification would draw upon is in fact as  
24 much of the standards that are ready today in pulling that  
25 together and a commitment to work with those in the



1 industry to expedite those standards a common way.

2           As I said in my opening summary, I believe that  
3 if we can get a standard definition of what unbundled  
4 network elements are across the United States and have a  
5 standard electronic interface platform that supports that,  
6 then that encourages multiple new entrants quicker into the  
7 market place, and that's what AT&T is trying to support.

8           Q     Okay. Just to be clear, GTE has agreed to  
9 provide you electronic interfaces, that's right, isn't it,  
10 on a permanent basis?

11          A     Would you ask the question again please?

12          Q     It's true, isn't it, that GTE has agreed to  
13 provide you electronic interfaces, the long-term solution  
14 we have been talking about? We have agreed to that,  
15 haven't we, or we're not opposed to that?

16          A     I think the answer to that is yes. I think GTE  
17 is not opposed to that. Where I have a problem is in the  
18 specifics, and with this kind of a situation where you  
19 really are dealing with very specific handoffs of  
20 information where both parties, new entrants as well as  
21 GTE, has to make accommodations in their systems in and  
22 about the same time frame, and you've got to tie that to  
23 the ability to support both TSR and unbundled network  
24 elements. The specifics of the commitment is important.  
25 So although AT&T truly appreciates the intent that GTE says

1 when they, yes, we are willing to support that, it is in  
2 fact the lack of a specific committed plan with a date  
3 certain that is missing.

4 Q Okay. I believe you testified you will be  
5 sharing specifications and requirements with GTE and that  
6 that use of "will be" tells me that you haven't done it yet  
7 in this proceeding; is that true?

8 A Yes, that is correct. Our subject-matter experts  
9 have been discussing that over I'd say last week, maybe a  
10 little before that, and it was really put into the sense  
11 with the subject-matter experts when would it be  
12 appropriate for GTE to be able to put resources on to begin  
13 to examine those requirements. They wanted to complete the  
14 commitment on step 2 of the interim and get that done and  
15 get a committed plan and, therefore, that's why I think  
16 your requirements are going to be examined in some detail  
17 this week or next week.

18 Q Okay. But as of this time, we don't have the  
19 specific detailed requirements that we would need to build  
20 the permanent interfaces that you are seeking; is that  
21 right?

22 A Yes, you do not have the requirements that we  
23 have today available.

24 Q Okay. I'm sorry. When would you say it would be  
25 reasonable for us to have in place the interfaces that you

1 want on a permanent basis?

2           A     This is a tough question to be specific. You  
3 would like to say let's have a specific date. The FCC said  
4 and suggested a date of January the 1st, 1997. When you  
5 take a look at where we are today here in this hearing and  
6 look at the fact that we will be able to examine  
7 requirements maybe next week or the next week, I believe  
8 that January date may not be appropriate. I do believe,  
9 though, that the platform that we are talking about for  
10 total service resale and unbundled network builds so  
11 heavily on industry standards that are available and that  
12 we believe GTE is quite familiar with, that an  
13 implementation in early 1997 would be appropriate.

14           Q     When you use the term "industry standards," those  
15 standards haven't been endorsed universally in the industry  
16 yet, have they?

17           A     Yes, some of the standards that are in the  
18 requirement have in fact been fully endorsed. Those that  
19 associate specifically with the gateway and the interface  
20 and flow of information would be a good example of that. I  
21 think the standards as it relates to access service,  
22 resale, ordering, those processes that are appropriate to  
23 support the ordering of a single unbundled network element,  
24 those standards are pretty much in place. And I would say  
25 that there are some aspects of the platform that where

1 standards need to come yet, but there is a good indication  
2 where people in the industry think are appropriate. So for  
3 example, I don't believe it's an industry standard that  
4 CABS as a billing system is the appropriate billing system  
5 for local; however, many in the industry are saying that  
6 that standard that has been applied for access looks like  
7 it could very much support this quickly.

8 Q But the fact remains that everybody hasn't agreed  
9 on all the standards; is that correct?

10 A That's correct.

11 Q Okay. If AT&T requests something that is just  
12 unique to AT&T, just something that AT&T wants, is AT&T  
13 willing to pay the full cost for that?

14 A Yes, we are.

15 Q Let's talk about PIC changes. Today if an  
16 interexchange carrier wants to submit a PIC change to GTE,  
17 it just transmits the change electronically to GTE and the  
18 change is made through a mechanized process, and I believe  
19 Mr. Gillan called it the ultimate electronic interface. Is  
20 that consistent with your understanding that's the way it  
21 works?

22 A Yes.

23 Q Okay. And you want to change that system; is  
24 that right?

25 A No. What we are asking for here before the

1 Commission is that in the situation where AT&T has  
2 marketed, sought and won customers in this local market  
3 place, those local customers now are AT&T's customers; we  
4 are the local service provider. We believe it is  
5 appropriate for the local service provider to be the one  
6 that would accept changes from their customer as it relates  
7 to the interexchange PIC changes. We would then be  
8 obligated as any local service provider to implement those  
9 changes within the network.

10 We also are seeking, not only that that's  
11 appropriate, and being that we would be relying on GTE to  
12 help implement some of that, that we would want a  
13 simplified ordering process because it's basically very  
14 straightforward. The customer has notified us that they  
15 want to move from interexchange carrier B to C and we would  
16 be implementing that. So we just want to do that very  
17 simply and also have itemized record backs so that we can  
18 bill appropriately.

19 Q Okay. The way the process works today, the  
20 process you said you don't want to change, MCI, for  
21 example, can submit a PIC change request for a customer to  
22 transfer from AT&T to MCI; is that true?

23 A Yes.

24 Q And you want to change that, don't you?

25 A No, I don't. In this case that you are referring

1 to, you're saying MCI would be notifying GTE. In that  
2 scenario that you have walked through, GTE is the local  
3 service provider. What I'm talking about here is when the  
4 customer is an AT&T customer and we are the local service  
5 provider. We believe it is the responsibility of the local  
6 service provider to implement such changes.

7 Q Okay. See if we can do this a different way.  
8 Well, let's see what -- let's try and describe what you  
9 want, okay? Another IXC, say MCI again, would submit a PIC  
10 change request to GTE electronically just as it does today,  
11 okay? We are clear on that step? That's what happens  
12 today, right?

13 A Yes.

14 Q Okay. But if the change was for an AT&T  
15 customer, GTE's system would have to detect that and reject  
16 the change; is that correct?

17 A No, we are asking for the same exact procedure  
18 that exists in the industry. MCI is notifying the local  
19 service provider of a change. In this case you would  
20 notify the local service provider, which would be AT&T, if  
21 it was an AT&T customer. We would then work through the  
22 mechanisms that have been set forth in the Act and in GTE's  
23 wholesale business in support of our business to execute  
24 those changes.

25 Q What if MCI calls -- what if an end user calls

1 GTE with a PIC change request? Today we would put in that  
2 request. Under your proposal we could not put in that  
3 request; is that right? That change would not be made. We  
4 would have to tell the customer, no, you've got to call  
5 AT&T?

6 A What I would expect you to do is if an end user  
7 called you and it was an AT&T customer that you would ask  
8 them to call their local service provider; that is their  
9 responsibility.

10 Q So your answer is yes; is that right?

11 A Well, I'm not sure. If you would restate the  
12 question, I'll give you a yes or no.

13 Q Okay. Today if an end user calls and says, I  
14 want to change my interexchange carrier, please change me  
15 from AT&T to MCI, we can do that change for them; is that  
16 right?

17 A If that is the standard in the industry.

18 Q Well, I thought --

19 A And I don't know. If that is, yes, that that's  
20 the standard, then yes, you could do that.

21 Q Well, you are testifying that we should remain  
22 with the standard in the industry, and now you are telling  
23 me you don't know what that standard is?

24 A I'm familiar with the standard of interexchange  
25 carriers can call a local service provider and say that

1 they want a customer market place to make the change. The  
2 nuances on what is handled if a customer calls you  
3 directly, I'm not familiar with what the detailed specifics  
4 of that standard are.

5 Q Would you agree today the way the process works,  
6 PIC changes are submitted electronically to GTE and then  
7 GTE just makes them?

8 A Yes, when GTE is the local service provider.

9 Q So if MCI submitted a request to us  
10 electronically, just as it does today, to change a customer  
11 from AT&T to MCI, we could not make that change under your  
12 proposal; is that true?

13 A To change from who to whom?

14 Q From MCI to AT&T. We could not accept that  
15 request. Our electronic system would not be able to accept  
16 that request under your proposal; is that right?

17 A Yes, I'm proposing that the change should be  
18 submitted to the local service provider.

19 Q So that is a change from the way the system works  
20 today, isn't it?

21 A No.

22 CHAIRMAN CLARK: Ms. Caswell, we have gone round  
23 and round, and I understand him to say that he wants the  
24 local exchange company, whoever that is, to make the  
25 change; and because GTE will no longer be the single



1 provider of local exchange service, if AT&T is, then they  
2 have to do it. Now that is what I have understood.

3 A Yes.

4 Q So would we need to modify our electronic  
5 processes to accommodate your change?

6 A Yes, in that that's what these electronic  
7 interfaces are about. It's not changing the PIC  
8 notification process in the industry, it's changing the  
9 electronic interfaces between how that is processed between  
10 AT&T and GTE as the wholesale support.

11 Q With regard to loop testing, Mr. Shurter, would  
12 you be happy with what GTE provides to itself?

13 A Yes, I am. Yes, I would be. This is an issue of  
14 a parity, and if in fact GTE is testing local loops, be it  
15 either on installation of new services or on some kind of  
16 maintenance or repair process. If in fact they test and  
17 they document what the results of those tests are, we are  
18 simply asked that they process and provide that to us.

19 Q And if we don't -- I'm sorry.

20 A Go ahead.

21 Q If we don't document the results of that test,  
22 then obviously there is no need to provide it to you; is  
23 that right?

24 A That's right.

25 Q Okay. The contract you've proposed in this

1 proceeding provides all the relief AT&T seeks in its  
2 petition; is that right?

3 A Yes.

4 Q Okay. So would you agree that AT&T should pay  
5 \$2.49 for secondary directory distribution?

6 A Yes, and let me tell you the conditions when I  
7 think that would be, and let me give you a no when I think  
8 the conditions, when it would not be.

9 This speaks to a point of a parity. And if in  
10 fact GTE today pays for the secondary distribution, this  
11 would be after the annual distribution and new people move  
12 into the area and they would like a directory, if in fact  
13 GTE pays for those costs today and incurs those kind of  
14 costs and if in fact they are not already covered in the  
15 unavoided cost, then AT&T on the same basis as GTE, we are  
16 prepared to say the \$2.59. However, if GTE doesn't pay it,  
17 then we shouldn't pay it as a point of parity; and if GTE  
18 is already recovering that in the unavoided cost, then AT&T  
19 should not pay for it twice.

20 Q Okay. And GTE agrees with that position, doesn't  
21 it?

22 A I believe they do.

23 Q Okay. And again, with regard to directory space,  
24 the contract proposal you've put forth is consistent with  
25 what GTE's proposal; is that correct?

1           A     Maybe you could be specific.

2           Q     Okay. I'm looking at Section 19.3 of the  
3 contract, and that pretty much states that GTE will include  
4 one full page of information about AT&T's services and AT&T  
5 agrees to pay a rate equal to, and then there is a blank  
6 for the rate, for the inclusion of this full page. So that  
7 is consistent with our proposal in this proceeding, isn't  
8 it?

9           A     Yes, to the words that were agreed to. And the  
10 agreement, just to be clear, is that for customer call  
11 guide pages, GTE would provide one page for AT&T to be able  
12 to put their reference data in there to be able to direct  
13 their customers when they need to seek advice on call  
14 handling. What we want to be clear of is that we do not  
15 expect GTE to put unreasonable restrictions on information  
16 that we put on the call page; and as your review of the  
17 contract indicates, we are not in agreement on what the  
18 price would be.

19                     My position is one of parity there as well. And  
20 that is, whatever GTE telops would pay for a page, a  
21 customer guide information, and they can demonstrate what  
22 that cost is, that AT&T is prepared to pay that same cost.

23           Q     Okay. And with regard to this space, AT&T would  
24 agree to one page of information, just as it says in your  
25 contract, right?

1           A     Yes.

2           Q     So that's inconsistent again with Mr. Carroll's  
3 testimony, isn't it? And I can give you a reference. It's  
4 page 26, lines 3 and 4. AT&T requested that GTE provide  
5 AT&T the same amount and type of space in the directory  
6 that GTE provides itself. That's inconsistent with what  
7 your contract says, isn't it?

8           A     Yes, it is inconsistent as it deals with the same  
9 amount. It would be inconsistent if you were to take a  
10 look at all cases. I suspect there are some cases where it  
11 would be consistent, but I can imagine there were some  
12 cases where GTE may in fact have more customer call pages  
13 than what AT&T would be. So in terms of the amount of  
14 space, there would be some cases where that statement might  
15 be inconsistent being that we've agreed to one page.

16          Q     Let's talk about CPNI for a few minutes. AT&T  
17 believes, does it not, that it should have access to a  
18 customer's CPNI even before the customer transfers to AT&T;  
19 isn't that right?

20          A     No, what AT&T is asking for here is that when  
21 they have won a customer in the market place and the  
22 customer calls AT&T and says that basically for all  
23 practical purposes what they want to do is just transfer  
24 from GTE to AT&T, they basically want to keep their service  
25 the same. And what AT&T would like to do would be able to

1 validate that service with the customer so that we are  
2 providing good service and there is no opportunity for  
3 error on billing and expectation with the customer at the  
4 time of implementation.

5 GTE's position has been here that they want that  
6 authorization to be in written form from the customer prior  
7 to AT&T would have the opportunity to validate any  
8 information. We don't believe that that is the procedure  
9 that GTE has for itself as they are dealing with customers  
10 who change from one thing to another, and we also believe  
11 that we have had industry policies in place relative to  
12 these kind of changes in terms of access where you can put  
13 in processes and procedures that can be audited to support  
14 this to make sure everybody is handling the changes  
15 properly. And AT&T just asks for that kind of procedure to  
16 be put in place so that we have the same opportunity to  
17 deal with customers as GTE does.

18 CHAIRMAN CLARK: Ms. Caswell, we are going to  
19 take a break right now for lunch, and we will reconvene at  
20 two o'clock.

21 I should let everybody know that we will be going  
22 late tonight and tomorrow tonight and the next night if  
23 necessary, and we will take no more than half-hour breaks  
24 at lunch and dinner. We will be back at two o'clock.

25 (RECESS TAKEN AT 1:30 TO 2:00)

1 CHAIRMAN CLARK: We'll go ahead and reconvene.

2 Ms. Caswell.

3 MS. CASWELL: Thank you.

4 BY MS. CASWELL:

5 Q Mr. Shurter, I think we were talking about CPNI.

6 I just have a few more questions.

7 A Yes.

8 Q Does AT&T want CPNI for preordering purposes?

9 A Yes.

10 Q And that means that you would get CPNI before a  
11 customer was transferred to AT&T; is that true?

12 A No. This would be the case where AT&T had won  
13 the customer in the market place and they had called and  
14 said that they would like to have service with us, and at  
15 that point in time we would begin the preordering process  
16 of validating telephone numbers, feature function, those  
17 kind of things, so it would be part of the preordering  
18 process.

19 Q And in that preordering process, might there be  
20 instances when the customer decided not to switch to AT&T  
21 after all?

22 A Yes, I suppose that could be the case, but what  
23 we are asking for here is the more probable case that when  
24 they've called to us and said that they would like to in  
25 fact transfer their service to AT&T, what is the support

1 that AT&T would need to have to be able to handle that  
2 contact conveniently and accurately for the customer.

3 Q GTE has agreed, has it not, to provide you with a  
4 customer's CPNI as long as it gets written authorization;  
5 is that true?

6 A Yes. The key to that phrase and for  
7 clarification is written authorization. And in our  
8 discussion with GTE, that took the form of actually the  
9 customer writing down on a piece of paper, somehow getting  
10 that piece of paper to AT&T, and then somehow AT&T getting  
11 that piece of paper over to GTE.

12 Q Doesn't the Act itself require affirmative  
13 written request by the customer to release CPNI?

14 A Yes, and I believe that the industry procedures  
15 that have been put in place in the past that have supported  
16 the access is the kind of procedures that are needed here.  
17 Industry participants need to be held accountable for their  
18 behavior in their adherence to the policies to protect the  
19 privacy of information of customers, and AT&T is absolutely  
20 committed to do that.

21 Q Would you agree that, building on what you've  
22 just said, that requiring an ILEC to change a customer's  
23 carrier without any written authorization from the customer  
24 itself might give rise to slamming problems?

25 A No. I believe having industry standards in place

1 that have the same kind of process and procedures that we  
2 have used in the past and the type of obligation and  
3 responsibility of the carriers, that if there is in fact  
4 some slamming, as you say, that occurs, that needs to be  
5 monitored and dealt with in the industry as we have in the  
6 past.

7 Q So basically a reputable firm could be trusted  
8 not to slam?

9 A I didn't hear your question.

10 Q Has AT&T been reprimanded this year for slamming?

11 A I do not know.

12 Q Mr. Shurter, would you agree that GTE can't  
13 authorize you to have access to systems that it doesn't  
14 own?

15 CHAIRMAN CLARK: Ms. Caswell, did you say can or  
16 can't?

17 MS. CASWELL: Can't.

18 A So would you restate the question then, please?

19 BY MS. CASWELL:

20 Q Would you agree that GTE cannot authorize you to  
21 have access to a system it does not own?

22 A Yes, I would agree with that.

23 Q Just a couple more questions on CPNI. Are you  
24 aware that this Commission has its own CPNI rules?

25 A I'm not familiar with it in detail.



1 Q Were you aware that they existed before I asked  
2 you that question?

3 A Yes.

4 Q Did you factor those rules into your policy on  
5 CPNI in this proceeding?

6 A No. I come to the Commission here based upon the  
7 negotiation, positions that we have taken that we believe  
8 are appropriate to support us serving customers that want  
9 to choose AT&T in the market place and focus on the parity  
10 principle of what would be equal type of treatment for  
11 those customers that are being supported by AT&T, and that  
12 is the basis of the issue.

13 Q Okay. Thank you, Mr. Shurter.

14 MS. CASWELL: That is all I have.

15 CHAIRMAN CLARK: Staff.

16

17 CROSS EXAMINATION

18 BY MR. PELLEGRINI:

19 Q Good afternoon, Mr. Shurter. I'm Charlie  
20 Pellegrini representing the staff.

21 A Good afternoon, Charlie.

22 Q It's GTE's position as expressed in the  
23 prehearing statement that current tariff provisions are  
24 sufficient, those that limit GTE's liability to the charges  
25 associated with the time out of service, do you agree? I

1 mean in the first place do you agree that that is GTE's  
2 position?

3 A Yes, I agree that that is GTE's position.

4 Q I assume you disagree with that position?

5 A Yes, I do.

6 Q Can you briefly explain?

7 A Yes. In this area of service performance, we are  
8 speaking in terms of the commitments that GTE would be  
9 making to AT&T as we are trying to serve our customers, so  
10 we would be talking about due-date type of commitments,  
11 network being available type of commitments and billing  
12 performance type of commitments. So what we have talked  
13 about here is establishing standards of performance at  
14 those points of interface between AT&T and GTE as a  
15 wholesale supporter of our services, so being assured that  
16 we can get the same quality of service, that they support  
17 AT&T in the same way they support GTE is very important to  
18 us to be able to ensure that we can provide good service.  
19 So we are really looking at those metrics that are focused  
20 between the handoffs between GTE and AT&T.

21 Q With respect to consequential damages, it's GTE's  
22 further position that if it's to be held liable for  
23 consequential damages then its rates must reflect that  
24 potential liability. Do you understand that to be GTE's  
25 position?

1           A     No, only that I'm just not aware of what GTE's  
2 position is relative to the way that would be handled.

3           Q     Well, given that position, given that that is  
4 GTE's position, would you consider that to be an  
5 appropriate position? That is, should LECs be able to  
6 recover the cost of insuring ALECs against loss of revenue?

7           A     I just have not given that a lot of thought as to  
8 how that ought to be recovered or even if it should be  
9 recovered. And again, what we are looking here is for  
10 financial incentives that would motivate GTE to ensure that  
11 they are providing to new entrants the type of service that  
12 they require to be successful. In some ways I might think  
13 that providing them another way to recover on those  
14 credits, if you will, might lessen the financial incentive,  
15 in fact push the burden someplace else in the system. And  
16 so their fundamental position, if that is what it is, that  
17 they ought to recover that through their unavoids, say,  
18 total service resale cost or part of the TSLRIC cost, those  
19 might be appropriate and logical when you take a look at  
20 where you put cost. I'm not so sure that that meets the  
21 motivation of a financial incentive, and it's not AT&T's  
22 intention here to somehow get money from GTE that  
23 ultimately finds its way back into the consumer recovery  
24 process in Florida.

25           Q     What you're saying I think then is if there were

1 a recovery mechanism that would to some extent at least  
2 negate the financial incentive, to use your phrase, that --

3 A I think it might.

4 Q On pages 11 and 12 of Mr. Carroll's direct  
5 testimony, Mr. Shurter, he talks about several types of  
6 performance failures. I'd like to discuss four of these  
7 with you one at a time. These four are: Work errors,  
8 billing fraud, alterations of software and unauthorized  
9 physical attachment to loop facilities. Are you with me?

10 A Okay. Yes.

11 Q First, I would like you to explain these briefly  
12 and with the aid of an example or two. First, work errors,  
13 what do you mean by -- what do you have in mind with work  
14 errors?

15 A A work error as an example might be a technician  
16 working on a central office piece of equipment and they go  
17 in there and make an error in that they take out all the  
18 central processing capability of the switch and, therefore,  
19 that switch is off line and all the customers that it does  
20 serve would not have service. That would be an example of  
21 a work error that would have a very significant impact on  
22 customers.

23 Q Is that the type of -- Is that a type of error  
24 that commonly occurs?

25 A Yes, unfortunately, work errors like this do

1 occur more frequently than the industry would like. It's  
2 not rampant, don't let me give you the wrong implication  
3 here. The industry pays a lot of attention to training  
4 their employees to take care when they are dealing with  
5 this kind of sophisticated equipment, but in the end there  
6 have been cases, and they do reoccur where situations like  
7 I describe. They do occur.

8 Q How would you in that case -- how would you in  
9 that case assign a DMOQ or a DMOQ?

10 A In this case where I'm referring to the central  
11 office piece of a switching equipment, it relies in the  
12 area of network reliability, so I think I've identified a  
13 three kind of category. Service provisioning, that would  
14 be one, not this case here; second would be network  
15 reliability. So it would be in that category where we  
16 would take a look at that, and the credits that we had  
17 identified in the interconnection agreement that deals with  
18 network outage, service interruption, those would be the  
19 kind that I would apply to that situation.

20 Q What about billing fraud, what do you have in  
21 mind there?

22 A It's interesting that I can't keep up with all of  
23 the creative ways that individuals try to defraud the  
24 telephone network, but what I'm thinking of here is that  
25 there are two forms of it. One is that there is an end

1 user with intent to defraud the network, and in that case  
2 we would be looking for GTE as the first point of  
3 observation of that to be able to identify and take  
4 appropriate action to identify the fraud and terminate the  
5 condition. There, of course, is the situation where their  
6 employee could possibly be committing fraud. In that case,  
7 that's a more serious case for them personally, but there  
8 could be situations where they could be diverting  
9 information that would provide access to the network in a  
10 less than -- the price they ought to be paying for it.

11 Q How much of a problem are these, that is,  
12 end-user fraud and inside or employee fraud?

13 A The majority of the fraud that I think we see in  
14 the industry is not internal with employees that work in  
15 the industry but external, and so in that case it's  
16 important. You've got the, all customers out there, not  
17 all, but there is a good number of them. You've got a big  
18 universe of which fraud could potentially come from. So  
19 early detection is key to the stability of the industry.

20 Q And what kind of liability would you have GTE  
21 bear for these kinds of misperformances?

22 A It would be tied to the amount of revenue that  
23 was lost. Yes, revenue.

24 Q How about, what about alterations of software?

25 A Alterations of software can occur in much of the

1 sophisticated equipment in the network today, not only in  
2 switches but also in the transmission equipment. More and  
3 more of it is becoming software driven. So alterations of  
4 software occur if you are making code changes or generic  
5 updates or basically altering the capability of the  
6 system. So there are entry procedures that a technician  
7 will make to enter in the change of software and to load  
8 that into the system, and it is, in fact, at that point  
9 that you could make an error that would cause a significant  
10 problem where -- let me take one from a routing of an MPA  
11 or an NNX, basically making it so that you could not route  
12 to a complete part of Florida, for example, because the way  
13 they went in and made the software change prevented the  
14 system from seeing that you could actually direct calls to  
15 that area. And that's all set up into the software,  
16 programming of the system. That would be an example where  
17 the instructions given to the system have been in error  
18 modified and, therefore, causing call processing to be  
19 different than what was intended.

20 Q I assume that lost revenues would be the remedy  
21 that you would seek in that instance?

22 A In this category where we are talking about  
23 unbillable and uncollectible it would be because if there  
24 was not unbillable, uncollectible, we would not be seeking  
25 it.

1 Q Are software alterations a major problem?

2 A They do occur. I don't know if I would treat it  
3 as major. I would treat it as an error in this area is  
4 major. So if you say major relative to frequency of it,  
5 the industry has learned to focus on treating these changes  
6 with care, but when they do occur, they are significant.

7 Q And lastly, what about unauthorized physical  
8 attachment to loop facilities?

9 A Yeah, this is a condition that could occur. Here  
10 you have the loop facility that is going out to the  
11 customer premise and could be exposed so that an end user  
12 could get access to that and begin to actually get on that  
13 facility and make calls that are not their own. And again,  
14 if GTE is providing the switch capability here, they would  
15 have the capability, either it would be under a TSR or if  
16 we bought the unbundled network element switch, to be able  
17 to identify the difference in calling patterns, the  
18 frequency of that and to be able to detect that and take  
19 action on it.

20 Q Would you consider those to be direct measures of  
21 quality?

22 A No, I don't consider what we have been talking  
23 about here as direct measures of quality, and I would tie  
24 that back to such things, like in the category of  
25 installation would be due date met. In the area of



1 maintenance repair, would be an item that repaired within a  
2 certain time frame. So those direct measures are very  
3 specific and pertain to the provisioning process and also  
4 the repair and maintenance process and billing.

5 Q Mr. Shurter, AT&T as an IXC for sometime now, 12  
6 years or so, has been operating according to provisions in  
7 LEC access tariffs that limit LEC liability to the charges  
8 for the period out of service; is that correct?

9 A Yes.

10 Q Has that been a workable arrangement?

11 A Yes, it has, and I believe that in addition to  
12 that, the performance standards and credits that have been  
13 called for in the interstate access tariffs, and interstate  
14 access tariffs further support that.

15 Q You mentioned in response to a question of  
16 Ms. Caswell's that AT&T had proposed ADR as a resolution  
17 mechanism?

18 A Yes.

19 Q But did I understand you to say that GTE has not  
20 agreed to that mechanism?

21 A It's my understanding that that is one of the  
22 terms and condition in the interconnect agreement that they  
23 have not agreed to.

24 Q Mr. Shurter, with reference to notification of  
25 changes --

1           A     Yes.

2           Q     -- as a wholesale customer of GTE, what notice  
3 period does AT&T require or consider to be appropriate when  
4 GTE is making a price change?

5           A     AT&T seeks a notification period of 45 days, and  
6 that's what we have put in our request. And this would be  
7 when GTE was anticipating the introduction of a new service  
8 or on an existing service where there was some price  
9 change. So as part of the total resale service arrangement  
10 that we have with them, we believe it is appropriate for us  
11 to have a period of notification -- the 45-day is what we  
12 are requesting -- so that we have a like period of time to  
13 enable our systems to be able to support the new services  
14 or, and/or to support the new price changes. We request  
15 this on a basis of equal treatment in terms of parity, that  
16 we would like to have the same opportunity to support that  
17 as GTE supports for themselves.

18          Q     And how would you have GTE make that  
19 notification?

20          A     We have a customer account team procedure that is  
21 in place between AT&T and GTE today. I think there would  
22 be appropriate processes that could be put in place with  
23 that relationship between them as the supplier. They have  
24 an account management structure, that they flow that change  
25 to us through that; that would be acceptable to us.

1 Q Would the notification period be the same for  
2 changes to features or functions of existing services?

3 A Yes, we are asking just for the standard 45-day  
4 notification.

5 Q And again, what about the manner of notification?

6 A We would like to be notified in an official way  
7 so there is no misunderstanding that this has in fact  
8 occurred, that the new service is being introduced or the  
9 feature of a service is changed or that the price has in  
10 fact changed and on what date.

11 Q Would those answers be the same for the  
12 introduction of new services?

13 A Yes.

14 Q Same notification period and same manner of  
15 notification?

16 A Yes.

17 Q And what about for, how about for notification of  
18 the introduction of a new technology?

19 A This would be different, and I believe we are in  
20 agreement on this. This would be a longer period of time.  
21 You could envision something that is kind of common now  
22 that everybody has talked about in the industry, is the  
23 introduction of SONET or SONET rings. So if in fact that  
24 they were going to make this investment and introduce a  
25 whole new technology, that may require a little longer

1 notification because we are not talking about some  
2 incremental change to our system that has been in place; we  
3 may have to make some very significant changes, maybe build  
4 some new operational support systems, some new engineering  
5 systems to be able to deal with the new technology. So we  
6 are seeking longer periods of time of notification with  
7 technology changes.

8 Q Discussions are ongoing at the moment on this  
9 point, or are you at an impasse?

10 A I believe these are ongoing negotiations. As  
11 anything that is still open in front of the Commission that  
12 we are asking for assistance here, we are trying to  
13 continue to advance closure in all of those cases. I think  
14 GTE was a little more comfortable with a longer term  
15 notification of technology changes than they were of new  
16 services, feature function change or price in the 45-day  
17 interval.

18 Q Turning for just a moment, I have one question  
19 concerning customer authorization. What type of customer  
20 authorization do you believe is appropriate to access  
21 customer account information and transfer existing  
22 services?

23 A Charlie, was the question what authorization or  
24 what process of authorization?

25 Q Well, what process, what type of customer

1 authorization do you believe to be required under the Act?

2 A Okay. I believe that if the customer notifies  
3 AT&T that they have intended and have the intent that they  
4 want to change the service to AT&T, that that authorization  
5 to AT&T should be sufficient for us to operate within the  
6 industry to be able to make the changes. Now we will need  
7 to put processes in place to audit that, make sure we  
8 understand what all the rules and procedures are around  
9 that to make sure that the procedures in fact followed in  
10 an error free way. But I think in terms of supporting  
11 competition and customer choice it's very important that we  
12 have something that provides for that immediate type of  
13 response to a customer's request.

14 Q I want to conclude by seeing if we can arrive at  
15 a summary of your responses to Ms. Caswell's questions  
16 concerning the agreement or lack of agreement concerning  
17 electronic interfaces.

18 A Okay.

19 Q As I understand -- as I understood your  
20 responses, you indicated that in respect to resold services  
21 that GTE and AT&T had arrived at an interim solution?

22 A Yes, that is correct, and that would be  
23 interim -- what we have agreed on is interim step 1.

24 Q Interim step 1. And again, as I understood, that  
25 solution would consist of both batch and real-time access;

1 is that correct?

2 A That step 1 system is really comprised more of  
3 manual plus batch processing, that first stage.

4 Q Does it consist of real-time access in any way?

5 A It could be real-time in that you have a network  
6 data mover, NDM, as the transport between AT&T and GTE for  
7 transmitting the order. So we could speed that up so it  
8 happens more frequently, but it doesn't meet the definition  
9 of real-time.

10 Q And I further understood that you've not reached  
11 an interim agreement with respect to unbundled network  
12 elements; is that correct?

13 A That is correct.

14 Q Now in respect to permanent solutions to  
15 electronic interfaces, you have agreements in principle, as  
16 I understood, with both -- in respect to both resold  
17 services and unbundled network elements; is that correct?

18 A Yes, we have agreement that GTE will ultimately  
19 support with electronic interface interactive both total  
20 service resale and unbundled network element. The real  
21 issue is when and will it be available to support AT&T's  
22 market entry in 1997.

23 Q But there is agreement that on a permanent basis  
24 the electronic interface would be both real-time and  
25 interactive; is that correct?

1           A     Yes, conceptually we are at agreement on that.

2           Q     I think that concludes my questions.

3           MR. PELLEGRINI: Thank you, Mr. Shurter.

4           WITNESS SHURTER: Thank you.

5           CHAIRMAN CLARK: Redirect.

6                               REDIRECT EXAMINATION

7   BY MR. LOGAN:

8           Q     Mr. Shurter, just three or four questions.  
9   First, in the early part of your testimony Ms. Caswell  
10   asked you a number of questions about indemnification and  
11   indemnity agreements. Are these kind of agreements common  
12   in the industry today?

13          A     Yes, we believe that these are common in the  
14   industry. We believe that they are common as part of  
15   commercial contracts arrangements. In fact, we have had,  
16   as we have in the past, asked GTE to do our billing of our  
17   customer service. We have had those kind of procedures in  
18   place, those kind of indemnifications, as they were  
19   executing our billing functions for us; and if there was a  
20   significant error, those kind of procedures had been part  
21   of our business relationship in the past.

22          Q     And to follow up a few more questions on the  
23   interactive electronic interfaces, with respect to the  
24   development of those operational interfaces, are these  
25   one-time or recurring costs?

1           A     I believe that they are more typically one-time  
2 costs. So when you say that this is the capability and  
3 configuration you want to put in place, there is a one-time  
4 cost to put that capability in place, that would be a  
5 one-time cost.

6           Q     Okay. And how does AT&T propose that these costs  
7 be recovered?

8           A     As I stated earlier, I believe they ought to be  
9 recovered in a competitively neutral way in which AT&T will  
10 pay a part.

11          Q     And once the interfaces are in place, how would  
12 recurring costs for the services be paid for by AT&T?

13          A     Yes, there will be some recurring charges  
14 associated with the administration of electronic interfaces  
15 and the operational support system. And as they support  
16 total service resale, they should be recovered as part of  
17 the unavoided cost of part of that service; and to the  
18 extent they support unbundled network elements, they should  
19 be recovered as part of the TELRIC cost recovered  
20 associated with the unbundled network element.

21               MR. LOGAN: No further questions.

22               CHAIRMAN CLARK: Exhibits.

23               MR. LOGAN: AT&T would move exhibit 4.

24               CHAIRMAN CLARK: Without objection exhibit 4 will  
25 be entered in the record.



1 Thank you, Mr. Shurter.

2 WITNESS SHURTER: Thank you all.

3 CHAIRMAN CLARK: Do we have the video with us for  
4 the next witness?

5 MR. TYE: I believe it is set up, Madam Chairman.

6 CHAIRMAN CLARK: Okay.

7 MR. TYE: AT&T would call Ray Crafton.

8 Whereupon,

9 RAY CRAFTON

10 was called as a witness on behalf of AT&T and, having been  
11 duly sworn, testified as follows:

12 DIRECT EXAMINATION

13 BY MR. TYE:

14 Q Mr. Crafton, have you previously been sworn?

15 A Yes, I have.

16 Q Okay. Would you please state your name and  
17 business address for the record?

18 A I'm Ray Crafton, I'm located at 1200 Peachtree  
19 Street, Atlanta, Georgia.

20 Q And by whom are you employed and in what  
21 capacity, sir?

22 A I'm employed by AT&T as the business manager for  
23 local services in the Southern States.

24 Q Now Mr. Crafton, did you prepare and cause to be  
25 prefiled in this proceeding direct testimony consisting of

1 some 37 pages of questions and answers?

2 A Yes, I did.

3 Q Did you have two paper exhibits attached to that  
4 testimony?

5 A Yes, I did.

6 Q Okay. Do you have any changes, corrections or  
7 additions to the testimony or the exhibits that you need to  
8 make at this time?

9 A Yes, I do. In my direct testimony on page 25,  
10 line 22, please delete the word "of" appearing at the end  
11 of the line. On page 30, line 1, please delete the phrase  
12 "because they are a limited resource." That phrase appears  
13 later in the sentence in its proper place.

14 In my rebuttal testimony filed September 24, page  
15 5 --

16 Q Mr. Crafton, we haven't gotten to that yet, I'm  
17 sorry.

18 A I'm sorry.

19 Q Are those all the changes and corrections you  
20 need to make to your direct testimony?

21 A That is correct.

22 Q Okay. Now with respect to your rebuttal  
23 testimony, did you prepare some 14 pages of rebuttal  
24 testimony?

25 A Yes, I did.

1 Q Okay. Now could you give us the changes and  
2 corrections to that please?

3 A I'd be glad to. Page 5, line 13, where it reads  
4 "Several state commissions including Georgia, Illinois and  
5 New York have found," please replace Georgia with  
6 Pennsylvania.

7 On page 7, line 15, where it reads, "The  
8 architecture proposed by AT&T in the AT&T-AIN test," please  
9 insert BellSouth after the hyphen. Page 7, line 16, where  
10 it reads, "Report of November, 1995 concluded that the  
11 sharing of subscribed triggers," please insert "public  
12 office dial plan" so it reads, "The sharing of public  
13 office dial plan and subscribed triggers."

14 Page 8, line 11, where it reads, "Access to  
15 unbundled signaling links and STPs is technically  
16 feasible," please insert "SCP data bases" into that list so  
17 it reads, "Unbundled signaling links, STPs and SCP data  
18 bases is technically feasible."

19 Q Are those all the changes and corrections?

20 A Those conclude the corrections.

21 Q Now with those changes and corrections noted to  
22 your direct and your rebuttal testimony, Mr. Crafton, if I  
23 were to ask you the same questions here today, would you  
24 give me the same answers contained there?

25 A I would.

1 Q Thank you.

2 MR. TYE: Madam chairman, I would ask that  
3 Mr. Crafton's direct and rebuttal testimony be inserted  
4 into the record as though read.

5 CHAIRMAN CLARK: It will be inserted in the  
6 record as though read.

7 BY MR. TYE:

8 Q Now Mr. Crafton I believe you indicated that you  
9 have two paper exhibits to your direct testimony; is that  
10 correct?

11 A That's correct.

12 Q Okay. And those are labeled RC-1 and RC-2; is  
13 that correct?

14 A Correct.

15 Q Were those exhibits prepared by you or under your  
16 direction and supervision?

17 A Yes, they were.

18 Q Okay. Do you have any changes or corrections you  
19 need to make to either of those exhibits at this time?

20 A No, I don't.

21 Q Okay. Now Mr. Crafton, you also have attached to  
22 your direct testimony and labeled exhibit RC-3, I believe,  
23 a CD-ROM; is that correct?

24 A That is correct.

25 Q Okay. And is that CD-ROM an electronic version

1 of your exhibit RC-2?

2 A Yes, it is.

3 Q Okay. Have you reviewed that CD-ROM in its  
4 entirety?

5 A I have.

6 Q Okay. Is the information contained thereon true  
7 and accurate to the best of your knowledge?

8 A Yes, it is.

9 Q Okay. Thanks.

10 MR. TYE: Madam Chairman, I would ask that  
11 Mr. Crafton's two paper exhibits, RC-1 and RC-2, be marked  
12 as a composite exhibit.

13 CHAIRMAN CLARK: The next exhibit number I have  
14 is number 5.

15 (SO MARKED EXHIBIT 5)

16 MR. TYE: Okay. And I would ask that the CD-ROM  
17 be, since it's not attached to those two exhibits, be  
18 marked as exhibit 6.

19 CHAIRMAN CLARK: It will be marked as exhibit 6.

20 (SO MARKED EXHIBIT 6)

21 MR. TYE: Thank you.  
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**DIRECT TESTIMONY OF**  
**RAY CRAFTON**  
**AT&T COMMUNICATIONS OF THE SOUTHERN STATES, INC.**  
**BEFORE THE**  
**FLORIDA PUBLIC SERVICE COMMISSION**  
**DOCKET NO. 960847-TP**

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

A. My name is Ray Crafton. My business address is 1200 Peachtree Street, NE, Atlanta, Georgia, 30309-3579.

**Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND AND EXPERIENCE.**

A. I earned a Bachelor of Science degree in Mathematics with a Minor in Computer Science at the University of Maryland in 1972. In 1973 I joined Bell Laboratories as a member of the technical staff, where I was responsible for designing telephone operator systems and performing economic and financial analyses on those designs. And in 1974, I earned a Master of Science in Operations Research, a field in which mathematical techniques are applied to solving complex business problems. From that time until 1980, I continued as a member of the technical staff of Bell Laboratories, where I participated in the design of various telephone operator system enhancements such as Automated Coin Toll Service (which automates the quotation of rates and collection of coins on coin sent paid calls); automatic calling card service (which allows customers to dial their own calling card calls using a personal identification number without operator assistance); and the operator systems enhancements necessary to handle cellular mobile customers' operator calls. In late 1980, I joined the Traffic Network Planning Department of the AT&T

1 General Departments, where I led the development of computerized planning tools  
2 used by the Bell Operating Companies to plan the optimal deployment of telephone  
3 operator systems. In 1981 I was promoted to District Manager - Traffic Network  
4 Planning and began to lead the development of planning guidelines and computer  
5 tools for the toll switched network. I also became responsible at that point for  
6 project management of Dynamic Non-Hierarchical Routing (DNHR). DNHR  
7 allowed AT&T to reduce the number of trunk groups and facility mileage in its  
8 inter-toll network by more flexibly routing traffic over idle paths in the network.  
9 While project managing DNHR, I was also responsible for AT&T's joint planning  
10 and joint ownership program with independent telephone companies. This ended in  
11 1983 on the eve of AT&T's divestiture of the Regional Bell Operating Companies.  
12 To be successful in this array of assignments, I had to develop a strong knowledge  
13 of local networks. After divestiture, I became responsible for AT&T network  
14 architecture and recommended applications and enhancements in the 4ESS, 5ESS,  
15 Digital Access and Cross-connect System and other systems to support AT&T's  
16 switched and dedicated services. During this assignment I developed technical  
17 regulatory analyses to support Computer Inquiry II and the Open Network  
18 Architecture concept for enhanced services. From 1988 to 1993 I led the project  
19 management of all technology for AT&T's Signaling System No. 7 network and  
20 conducted the first interconnection of an inter-exchange carrier and a local exchange  
21 carrier signaling network between AT&T and BellSouth. In 1993 I became  
22 responsible for strategic access planning, an assignment focused on improving the  
23 quality and cost of interexchange access. In 1994 I earned a Masters degree in  
24 Business Administration from Columbia University. And in 1995 I was promoted to  
25 Division Manager - Customer Connectivity Planning, a position responsible for

1 developing the strategies, methods, computer tools, and plans for AT&T's local and  
2 access business.

3 **Q. PLEASE DESCRIBE YOUR CURRENT EMPLOYMENT AND THE SCOPE**  
4 **OF YOUR RESPONSIBILITIES.**

5 A. I am the Business Manager for AT&T's Southern States Local Service  
6 Organization. My division is responsible for managing the portfolio of local and  
7 access products AT&T is introducing in the 9 states of Alabama, Florida, Georgia,  
8 Kentucky, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee.  
9 My current position is responsible for negotiations with BellSouth and other  
10 suppliers and partners that support our local market entry; for the profit and loss of  
11 the local product portfolio; and for project management of our local market entry  
12 program.

13 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE ANY STATE PUBLIC**  
14 **SERVICE COMMISSIONS? IF SO, BRIEFLY DESCRIBE THE**  
15 **SUBJECT(S) OF YOUR TESTIMONY.**

16 A. I testified before the California commission in the late 1980s on the subject of  
17 technological obsolescence. This was related to the setting of accelerated  
18 depreciation rates as competition in the inter exchange industry drove faster network  
19 modernization.

20 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
21 **PROCEEDING?**

22 A. The purpose of my testimony is to describe the unbundled network elements that  
23 AT&T has requested that GTE make available to AT&T, and which GTE, as an  
24 incumbent local exchange carrier ("ILEC"), must make available to satisfy the  
25 requirements of the Federal Telecommunications Act of 1996 (the "Act").



1 Specifically, I will: (1) describe unbundling and its role under the Act; (2) identify  
2 the twelve elements of GTE's network which AT&T has requested be unbundled  
3 and explain why AT&T needs the functionalities of these unbundled network  
4 elements in order to be competitive in the provision of local services; (3) explain  
5 why AT&T must be allowed to combine unbundled network elements as needed to  
6 provide consumers with choices for local service; and (4) identify those network  
7 elements and other requirements that GTE has refused to make available to AT&T,  
8 and discuss why each is technically feasible and necessary to effectuate the Act's  
9 procompetitive purpose.

10 **I. INTRODUCTION**

11 **Q. WHY DID AT&T REQUEST ARBITRATION ON UNBUNDLED NETWORK**  
12 **ELEMENTS?**

13 **A.** AT&T requested arbitration on unbundled network elements because GTE refuses  
14 to provide access to all of the unbundled network elements and combinations that  
15 AT&T requested in its proposed Interconnection Agreement. AT&T's proposed  
16 Interconnection Agreement is Attachment 2 to AT&T's Petition For Arbitration,  
17 filed today. GTE's position rests in large part on the belief that it is not required  
18 under the Act to provide unbundled network elements and interconnection under  
19 terms and conditions which are equal to those GTE provides itself. GTE also  
20 refuses to offer certain unbundled network elements to AT&T because GTE claims  
21 that it is not technically feasible to do so. In addition, GTE has placed restrictions  
22 on how AT&T may use the unbundled network elements, and on the collocation of  
23 equipment in GTE's offices. These restrictions not only are contrary to what the Act  
24 explicitly requires of GTE, but also would prevent AT&T from offering consumers  
25 a choice in local telephone services. Lastly, GTE refuses to provide AT&T with

1 several additional requirements AT&T needs to utilize these unbundled network  
2 elements in the provision of local services.

3 In summary, GTE's position will result in a scenario that is wholly insufficient and  
4 inadequate to meet the business needs for the provision of services AT&T seeks to  
5 offer. AT&T intends to buy unbundled network elements and to use those elements  
6 either alone, or together with services purchased for resale, or with AT&T's own  
7 facilities or with third party-owned facilities, to provide retail services in Florida.  
8 Were the Commission to adopt GTE's position on unbundled network elements, it  
9 would make it impossible for AT&T to compete fully in the local market, leaving  
10 consumers without the benefits Congress intended.

11 **Q. WHAT DOES "UNBUNDLED NETWORK ELEMENT" MEAN?**

12 A. Under the Act, GTE is obligated "to provide, to any requesting telecommunications  
13 carrier for the provision of a telecommunications service, nondiscriminatory access  
14 to network elements on an unbundled basis at any technically feasible point on rates,  
15 terms and conditions that are just, reasonable and nondiscriminatory." 47 U.S.C. §  
16 251(c)(3). This section further directs GTE to "provide such unbundled network  
17 elements in a manner that allows requesting carriers to combine such elements in  
18 order to provide such telecommunications service." Id. The Act defines a network  
19 element to be " a facility or equipment used in the provision of a  
20 telecommunications service," including the "features, functions, and capabilities  
21 that are provided by means of such facility or equipment, including subscriber  
22 numbers, databases, signaling systems, and information sufficient for billing and  
23 collection or used in the transmission, routing, or other provision of a  
24 telecommunications service." 47 U.S.C. § 153(29).

25 An unbundled network element results from identifying and disaggregating the local

1 exchange network into a set of elements or basic network functions, which can be  
2 individually provided, costed, priced, maintained, and combined in such a way as to  
3 provide service offerings. The unbundled network elements either can be physical  
4 facilities and/or features, functions, and capabilities provided by those facilities.  
5 Unbundled network elements are the piece parts of the network whose functionality  
6 is required to provide AT&T the network features and capabilities it needs to offer  
7 competitive services for the benefit of consumers.

8 **Q. WILL THE DESCRIPTION OF UNBUNDLED NETWORK ELEMENTS**  
9 **PROVIDED IN THIS TESTIMONY CHANGE OVER TIME?**

10 A. Yes. While AT&T's present minimum set of network elements are described below,  
11 unbundling is not a static concept. As local competition develops, specific carrier  
12 needs, market developments, or advances in technology used to provide services  
13 will create additional circumstances warranting further unbundling. Thus, AT&T's  
14 list of unbundled network elements is not meant to be exhaustive, but instead should  
15 be viewed as the "baseline" unbundling immediately required under the Act.

16 **II. AT&T'S REQUESTS FOR UNBUNDLED NETWORK ELEMENTS**

17 **Q. WHAT ARE THE UNBUNDLED NETWORK ELEMENTS THAT AT&T**  
18 **HAS REQUESTED FROM GTE?**

19 A. AT&T has requested that GTE make the following unbundled network elements  
20 available under the terms of AT&T's Interconnection Agreement. Attached as  
21 Exhibit RC-1 to my testimony is a schematic depicting the local network. Attached  
22 as Exhibit RC-2 is a series of graphic representations of the twelve requested  
23 unbundled network elements and the use of each in providing local services to  
24 consumers. Exhibit RC-3 is a CD-ROM presentation depicting the local network, its  
25 component unbundled elements, and the functionality of each element. Today, these

1 elements are available exclusively or almost exclusively from GTE, and must be  
 2 unbundled and made available for use by AT&T either individually or in a  
 3 combination with other elements:

- 4 1. Network Interface Device
- 5 2. Loop Distribution
- 6 3. Loop Concentrator/Multiplexer
- 7 4. Loop Feeder
- 8 5. Local Switching
- 9 6. Operator Systems
- 10 7. Dedicated Transport
- 11 8. Common Transport
- 12 9. Tandem Switching
- 13 10. Signaling Link Transport
- 14 11. Signal Transfer Points
- 15 12. Service Control Points/Databases

16 **Q. PLEASE DESCRIBE THE LOCAL LOOP FACILITY.**

17 A. The Local Loop Facility provides a transmission pathway between the subscriber's  
 18 residence or business and his or her local central office. The Local Loop Facility  
 19 can be subdivided into four sub-loop network elements: (1) the Network Interface  
 20 Device, (2) Loop Distribution, (3) the Loop Concentrator/Multiplexer, and (4) the  
 21 Loop Feeder.

22 1. **NETWORK INTERFACE DEVICE**

23 **Q. PLEASE DEFINE THE NETWORK INTERFACE DEVICE AND ITS**  
 24 **FUNCTION.**

25 A. The Network Interface Device ("NID") is the physical location where facilities from

1 the customer's local service provider connects to the inside wiring at the customer  
2 premises. The NID also provides a protective ground connection for the Loop. For  
3 further description and the technical and interface requirements for the NID, see  
4 AT&T's Interconnection Agreement, § 33.9.1, and Attachment 2, § 2.1.

5 **Q. PLEASE EXPLAIN THE NEED FOR UNBUNDLING THE NID.**

6 A. AT&T requires access to the NID to connect efficiently with the inside wiring at the  
7 customer premises. Without access to GTE's NID, AT&T and other new entrants  
8 will not be able to make use of any existing spare terminals in GTE's NID, or lift  
9 GTE's Loop Distribution wire within the NID in order to ground that wire, thereby  
10 making terminals available for use by the new entrants. Without unbundling the  
11 NID, AT&T and other new entrants that provide their own Loop Distribution  
12 facilities would be required to install their own NID on the customer premises  
13 (including hanging a new box and fishing for the wires in the walls) each time the  
14 customer changed his or her local service provider. Access to the unbundled NID  
15 also is necessary to connect AT&T with the electrical grounding of the  
16 telecommunications interface to the customer premises.

17 **2. LOOP DISTRIBUTION**

18 **Q. PLEASE DEFINE LOOP DISTRIBUTION AND ITS FUNCTION.**

19 A. Loop Distribution is the network element that connects the customer to the local  
20 network by connecting the customer's NID to either the Feeder Distribution  
21 Interface or the Loop Concentrator/Multiplexer. The Feeder Distribution Interface  
22 is a device that terminates the Loop Distribution and the Loop Feeder, and cross-  
23 connects them in order to provide a continuous transmission path between the NID  
24 and a telephone company central office. For loop plant that contains a Loop  
25 Concentrator/Multiplexer, the Loop Distribution may terminate at the Feeder

1 Distribution Interface (if one exists), or at a termination and cross-connect field  
2 associated with the Loop Concentrator/Multiplexer. This termination and cross-  
3 connect field may be in the form of an outside plant distribution closure, remote  
4 terminal or fiber node, or an underground vault. The Loop Distribution may be  
5 copper twisted pair cable, coax cable, or single or multi-mode fiber optic cable. For  
6 further description and the technical and interface requirements for Loop  
7 Distribution, see AT&T's Interconnection Agreement, § 33.9.1, and Attachment 2, §  
8 2.2.

9 **Q. EXPLAIN THE NEED FOR UNBUNDLING LOOP DISTRIBUTION.**

10 A. AT&T requires unbundling of Loop Distribution, for example, where AT&T  
11 deploys local fiber rings and its own switches, but does not own the facilities to span  
12 the "last mile" to the customer premises. In this scenario, AT&T could use its fiber  
13 rings to transport traffic between its central office and GTE's Loop Distribution, in  
14 conjunction with a Loop Concentrator/Multiplexer, to deliver traffic between  
15 AT&T's central office and the customer premises. In addition, in some settings,  
16 particularly apartment developments and office buildings, the Loop  
17 Concentrator/Multiplexer is located in the building itself. Accordingly, use of  
18 GTE's Loop Concentrator/Multiplexer and Loop Distribution plant may be the most  
19 efficient way for AT&T to reach individual customers in these situations.

20 **3. LOOP CONCENTRATOR/MULTIPLEXER**

21 **Q. PLEASE DEFINE THE LOOP CONCENTRATOR/MULTIPLEXER AND**  
22 **ITS FUNCTION.**

23 A. The Loop Concentrator/Multiplexer is the network element that provides several  
24 functions needed to assist in transmitting calls across the network. It converts  
25 analog signals coming in from customers to digital signals that are sent across the

1 network. It also concentrates the traffic from the many lines coming in from end-  
2 users to fewer lines going out to the central office. Lastly, to accommodate large  
3 volumes of traffic using fewer facilities, the Loop Concentrator/Multiplexer  
4 intersperses the digital signals from calls into one high speed digital signal. For  
5 further description and the technical and interface requirements for the Loop  
6 Concentrator/Multiplexer, see AT&T's Interconnection Agreement, § 33.9.2, and  
7 Attachment 2, § 3.

8 **Q. EXPLAIN THE NEED FOR UNBUNDLING THE LOOP**  
9 **CONCENTRATOR/MULTIPLEXER.**

10 A. AT&T needs access to GTE's unbundled Loop Concentrator/Multiplexer because it  
11 provides capabilities that are crucial to AT&T's ability to efficiently access its  
12 customers in various circumstances. In order to assure that carriers which need only  
13 the concentrator/multiplexer and feeder functionality (for example, where AT&T  
14 buys distribution from a cable television provider) do not pay for the loop  
15 distribution functions, and also to assure that carriers which need only the  
16 concentrator/multiplexer and loop distribution functions (for example, where AT&T  
17 uses its fiber rings to transport traffic between its central office and the customer)  
18 are not required to pay for the loop feeder functions, GTE should be required to  
19 unbundle the Loop Concentrator/Multiplexer element from each of the other loop  
20 elements. This will effectively permit AT&T to purchase only the specific functions  
21 required to provide local services to consumers.

22 **4. LOOP FEEDER**

23 **Q. PLEASE DEFINE THE LOOP FEEDER AND ITS FUNCTION.**

24 A. The Loop Feeder connects the customer lines at the Feeder Distribution Interface or  
25 the Loop Concentrator/Multiplexer, if one is in place, with the local central office.

1 For further description and the technical and interface requirements for the Loop  
2 Feeder, see AT&T's Interconnection Agreement, § 33.9.3, and Attachment 2, § 4.

3 **Q. EXPLAIN THE NEED FOR UNBUNDLING THE LOOP FEEDER.**

4 A. AT&T needs unbundled access to the Loop Feeder to gain access to its customers in  
5 situations where it has deployed its own distribution plant or has purchased that  
6 functionality from another vendor, but will use GTE's Feeder capabilities (with or  
7 without GTE's Loop Concentrator/Multiplexer) to transport traffic to and from  
8 GTE's central office . This might occur, for example, where AT&T wires a new  
9 housing subdivision or corporate campus complex, but does not have its own switch  
10 or its own transmission facilities to that switch.

11 **5. LOCAL SWITCHING**

12 **Q. PLEASE DEFINE LOCAL SWITCHING AND ITS FUNCTION.**

13 A. Local Switching is the network element that provides many of the fundamental  
14 functionalities of the local network. Among other key functions, it provides the  
15 customer with dialtone for each line; provides customer features such as call waiting  
16 and call forwarding; provides for the proper routing of a call; provides access to  
17 Advanced Intelligence Network ("AIN") triggers to customize call processing; and  
18 creates data necessary to compile a customer's bill. Local Switching also provides  
19 the functionality to connect the appropriate originating lines or trunks to a desired  
20 terminating line, platform, or trunk. Local Switching thus includes all of the  
21 features, functions, and capabilities that any GTE switch is capable of providing.

22 In addition to this voice transmission capability, the Local Switching network  
23 element also provides a second capability -- data switching. Data switching is used  
24 to terminate, concentrate, and switch data traffic from customer premise equipment  
25 to its final destination in a digital format. Access to the unbundled Local Switching



1 network element includes the freedom for AT&T, as needed, to buy access to either  
2 of the two capabilities this element provides. For further description and the  
3 technical and interface requirements for Local Switching, see AT&T's  
4 Interconnection Agreement, § 33.9.4, and Attachment 2, § 5.

5 **Q. EXPLAIN THE NEED FOR UNBUNDLING LOCAL SWITCHING.**

6 A. Unbundled Local Switching is key to the efficient creation of new and improved  
7 services for consumers. Local Switching is the entity within the network that holds  
8 many of the functionalities that will allow AT&T to provide innovations to  
9 consumers and differentiate itself from its competitors. Therefore, AT&T needs the  
10 option either to buy this unbundled network element from GTE or, alternatively, to  
11 provide its own local switch element when building such a facility is the most  
12 efficient solution.

13 **6. OPERATOR SYSTEMS**

14 **Q. PLEASE DEFINE OPERATOR SYSTEMS AND ITS FUNCTION.**

15 A. Operator Systems provides operator and automated call handling and billing, special  
16 services, customer telephone listings, and optional call completion services.  
17 Operator Systems provides two types of capabilities: Operator Services and  
18 Directory Services, each of which are described in detail below.

19 Operator Services provides: (1) operator handling for call completion (for example,  
20 collect, third number billing, and manual credit card calls); (2) operator or  
21 automated assistance for billing after the customer has dialed the called number (for  
22 example, credit card calls); and (3) special services including, but not limited to,  
23 Busy Line Verification and Emergency Line Interrupt, Emergency Agency Call,  
24 Operator-assisted Directory Assistance, and Rate Quotes.

25 Directory Services includes storing and maintaining customer information and

1 providing local customer telephone number listings with the option to complete the  
2 call at the caller's discretion. For further description and the technical and interface  
3 requirements for Operator Systems, see AT&T's Interconnection Agreement, §  
4 33.9.5, and Attachment 2, § 6.

5 **Q. EXPLAIN THE NEED FOR UNBUNDLING OPERATOR SYSTEMS.**

6 A. Unbundled Operator Systems will benefit consumers by allowing AT&T to create  
7 new services (such as foreign language dependent services and innovations based on  
8 voice recognition capabilities) as well as by combining AT&T's world-class  
9 operator services platform with GTE's switches. In order for AT&T to attract  
10 customers, it must provide a full complement of local services, including services  
11 that rely upon Operator Systems. Many new entrants may not be able to duplicate  
12 the entire range of GTE's Operator Systems functionality and therefore would  
13 require the use of GTE's unbundled Operator Systems platforms. At the same time,  
14 some new entrants, such as AT&T, that have already invested or will choose to  
15 invest in Operator Systems should be permitted to maximize the value of such  
16 investments and not be required to purchase the use of GTE's Operator Systems  
17 when using the unbundled GTE Local Switching element.

18 **Q. PLEASE DESCRIBE THE TRANSPORT NETWORK ELEMENTS.**

19 A. The next three network elements are Transport elements. Transport elements  
20 provide the functionality to connect, for example, a central office or Tandem Switch  
21 with another central office, Tandem Switch or a interexchange carrier's Point of  
22 Presence. The central offices, Tandem Switches and Points of Presence may belong  
23 to the subscribing new entrant, other entrants, interexchange carriers, and/or the  
24 incumbent LEC. This allows subscribers to reach each other even when they are not  
25 served out of the same central office or by the same carrier. There are three

1 Transport network elements that must be made available on an unbundled basis --  
2 Dedicated Transport, Common Transport, and Tandem Switching.

3 7. DEDICATED TRANSPORT

4 Q. PLEASE DEFINE DEDICATED TRANSPORT AND ITS FUNCTION.

5 A. Dedicated Transport is an interoffice transmission path between AT&T designated  
6 locations, such as GTE's central offices or other equipment locations, AT&T  
7 network components, and other carrier network components. Dedicated Transport is  
8 used exclusively by a single carrier for the transmission of its traffic. For further  
9 description and the technical and interface requirements for Dedicated Transport,  
10 see AT&T's Interconnection Agreement, § 33.9.7, and Attachment 2, § 8.

11 8. COMMON TRANSPORT

12 Q. PLEASE DEFINE COMMON TRANSPORT AND ITS FUNCTION.

13 A. Common Transport is an interoffice transmission path that links together unbundled  
14 network elements and carries the traffic of more than one carrier. It provides this  
15 path only for the duration of the connection. For further description and the  
16 technical and interface requirements for Common Transport, see AT&T's  
17 Interconnection Agreement, § 33.9.6, and Attachment 2, § 7.

18 9. TANDEM SWITCHING

19 Q. PLEASE DEFINE TANDEM SWITCHING AND ITS FUNCTION.

20 A. Tandem Switching is the network element that establishes a communications path  
21 between two central offices through a third central office (the Tandem Switch).  
22 This path lasts only for the duration of the connection. Tandem Switching is used  
23 when it is either impractical or uneconomical to connect multiple central offices  
24 and/or Points of Presence directly to each other. For further description and the  
25 technical and interface requirements for Tandem Switching, see AT&T's

1 Interconnection Agreement, § 33.9.11, and Attachment 2, § 12.

2 **Q. EXPLAIN THE NEED FOR UNBUNDLING THE TRANSPORT NETWORK**  
3 **ELEMENTS.**

4 A. Unbundling the three Transport network elements described above will benefit  
5 consumers by allowing AT&T and other new entrants to make economically  
6 efficient decisions concerning investment in network interconnections and facilities  
7 needed to exchange traffic with GTE, other local exchange carriers, and  
8 interexchange carriers. AT&T and other new entrants may use the various  
9 Transport network elements to connect any two network components to one another,  
10 be they GTE's unbundled network elements, AT&T facilities, or third-party  
11 facilities. The choice AT&T will make between buying Dedicated Transport, on the  
12 one hand, and Common Transport and Tandem Switching on the other, will be  
13 driven by the relative cost of the options and the amount of traffic that will be  
14 carried.

15 **Q. PLEASE DESCRIBE THE SIGNALING NETWORK ELEMENTS.**

16 A. Signal System 7 ("SS7") signaling is used in the call set-up process to pass  
17 information on the routing and billing of calls within a carrier's network and  
18 between carriers. For example, signaling systems are used to provide validation and  
19 other information for calling card and other operator services calls, and to route 800  
20 number calls to the correct carrier and end user. Signaling systems also enable  
21 carriers to efficiently create and provide AIN services which will add calling  
22 features and value to consumers. Network signaling is provided through the use of  
23 three network elements that should be made available on an unbundled basis --  
24 Signaling Link Transport, Signal Transfer Points, and Service Control  
25 Points/Databases.

1                   **10.    SIGNALING LINK TRANSPORT**

2   **Q.    PLEASE DEFINE SIGNALING LINK TRANSPORT AND ITS FUNCTION.**

3           A Signaling Link is a set of Dedicated transmission paths which carry signaling  
4           messages between carriers' central office switches and signaling networks. For  
5           further description and the technical and interface requirements for Signaling Link  
6           Transport, see AT&T's Interconnection Agreement, § 33.9.8.1, and Attachment 2, §  
7           9.

8                   **11.    SIGNAL TRANSFER POINTS**

9   **Q.    PLEASE DEFINE SIGNAL TRANSFER POINTS AND THEIR FUNCTION.**

10   **A.   Signal Transfer Points are signaling message switches that interconnect Signaling**  
11       **Links to route signaling messages between central office switches and databases.**  
12       For further description and the technical and interface requirements for Signal  
13       Transfer Points, see AT&T's Interconnection Agreement, § 33.9.9, and Attachment  
14       2, § 10.

15                   **12.    SERVICE CONTROL POINTS/DATABASES**

16   **Q.    PLEASE DEFINE SERVICE CONTROL POINTS/DATABASES AND THEIR**  
17       **FUNCTION.**

18   **A.   Databases are the network elements that provide the functionality for storage of, and**  
19       **access to, information required to offer a particular basic telecommunications**  
20       **service and/or capability. A Service Control Point (SCP) is a specific type of**  
21       **database that contains customer and/or carrier-specific routing, billing, or service**  
22       **instructions to be acted on by carriers' central office switches and operator systems.**  
23       The SCP executes the services application logic in response to SS7 queries sent to it  
24       by a central office switch. SCPs also provide operational interfaces to allow for  
25       provisioning, administration, and maintenance of subscriber data and service

1 application data (e.g., an 800 database stores customer record data that provides  
2 information necessary to route 800 calls). For further description and the technical  
3 and interface requirements for Service Control Points/Databases, see AT&T's  
4 Interconnection Agreement, § 33.9.10, and Attachment 2, § 11.

5 **Q. EXPLAIN THE NEED FOR UNBUNDLING NETWORK SIGNALING.**

6 A. SS7 signaling is critical in the provision of modern telecommunications services  
7 because it enables different providers' networks to set up calls to one another,  
8 thereby allowing a customer on one provider's network to communicate with a  
9 customer on another provider's network. Unbundling the Signaling network  
10 elements will allow AT&T to provide signaling capabilities using combinations of  
11 GTE's, AT&T's, and potentially, third-party owned signaling elements to support  
12 AT&T's end user's originating and terminating traffic and advanced features. The  
13 unbundled Signaling network elements are particularly important to consumers in  
14 the competitive local services market because they permit efficient interconnection  
15 and calling between networks without additional Post Dial Delay and will enable  
16 AT&T to introduce innovative, competitive services with shorter development and  
17 delivery time.

18 AT&T must be able to determine how it will obtain its signaling network. Because  
19 of the high costs of deploying, maintaining and interconnecting a signaling network,  
20 AT&T requires the option to purchase these elements, either alone or in  
21 combination, from GTE or from other suppliers.

22 **Q. WHAT ARE THE FCC MINIMUM PRESCRIBED ELEMENTS AND HOW**  
23 **DO THEY COMPARE TO AT&T'S REQUEST FOR 12 ELEMENTS?**

24 A. The FCC, in its Report and Order No. 96-325 ("Order"), requires incumbent LECs  
25 to provide a minimum of seven (7) unbundled network elements and any additional

1 unbundling requirements beyond those specified that a state commission might  
2 impose. The seven network elements that the FCC specified correspond to the  
3 network elements that AT&T has requested to be unbundled in the following  
4 fashion:

5 Network Interface Device (NID): The FCC has required the NID to be an  
6 unbundled network element as AT&T has requested.

7 Local Loop: The FCC has ordered this element, which consists of a combination of  
8 the three sub-loop elements (other than the NID) that AT&T has requested access to  
9 as unbundled network elements.

10 Switching Capability: The FCC has included in this unbundled network element  
11 two functionalities requested by AT&T. The first functionality includes local  
12 switching, including all vertical features and any technically feasible customized  
13 routing functions. The FCC declined to include data switching in its definition of  
14 Local Switching as a national network element due to the limited number of  
15 commenters on the issue. This offers an opportunity for the Florida Commission to  
16 demonstrate its ability to provide for the competitive needs of the citizens of Florida  
17 by identifying data switching as an additional unbundled network element for the  
18 state of Florida. The second functionality is Tandem Switching.

19 Operator Systems: The FCC has required this to be an unbundled network element  
20 as AT&T requested.

21 Interoffice Transmission: The FCC has included in this unbundled network element  
22 the functionalities of Dedicated and Common Transport requested by AT&T.

23 Signaling Networks and Call-Related Databases: The FCC has included in this  
24 unbundled network element the functionalities of Signaling Link Transport,  
25 Signaling Transfer Point (STP), and Signaling Control Point (SCP)/Databases

1 requested by AT&T. The FCC has required incumbent LECs to provide access to  
2 their call-related databases for the purpose of switch query and database response  
3 through the SS7 network. These call-related databases include the LIDB, Toll Free  
4 Calling and AIN databases. This interconnection, however, must be through the call-  
5 related database's associated STP. The FCC also has required unbundled access to  
6 the service management systems (SMS), which allow competitors to create, modify,  
7 or update information in call-related databases. Additionally, the FCC ordered the  
8 incumbent LECs to provide new entrants with the same access to design, create, test,  
9 and deploy AIN-based services at the SMS that the incumbent LEC provides for  
10 itself. As for third party call-related databases, the FCC declined to require a  
11 national unbundled network element, again due to the small number of commenters  
12 on that issue. However, the FCC stated that state commissions could find such an  
13 arrangement to be technically feasible.

14 Operations Support Systems: The FCC has ordered that they be treated as a separate  
15 unbundled network element. Although AT&T had not requested access to these  
16 systems and the information that they contain as a separate network element, AT&T  
17 has requested that GTE provide the functionalities of the FCC's designated element  
18 as a necessary requirement to support AT&T's access to other unbundled network  
19 elements and services.

20 Thus, the FCC Order establishes the reasonableness of the unbundled network  
21 elements requested by AT&T

### 22 **III. USE OF UNBUNDLED NETWORK ELEMENTS**

23 **Q. SHOULD THERE BE ANY RESTRICTIONS ON AT&T'S ABILITY TO**  
24 **COMBINE GTE'S UNBUNDLED NETWORK ELEMENTS IN AT&T'S**  
25 **PROVISION OF LOCAL SERVICES?**



1 A. No. GTE must not be allowed to place any restrictions on AT&T's use of GTE's  
2 unbundled network elements, either alone, in combinations, or in conjunction with  
3 services purchased for resale or with AT&T's or a third-party's facilities. The Act  
4 mandates that GTE "shall provide such unbundled network elements in a manner  
5 that allows requesting carriers to combine such elements in order to provide such  
6 telecommunications service." 47 U.S.C. § 251(c)(3). The FCC has reinforced this  
7 requirement by specifying the incumbent's duty not to "impose limitations,  
8 restrictions, or requirements on requests for, or the use of, unbundled network  
9 elements that would impair the ability of a requesting telecommunications carrier to  
10 offer a telecommunications service in the manner the requesting telecommunications  
11 carrier intends." 47 C.F.R. § 51.309(a). Consistent with the Act and regulation,  
12 AT&T must have the greatest possible flexibility in using GTE's unbundled network  
13 elements to address the features, functions, and services needs of its customers. This  
14 is so for several reasons.

15 First, AT&T must have the ability to provide a former GTE customer with the same  
16 services that customer received from GTE, if the customer so chooses. The most  
17 efficient way to accomplish this may be for AT&T to combine the functionality of  
18 several of GTE's unbundled network elements to provide such services.

19 Second, AT&T must be able to purchase and combine GTE's unbundled network  
20 elements to foster innovation in the provision of services to consumers. By  
21 combining functionalities of these elements, AT&T may be able to create new and  
22 improved services that GTE was unable or unwilling to provide to its customers.

23 Third, AT&T must be able to purchase individual unbundled network elements  
24 and/or combinations of elements to supplement its own network with the network  
25 functionality AT&T cannot yet provide economically itself or through a third party.

1 The purchase of the functionality of these unbundled network elements will allow  
2 AT&T to compete in a given market without the expenditure needed to duplicate  
3 GTE's network capabilities.

4 Lastly, restrictions on AT&T's ability to combine GTE's unbundled network  
5 elements are unnecessary because existing industry standards will be utilized in  
6 combining these elements. Thus, there are no technical impediments to  
7 combinations of technically feasible elements.

8 **Q. PLEASE PROVIDE SOME EXAMPLES OF COMBINATIONS OF GTE'S**  
9 **UNBUNDLED NETWORK ELEMENTS AT&T MAY CHOOSE TO**  
10 **UTILIZE.**

11 A. One example of a combination of unbundled network elements AT&T may utilize to  
12 bring the benefits of competition to consumers is the Loop/Switching combination,  
13 sometimes called the "platform." The Loop/Switching combination is made up of  
14 the four sub-loop elements (the Network Interface Device, Loop Distribution, the  
15 Loop Concentrator/Multiplexer, and the Loop Feeder), the Local Switching element,  
16 and selected Signaling and Transport elements. AT&T will order this combination  
17 of contiguous network elements on an individual line/customer basis. For this  
18 example, AT&T must have the option to purchase or not purchase GTE's Operator  
19 Systems network element as warranted.

20 For existing GTE customers who simply want AT&T as their local service provider,  
21 the Loop/Switching combination will allow the change without requiring any  
22 physical change in the existing GTE network infrastructure. In addition, use of the  
23 Loop/Switching combination will not require AT&T to collocate any equipment in  
24 GTE's central office for customers served via this example.

25 A second example of a combination of unbundled network elements AT&T may

1 choose to purchase from GTE is the combination of the four sub-loop elements (a  
2 "contiguous loop"). This combination will allow AT&T to reach the customer  
3 premises when, for example, AT&T is providing its own central office switch,  
4 transport, and signaling. The FCC's rules accommodate this combination in the  
5 definition of the "NID" and "Local Loop" elements. 47 C.F.R. § 51.319(a), (b).  
6 Another combination that AT&T may need to purchase would include the NID,  
7 Transport, and Signaling elements. This combination would be needed where  
8 AT&T provides its own loop and central office switch.

#### 9 **IV. ISSUES IN DISPUTE**

10 **Q. PLEASE DESCRIBE THE DISPUTE BETWEEN AT&T AND GTE**  
11 **REGARDING AT&T'S ACCESS TO GTE'S UNBUNDLED NETWORK**  
12 **ELEMENTS.**

13 **A.** Although GTE and AT&T have reached agreement on a limited number of issues  
14 with regard to the identification of network elements, GTE refused to address  
15 seriously AT&T's request for unbundled network elements because AT&T would  
16 not agree, in the first instance, to GTE's position regarding pricing. GTE has agreed  
17 to provide access only to those unbundled network elements which GTE is already  
18 providing through tariffs.

19 Beyond these elements, GTE claims, first, that the functionalities requested by  
20 AT&T are not unbundled network elements under the Act. This position is simply  
21 wrong. Each element requested by AT&T fits the Act's definition of "feature,  
22 functions, and capabilities...used in the transmission, routing or other provision of a  
23 telecommunications service." 47 U.S.C. § 153(29). GTE's second argument is that  
24 it is not technically feasible to unbundle some of the network elements requested by  
25 AT&T. The fallacy in this position lies in GTE's definition of technical feasibility,

1           which appears to be that providing access to unbundled network elements is  
2           technically feasible only when GTE can provide such access without doing anything  
3           at this time. Thus, in GTE's view, the need for GTE to make any logistical,  
4           procedural, or operational adjustment to its routine practices in order to provide  
5           AT&T access to an unbundled network element renders that access technically  
6           infeasible.

7   **Q.    WHAT IS THE CORRECT DEFINITION OF TECHNICAL FEASIBILITY?**

8   **A.    The FCC, in its recent revisions to Title 47 of the Code of Federal Regulations**  
9           **pursuant to the Act, defines technical feasibility in this way:**

10                   "Interconnection, access to unbundled network elements,  
11                   collocation, and other methods of achieving interconnection  
12                   or access to unbundled network elements at a point in the  
13                   network shall be deemed technically feasible absent  
14                   technical or operational concerns that prevent the  
15                   fulfillment of a request by a telecommunications carrier for  
16                   such interconnection, access, or methods. A determination  
17                   of technical feasibility does not include consideration of  
18                   economic, accounting, billing, space, or site concerns,  
19                   except that space and site concerns may be considered in  
20                   circumstances where there is no possibility of expanding the  
21                   space available. The fact that an incumbent LEC must  
22                   modify its facilities or equipment to respond to such request  
23                   does not determine whether satisfying such request is  
24                   technically feasible. An incumbent LEC that claims that it  
25                   cannot satisfy such request because of adverse network

1 reliability impacts must prove to the state commission by  
2 clear and convincing evidence that such interconnection,  
3 access, or methods would result in specific adverse network  
4 reliability impacts.” 47 C.F.R. § 51.5.

5 Thus, GTE’s notion that it can claim technical infeasibility based simply on its  
6 unwillingness to make any necessary logistical, procedural, or operational  
7 adjustment is incorrect.

8 **Q. HOW DID AT&T ADDRESS TECHNICAL FEASIBILITY IN SELECTING**  
9 **THE UNBUNDLED NETWORK ELEMENTS IT REQUESTED FROM GTE?**

10 A. Aside from being the basic building blocks required to provide customers with a  
11 local network, AT&T recognized the need to develop a list of unbundled network  
12 elements that would meet the test of technical feasibility, and be uniform across  
13 networks and consistent with existing network architectures. Accordingly, AT&T  
14 used the following requirements to identify the network elements:

- 15 1. Each network element must be measurable and billable or have the  
16 potential to be measurable and billable.
- 17 2. Each network element must utilize transmission or switching protocol  
18 and physical interconnection standards, either existing or under  
19 development, that are recommended by an acknowledged industry body.
- 20 3. Each network element must have the potential to be provisioned by a  
21 competitive service provider -- that is, they represent discrete, stand-alone  
22 physical or logical elements.
- 23 4. Each network element must have the potential to be ordered in  
24 combination with any other network elements to facilitate the  
25 development of a competitive service offering.

1 Q. WHICH UNBUNDLED NETWORK ELEMENTS DOES GTE REFUSE TO  
2 PROVIDE TO AT&T?

3 A. The following are the elements, capabilities, or combinations of elements GTE  
4 refuses to provide to AT&T, along with GTE's reasons for its refusal, and AT&T's  
5 position with respect to each.

6 1. Local Loop Facility: AT&T proposed that the local loop be divided  
7 into four sub-loop elements which can be offered separately or in combination.  
8 These elements are the NID, Loop Distribution, Loop Concentrator/Multiplexer, and  
9 the Loop Feeder. GTE has agreed to provide the NID, but has not provided any  
10 pricing for that element.

11 On July 18, GTE and AT&T subject matter experts reached tentative agreement that  
12 GTE would initially provide a combination of the other three sub-loop elements, and  
13 that it would in the future provide the three individually as the market demand is  
14 ascertained on an individual case basis. GTE acknowledged that it was technically  
15 feasible to provide the requested sub-loop elements. However, GTE asserted that it  
16 would be very expensive to do so (although GTE provided no costs or proposed  
17 rates) and expressed its doubt that there was a sufficient market demand to justify  
18 the cost of providing these elements. GTE later withdrew its tentative proposal, and  
19 took the position that it is technically infeasible to provide access to the sub-loop  
20 elements AT&T has requested.

21 Under the FCC's definition of technical feasibility, GTE has failed to demonstrate  
22 that unbundling each of these network elements is not technically feasible. In fact, ~~of~~  
23 this technical feasibility exists because the technical specifications for establishing  
24 interconnection with the sub-loop network elements are documented in various  
25 existing industry technical publications. See AT&T's Interconnection Agreement,

1 Attachment 2, § 2.1.3.

2 2. Access to Local Switching: GTE has taken the position that it will  
3 provide only limited switching capabilities as a part of its "port" offer. The "port"  
4 offer would limit the available switching features to those that GTE chooses to offer  
5 to its own retail customers, even though other capabilities are provided by software  
6 that is resident in GTE's local switch and thus are a part of the functionality of the  
7 switch. The Act requires GTE to make available to AT&T nondiscriminatory access  
8 to all of the features, functions, and capabilities of the GTE's switch, including  
9 vertical features, routing, and advanced call management capabilities. See AT&T's  
10 Interconnection Agreement, Attachment 2, § 5.1.

11 Data switching is an additional capability provided by Local Switching. AT&T  
12 requires interconnection between local data networks and other data networks so  
13 AT&T can transport its customers' data traffic. This network-to-network transport  
14 of data is accomplished through a defined industry standard called a Network to  
15 Network Interface (NNI). GTE has agreed to unbundle only the User Network  
16 Interface (UNI) interconnect function for data switching not the NNI. This is  
17 analogous to providing local calls but blocking toll calls.

18 GTE must provide the routing capabilities resident in its central office switch in  
19 order for traffic to be routed to the desired destination. For example, the routing  
20 capability in the central office switch would permit the routing of Operator Services  
21 and Directory Assistance calls to AT&T's operator services and directory assistance  
22 platforms. Thus, an AT&T customer dialing zero, when served via the GTE Local  
23 Switching element, would be sent to GTE's Operator System rather than to AT&T's.

24 3. Transport Elements: GTE has refused to unbundle either Dedicated  
25 or Common Transport from GTE's switching on the ground that the unbundling of

1 these local transport network elements from GTE's switching element is not  
2 technically feasible. GTE has stated that AT&T must order Dedicated and Common  
3 Transport from the access tariff. GTE will provide Tandem Switching to AT&T,  
4 except that it will not permit Tandem to Tandem switching on the grounds that GTE  
5 will lose billing data. GTE has agreed to provide Tandem to Tandem switching  
6 when it resolves the billing data issue. AT&T requires Tandem to Tandem  
7 switching for the efficiency of transporting customer calls from one exchange to  
8 another, just as GTE does for their customer calls in their local calling area.

9 Again, GTE mistakes a procedural or administrative issue for technical feasibility.  
10 The provision of these network elements on an unbundled basis is technically  
11 feasible. This is supported by the fact that Common and Dedicated Transport are  
12 already provided as separate elements in the access tariffs. In addition, GTE's offer  
13 does not permit the routing of traffic that AT&T has requested.

14 4. Operator Systems: GTE has taken the position that Operator  
15 Systems are not network elements that GTE is required to unbundle under the Act.  
16 GTE does not contest the technical feasibility of providing access to Operator  
17 Systems. Contrary to GTE's belief, both Operator and Directory Assistance  
18 Services are considered a "capability" under the Act. Network elements consist of  
19 "features, functions, and capabilities . . . used in the transmission, routing or other  
20 provision of a telecommunications service." 47 U.S.C. § 153(29) (emphasis added).  
21 Without question, as the FCC has ruled, GTE Operator Systems is such a network  
22 element. See 47 C.F.R. § 51.319(g).

23 5. Signaling Elements: GTE's position is that access to the Signal  
24 Control Point databases and Signaling Link Transport must be through the Signal  
25 Transfer Point and that further unbundling is not technically feasible. Again, as the



1 FCC has ruled, GTE is required to provide the requested unbundled signaling  
2 elements. 47 U.S.C. § 51.319(e). The unbundling of each signaling element is  
3 technically feasible. For example, AT&T is interconnected to STP pairs belonging  
4 to local exchange carriers, including GTE and alternative signaling network  
5 providers, in 191 LATAs. Most of those interconnections were accomplished during  
6 the two year period beginning October 1991, coincident with the FCC's order on  
7 800 Number Portability. Thus, the industry has had considerable experience in  
8 unbundling signaling interconnection.

9 6. Use of Unbundled Network Elements: GTE contends that new  
10 entrants such as AT&T should not be permitted to combine network elements so as  
11 to "substantially replicate" any services GTE separately offers for resale under  
12 Section 251(c)(4). As I explained above, GTE's position is plainly in conflict with  
13 the Act. AT&T is free to use any of GTE's unbundled network elements, either  
14 alone, in combinations, or in conjunction with services purchased for resale, or with  
15 AT&T's or a third party's facilities. This freedom is required by and crucial to, the  
16 pro-competitive purpose of the Act.

#### 17 V. ADDITIONAL REQUIREMENTS

18 **Q. IS THE FUNCTIONALITY OF GTE'S UNBUNDLED NETWORK**  
19 **ELEMENTS ALL THAT AT&T REQUIRES TO COMPETE IN THE LOCAL**  
20 **MARKET?**

21 **A.** No. The unbundling of GTE's network elements, and allowing AT&T to combine  
22 the functionality of these elements in any manner necessary to meet customer needs,  
23 will expedite robust competition in the marketplace. Without it, the barriers to entry  
24 are too substantial to ever envision competition thriving anytime in the near future.  
25 However, the unbundling of network elements, while necessary to the development

1 of local competition, is not by itself sufficient to ensure the development of a  
2 competitive local market that will benefit consumers. There are a variety of  
3 additional requirements and capabilities that GTE must provide AT&T. See  
4 AT&T's Interconnection Agreement, Attachment 2, § 13.

5 **Q. ARE ANY OF THESE ADDITIONAL REQUIREMENTS IN DISPUTE?**

6 A. Yes. The following are those that GTE refuses to provide to AT&T:

7 1. Access to Rights of Way, Conduits, and Pole Attachments: A right  
8 of way is the right to place poles, conduits, cables, or other equipment on the  
9 property of another, as well as to obtain physical access to that equipment. See  
10 AT&T's Interconnection Agreement, Attachment 3. A right of way may run under,  
11 to, on, or above public or private property (including air space), and may include the  
12 right to use discrete spaces in buildings or at other locations. Pole attachments are  
13 the connection of facilities, such as mechanical hardware, grounding and  
14 transmission cable, and equipment boxes, to a utility pole. Currently, most poles are  
15 owned and maintained by monopoly telecommunications providers. In some cases,  
16 they are jointly owned by telecommunications and electric utilities. Conduit is  
17 protected tubing or piping used to house communications or electrical cables. It can  
18 be either above or below ground and may contain one or more inner ducts. Conduit  
19 systems are found within buildings, under road and rail crossings, under rivers and  
20 streams, and in other locations where repeated excavation for maintenance or  
21 replacement of cable facilities is not desirable or where added protection for the  
22 cables is needed.

23 As a monopoly provider of telecommunications services, GTE has been able to  
24 obtain access to the public and private pathways necessary for its construction of  
25 critical network facilities. In fact, it has had decades in which to accumulate these

1 pathways. Moreover, ~~because they are a limited resource~~, by virtue of the finite  
2 amount of space available as well as limitations on the extent that local governing  
3 authorities and residents are willing to tolerate the inconveniences and intrusions  
4 that constructing and accessing these pathways can cause, these pathways are a  
5 limited resource.

6 For these reasons, AT&T often has no alternative but to use GTE's pathways. For  
7 example, in many areas GTE owns and maintains riser-cabling (cables which  
8 connect floors and rooms inside a large building). The denial of access to these  
9 facilities will make it literally impossible to serve large blocks of customers except  
10 through resale of GTE's services. Similarly, GTE can effectively deny access to  
11 customers located in multiple dwelling units, such as condominiums or apartment  
12 complexes, by refusing to provide AT&T space in the GTE equipment room located  
13 in that building.

14 GTE interprets the "non-discriminatory access" requirement of Section 224(f)(1) to  
15 require the owners of facilities to apply the same "just and reasonable" rates, terms,  
16 and conditions to all third parties obtaining access to poles, conduits, and rights-of-  
17 way. GTE asserts it has the right to refuse access due to capacity constraints,  
18 including constraints based on GTE's 5 year planning horizon, and for reasons of  
19 safety, reliability, and generally applicable engineering purposes. GTE claims the 5  
20 year planning horizon is justified because it is consistent with the time frames the  
21 FCC previously found reasonable for reserving central office space for the owner's  
22 own use related to collocation requests. GTE is unwilling to negotiate any time  
23 frames for providing additional capacity because GTE believes that the rates  
24 established pursuant to the Act are not sufficiently compensatory. GTE believes that  
25 the provisions of Section 251(c)(6) have no impact upon the FCC's prior

1 Rulemaking, and that its restriction on availability of collocation space based upon  
2 its five year plan is therefore justified.

3 The Act imposes a specific duty on the owners and holders of poles, conduits, and  
4 rights-of-way who are "utilities" to provide non-discriminatory access to competing  
5 telecommunications carriers. 47 U.S.C. §224(f)(1). "Non-discriminatory access"  
6 means that GTE must take reasonable steps to ensure that AT&T has access to and  
7 ability to use the poles, conduits and rights-of-way on the same terms and conditions  
8 as GTE itself. GTE should not be permitted to first satisfy all of its existing and  
9 projected five year spare capacity needs before allowing others to share the  
10 pathways. Rather, GTE must free up or create such capacity. Failure to impose  
11 such a requirement would permit GTE to easily erect barriers for its competitors  
12 simply by claiming that any spare capacity will be required for use within GTE's  
13 five year planning horizon.

14 2. Interim Number Portability: "Number portability" is the ability of  
15 customers to keep their telephone numbers when changing service providers  
16 ("Service Provider Local Number Portability"). Currently, there are four  
17 predominant "interim" portability arrangements: 1) remote call forwarding (RCF);  
18 2) Directory Number-Route Indexing (DN-RI); 3) Route Indexing-Portability Hub  
19 (RI-PH); and 4) Local Exchange Routing Guide (LERG). AT&T has requested that  
20 GTE support all four types of interim number portability. These options will permit  
21 interim portability to be deployed more efficiently and enable AT&T to better meet  
22 its customers' requests. However, while they offer some relief, local competition  
23 cannot fully develop under any of these interim arrangements. See AT&T's  
24 Interconnection Agreement, Attachment 8.

25 GTE has taken the position that it will provide interim number portability only

1 through RCF and DID/Flex DID (a form of Route Indexing that has only limited use  
2 for AT&T). In addition, GTE states that it is still investigating other methods such  
3 as flex-direct inward dialing, Directory Number-Route Indexing, Route Indexing-  
4 Portability Hub, and LERG reassignment for technical feasibility. GTE's position  
5 on interim number portability and their inability to respond to AT&T's request for  
6 the other forms of number portability places serious limitations on AT&T.

7 First, RCF requires all calls placed to these "ported" customers to be routed first to  
8 GTE's network, effectively keeping the incumbent monopoly in the path of calls to  
9 AT&T's customers. This seriously constrains the ability of AT&T to efficiently  
10 route and terminate calls and by requiring additional transport over incumbent  
11 facilities, diminishes network reliability, transmission quality, and network  
12 maintenance capabilities, and increases post-dialing delay and costs of call  
13 completion. Second, because RCF relies on number translation, RCF typically  
14 disables many custom local area signaling services (CLASS) type features. RCF's  
15 reliance on number translation also means that two North American Numbering Plan  
16 numbers are required for every "ported" customer, placing undue strain on  
17 numbering resources and exacerbating number exhaust. Finally, RCF is of limited  
18 utility to many business customers with call center applications, because it limits the  
19 number of calls that may be placed simultaneously to a single "ported" number.

20 DID/Flex DID limits AT&T in many of same ways that RCF does. The DID/Flex  
21 DID arrangement provides portability by causing GTE's end office switch to treat  
22 AT&T's switch as if it were a private branch exchange connected to GTE's  
23 network. Like RCF, DID/Flex DID requires that calls be routed through the  
24 incumbent's network, thereby similarly diminishing network reliability, transmission  
25 quality, and network maintenance capabilities, and increasing post-dialing delay and

1 the costs of call completion. Indeed, because DID/Flex DID requires that AT&T  
2 switches supporting "ported" customers be directly trunked to GTE end offices, it  
3 constrains engineering of alternative carrier networks to an even greater degree than  
4 RCF. Moreover, DID/Flex DID does not allow the calling party number to be  
5 delivered to AT&T's switch, preventing AT&T from providing vertical features  
6 such as Caller Identification to its customers.

7 3. Permanent Number Portability: AT&T has requested that GTE  
8 support the development of an industry wide permanent number portability solution  
9 within a geographic area based on a location routing number method and service  
10 provider number portability with limited location portability. For this purpose,  
11 AT&T has requested that GTE agree to the establishment of an industry wide  
12 service management system managed by an independent third party. AT&T further  
13 requests that GTE agree to service provider number portability with limited location  
14 portability and one database solution with one local number portability dip per call.  
15 GTE has taken the position that it is premature for GTE to commit to any long term  
16 number portability solution. GTE further has stated that it will provide only service  
17 provider number portability and that it will not agree to any limited location  
18 portability. See AT&T's Interconnection Agreement, Attachment 8, § 3.

19 4. Interconnection Between Two Carriers Collocated On GTE's  
20 Premises: Collocation is a method for implementing interconnection between  
21 carriers. Through physical collocation, an interconnecting carrier obtains dedicated  
22 space in GTE's premises and places equipment in that space in order to interconnect  
23 with GTE's and other ALECs' networks. The term "collocation" also encompasses  
24 virtual collocation. See AT&T's Interconnection Agreement, Attachment 3, § 2.  
25 GTE believes that the Act only requires that GTE permit collocation for carriers that

1 intend to interconnect with GTE and that it does not require GTE to permit multiple  
2 collocators to interconnect with one another on its premises. GTE claims that such  
3 interconnections would have to be made using GTE's facilities, at GTE's access  
4 rates. There are likely to be instances where AT&T and another non-GTE carrier  
5 happen to be collocated at the same GTE premise and want to interconnect with one  
6 another on GTE's premises. Those interconnections can be as simple as connecting  
7 a cable from one collocator's space to another. In that circumstance, the most  
8 efficient way for the two carriers to interconnect with one another is through trunks  
9 going directly from one carrier to the other. Such interconnections will facilitate  
10 competition because it gives new carriers options, thus mitigating GTE's monopoly  
11 position. Provided that space is available and that doing so would not harm GTE's  
12 facilities or services, there should be no limitations on non-GTE carriers  
13 interconnecting with one another on GTE's premises.

14 5. Other Restrictions On Collocation: GTE has proposed other  
15 restrictions on collocation that are inconsistent with the Act. It wants to limit the  
16 type of equipment that AT&T can install on GTE's premises to include only  
17 equipment required to interconnect with GTE's facilities. If that equipment  
18 performs any other function—for example, if the equipment served as a remote  
19 switching unit—then GTE would preclude the equipment from being collocated on  
20 its facilities, even though GTE has space available on its premises and it would be  
21 technically efficient to engineer the equipment for collocated space. GTE also has  
22 proposed to restrict the use of the collocated space to the interconnection of only  
23 switched or special transport services and connections to unbundled local loops.  
24 GTE has not explained why it believes these restrictions are appropriate or  
25 necessary. These restrictions appear unreasonable and are perceived to have been

1 proposed for no other reason than to make it more difficult for GTE's would-be  
2 competitors to operate efficiently. See AT&T's Interconnection Agreement,  
3 Attachment 3, § 2.

4 6. Advanced Intelligent Network (AIN): GTE refuses to unbundle  
5 access to its AIN in such a way that AT&T can achieve parity in the creation and  
6 offering of AIN based services. AIN will allow AT&T to offer consumers a variety  
7 of innovative, competitive advanced features and services independent of GTE. See  
8 AT&T's Interconnection Agreement, Attachment 2, § 12.2.10. For example, AIN  
9 triggers would enable a carrier to offer "voice recognition," a service that allows a  
10 customer to dial a call by speaking the name of the party the customer wishes to call.  
11 AT&T's access to GTE's AIN triggers will provide AT&T with call control  
12 capability within the GTE local switch that would allow AT&T to customize  
13 offerings without having to duplicate GTE's network. Such access is critical to  
14 AT&T's ability to provide competing services to its customers now and in the future.  
15 GTE has taken the position that providing unmediated access to AIN is not  
16 technically feasible. GTE states that it will work with AT&T to jointly develop and  
17 test AIN services that will execute on GTE's platforms, thus permitting AT&T  
18 "virtual" access to AIN capabilities. GTE's refusal to provide AT&T access to  
19 GTE's AIN in such a way that AT&T can achieve parity in the creation and offering  
20 of AIN based services prevents AT&T from offering consumers a variety of  
21 innovative, competitive advanced features and services independent of GTE.

22 GTE also has not agreed to interconnect their SS7 network with AT&T's SS7 network  
23 for the purpose of exchanging AIN TCAP messages from their switch to AT&T's AIN  
24 SCP. GTE's position is that the access to their AIN platform and interconnection of  
25 GTE's SS7 network and AT&T's SS7 network for the purpose of access to AT&T's



1 AIN SCP is not technically feasible at this time. This position is ironic in light of the  
2 fact that the incumbent carriers and Bellcore viewed AIN as a chance for the  
3 incumbents to break through a vendor bottleneck on switch software feature  
4 development that inhibited them from quickly meeting customer needs. AT&T is  
5 now in essentially the same position GTE was a few years ago in its struggle to  
6 wrestle control of centralized switch intelligence from switch vendors, in that the  
7 new entrant's ability to define new services are constrained by GTE.

8 7. Unused Transmission Media: AT&T has requested that GTE lease  
9 to AT&T GTE's unused transmission media. See AT&T's Interconnection  
10 Agreement, Attachment 3, § 4. GTE has refused. AT&T needs the ability to lease  
11 this media to facilitate its ability to efficiently build its own network transmission  
12 facilities. Without the ability to lease this media, AT&T faces yet another capital  
13 investment barrier to developing its own network.

## 14 VI. CONCLUSION

### 15 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

16 A. AT&T is asking this Commission for a decision that will approve AT&T's requests  
17 for access to GTE's unbundled network elements and combinations of elements,  
18 including the additional requirements necessary for efficient use of these elements,  
19 as described in this testimony and enumerated in AT&T's proposed Interconnection  
20 Agreement with GTE. Access to the unbundled network elements and combinations  
21 of elements that AT&T has requested is technically feasible. GTE's refusal to  
22 provide AT&T access is based on an incorrect application of the concept of  
23 technical feasibility and on policy positions that conflict with the pro-consumer  
24 purposes of the Act. AT&T's Interconnection Agreement sets forth a business  
25

1 arrangement between AT&T and GTE, tailored to AT&T's individual needs, that  
2 will provide such access, and thereby make it possible for AT&T to diversify its  
3 presence in the local market and quickly bring the benefits of competition to  
4 consumers.

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

6 A. Yes.

1                                   **REBUTTAL TESTIMONY OF**  
2                                   **RAY CRAFTON**  
3                                   **ON BEHALF OF**  
4                                   **AT&T COMMUNICATIONS**  
5                                   **OF THE SOUTHERN STATES, INC.**

6                                   **BEFORE THE**  
7                                   **FLORIDA PUBLIC SERVICE COMMISSION**

8                                   **DOCKET NO. 960847-TP**

9                                   **Filed: September 24, 1996**  
10

11   **Q.     PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

12   **A.     My name is Ray Crafton. My business address is 1200 Peachtree Street, N.E.,**  
13       **Atlanta, Georgia 30309-3579.**

14  
15   **Q.     HAVE YOU PREVIOUSLY OFFERED TESTIMONY IN THIS**  
16       **PROCEEDING?**

17   **A.     Yes. I provided direct testimony on August 16, 1996.**

18  
19   **Q.     WHAT IS THE PURPOSE OF THE TESTIMONY YOU ARE CURRENTLY**  
20       **OFFERING?**

21   **A.     I am providing rebuttal testimony that responds to the testimony of GTE Florida**  
22       **Incorporated ("GTE") on selected issues. Specifically, I am responding to statements**  
23       **made by Messrs. Wood, Morris, DellAngelo, Ries, Bailey and Ms. Menard. My**  
24       **rebuttal testimony focuses on the provision of unbundled network elements,**  
25       **collocation, access to poles, conduits and rights of way, and the appropriate number**

1 of portability arrangements.

2 **Q. HAS AT&T REQUESTED UNRESTRICTED ACCESS TO GTE'S LOOP**  
3 **PLANT?**

4 A. No. On page 22 of GTE Witness Wood's testimony, he discusses the need for  
5 security and reporting procedures to protect the network from physical damage,  
6 compromise of privacy, and increased toll fraud. AT&T believes that reasonable  
7 security and reporting procedures should be developed that do not unfairly or  
8 unreasonably restrict the use of the unbundled elements and, at the same time, protect  
9 the network from physical damage, compromise of privacy, and increased toll fraud.

10

11 **Q. IF SUBLOOP ELEMENTS WERE UNBUNDLED, WOULD THE**  
12 **INTEGRITY OF GTE'S NETWORK BE COMPROMISED?**

13 A. No. Methods and procedures could be developed that would protect the integrity of  
14 GTE's network. The potential for toll fraud and eavesdropping exist in today's loop  
15 plant and would not be increased by unbundling subloop elements. GTE's network  
16 will be no more vulnerable than it is today to physical access by unauthorized parties  
17 once subloop elements are unbundled and made available to ALECs. It is likely that  
18 more loop plant will continue to be damaged in the future by end users pushing lawn  
19 mowers into cross connect enclosures and driving cars into telephone poles than by  
20 trained, certified technicians carrying out their job responsibilities.

21

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25

1 Q. WILL THE UNBUNDLING OF LOOPS THAT ARE SERVED ON  
2 INTEGRATED DIGITAL LOOP CARRIER (IDLC) SYSTEMS REALLY  
3 COST 'MANY MILLIONS OF DOLLARS' AS GTE CONTENDS?

4 A. These costs may not be as substantial as GTE has indicated. The costs will be driven  
5 by the frequency with which these systems have been deployed and by how often new  
6 entrants find it cost effective to use unbundled loops. Besides use of channel banks to  
7 provide unbundling of IDLC loops there are additional methods including but not  
8 limited to:

- 9
- 10 1. use of copper loops that have been left in place at the time of  
11 IDLC deployment,
  - 12 2. use of universal Digital Loop Carrier systems that may have  
13 been left in place at the time of IDLC deployment or that can  
14 be deployed alongside the IDLC, and
  - 15 3. use of next generation IDLC technology, known as Virtual  
16 Remote Terminals, to provide unbundling within the IDLC  
17 itself.

18

19 The benefit to the consumer of this unbundling is that the 20% of consumers who are  
20 served by IDLCs in GTE's network will see the benefits of facility-based competition  
21 in which new entrants like AT&T can pick up an unbundled IDLC loop and connect  
22 it to the new entrant's switch. These customers can then enjoy the benefits of service  
23 differentiation and lower cost afforded by the new entrant's switch and its value-  
24 added features. Without such unbundling, competition in this portion of the market  
25 would be limited to resale of GTE's services.

1

2 **Q. WHAT IS THE APPROPRIATE DEFINITION OF TECHNICAL**  
3 **FEASIBILITY?**

4 A. According to Section 251(c)(3) of the Act, ILECs are required to provide  
5 “nondiscriminatory access to network elements on an unbundled basis at any  
6 technically feasible point . . . .” (emphasis added). In other words, if it is  
7 operationally possible to provide access to an unbundled element at any given point in  
8 GTE’s network, GTE is required to provide such access at the request of a  
9 telecommunications carrier. This Commission, like the FCC, should not permit GTE  
10 to use economic, space or site considerations to avoid its obligations under the Act.  
11 GTE’s concerns about the costs of providing access to unbundled elements, the  
12 possibility that some of its space may need to be expanded, and other site  
13 considerations are logistical issues that GTE should not be permitted to hide behind to  
14 hinder the development of competition in the local exchange markets. If there are  
15 costs that are incurred due to ALECs’ requests to obtain access to unbundled  
16 elements, these issues can be properly addressed by the Commission through the  
17 establishment of an appropriate cost recovery mechanism.

18

19 **Q. WHY IS IT IMPORTANT THAT THIS COMMISSION ORDER GTE TO**  
20 **PROVIDE CUSTOMIZED ROUTING?**

- 21 A. 1. It allows an operator services call for the new entrant to be branded as that  
22 entrants call when it is handled on the GTE operator services platform.
- 23 2. It allows an operator services call for the new entrant to be  
24 routed to that entrant’s operator services platform.
- 25 3. It allows GTE to unbundle its local switching network

1 element from both the operator systems network element and the  
2 interoffice transport network elements thereby meeting the FCC  
3 order's definition of these elements and the order's requirement that  
4 these elements be made available separately or in any combination.  
5

6 **Q. IS IT TECHNICALLY FEASIBLE FOR GTE TO PROVIDE CUSTOMIZED**  
7 **ROUTING?**

8 A. Contrary to the assertions of GTE witness Wood, it is technically feasible for GTE to  
9 provide customized routing functions. Most switches within a LECs network under-utilize  
10 the number of available Line Class Codes ("LCCs"). On most switches there are usually  
11 hundreds, sometimes thousands, of spare LCCs. Only a small percentage of LCCs are  
12 needed to provide the type of customized routing described in my direct testimony. Indeed,  
13 several state commissions, including <sup>PENNSYLVANIA</sup> Georgia, Illinois and New York, have found that it is  
14 technically feasible for ILECs to provide customized routing. The FCC also concluded that  
15 "customized routing...is technically feasible in many LEC switches." If a particular switch  
16 within GTE's network has limited capacity, GTE should be required to make the  
17 appropriate demonstration to this Commission. Even the FCC concluded that an incumbent  
18 LEC must prove to the state commission that customized routing in a particular switch is  
19 not technically feasible.

20 **Q. HAS GTE ALWAYS CONTENDED THAT IT IS NOT TECHNICALLY**  
21 **FEASIBLE TO USE LINE CLASS CODES TO PROVIDE CUSTOMIZED**  
22 **ROUTING ON THEIR SWITCHES?**

23 A. No. In a letter dated April 25, 1996, Mr. Dan Bennett, GTE's national manager for  
24 the AT&T account wrote to Terry Casey, a manager on AT&T's negotiating team  
25 that:  
26

1 GTE also acknowledges the apparent technical feasibility of routing  
2 AT&T customers to the AT&T OS platform via "0+/0"- dialing  
3— utilizing the Line Class Code (LCC) functionality of the 5ESS® end  
4 office switch. Further, GTE conceptually agrees that LCC and/or  
5 enhanced/special route indexes are basic switch processing  
6 capabilities and the potential for utilizing similar functionality may  
7 (or could be made to) exist within some or all of GTE's other switch  
8 types.

9  
10 **Q. WOULD PROVISION OF CUSTOMIZED ROUTING LEAD TO AT&T'S**  
11 **AVOIDANCE OF ACCESS CHARGES AS GTE CONTENDS?**

12 **A.** Contrary to GTE's contention, implementation of these routing capabilities will not  
13 lead to AT&T's illegal avoidance of any access charges whatsoever. AT&T intends  
14 to pay those access charges which are applicable to a given call.

15  
16 **Q. WILL THE INTEGRITY OF GTE'S SS7 NETWORK BE COMPROMISED**  
17 **IF ALECS ARE PERMITTED TO INTECONNECT WITH GTE'S AIN**  
18 **NETWORK?**

19 **A.** No. As GTE witness Morris correctly points out on page 20 of his testimony, the  
20 Signal Transfer Points ("STPs") in the SS7 network provide the mediation function.  
21 Mediation at the STPs adequately protects both the switch and the database  
22 applications in the signaling network. Based on AT&T's AIN trial with BellSouth,  
23 this mediation is sufficient to protect AIN applications in the SS7 network as long as  
24 the interconnecting carriers have run a rigorous set of AIN network validation tests.  
25 This testing has become standard procedure in the interconnecting of SS7 networks



1 and their applications.

2

3 **Q. GTE WITNESS DELLANGELO ASSERTS THAT AIN END OFFICE**  
 4 **TRIGGERS CANNOT BE SHARED BY MULTIPLE PROVIDERS. IS THIS**  
 5 **CORRECT?**

6 **A. No. For a single customer his statement is true. But for a single switch serving**  
 7 **multiple customers, the statement is false. AIN standards expressly permit an AIN**  
 8 **query for a given subscribed trigger to be routed to a different AIN SCP database**  
 9 **depending on the customer subscribing to that trigger. Thus, an AT&T local**  
 10 **customer served by a GTE local switch can have their AIN queries routed to the**  
 11 **AT&T AIN SCP database while a GTE customer on the same switch subscribing to**  
 12 **the same triggers will have their AIN queries routed to the GTE AIN SCP database.**  
 13 **It is in this sense that the AIN triggers within a GTE switch can be accessed by**  
 14 **multiple providers. The key here is that the two providers' sets of customers are**  
 15 **distinct and separate. The architecture proposed by AT&T in the AT&T-AIN test**  
 16 **report of November 1995 concluded that the sharing of subscribed triggers between**  
 17 **multiple service providers is technically feasible.**

*Bell South  
public office dial plan and*

18

19 **Q. DOES THE NATURE OF AIN DEMAND FURTHER MEDIATION, AS GTE**  
 20 **CONTENDS?**

21 **A. No. GTE Witness DellAngelo points to a number of network fault conditions that**  
 22 **may be inadvertently triggered if further mediation of AIN is not put in place.**  
 23 **However, it is just as likely for GTE to cause a network fault in its AIN applications**  
 24 **as it is for another user, like AT&T, to cause them. Thus, if the Florida Commission**  
 25 **concludes that access to GTE's AIN network requires further mediation then the same**

1 mediation functions should apply to all users including GTE.

2

3 **Q. GTE CONTENDS THAT IT IS NOT TECHNICALLY FEASIBLE TO**  
 4 **UNBUNDLE THE SIGNALING ELEMENTS. IS THAT CORRECT?**

5 A. No. Incumbent LECs and some signaling aggregators already provide access to the  
 6 various signaling elements on an unbundled basis. Several state commissions,  
 7 including Colorado, Michigan, and Texas, recognized the technical feasibility of  
 8 providing unbundled elements of SS7 networks and already require incumbent LECs  
 9 to provide such unbundled elements. The FCC in its recent Order gave considerable  
 10 weight to the findings of these state commissions in reaching the conclusion that  
 11 access to unbundled signaling links and STPs is technically feasible.

*and SCP data bases*

12

13 **Q. IN YOUR EXPERIENCE IS THERE ANY REASON THAT SIGNALING**  
 14 **LINKS CANNOT BE UNBUNDLED?**

15 A. None whatsoever. Signaling links are nothing more than digital interoffice  
 16 transmission facilities which can be purchased today as private lines. Their only  
 17 peculiarity is that they must be acquired in sets of 2 or 4 links at a time and that the  
 18 routing of the links within each of these sets must remain physically diverse to ensure  
 19 signaling network redundancy and reliability.

20

21 **Q. GTE WITNESS RIES ASSERTS ON PAGE 11 OF HIS TESTIMONY THAT**  
 22 **AT&T IS SEEKING TO COLLOCATE MORE THAN THAT EQUIPMENT**  
 23 **NECESSARY FOR INTERCONNECTION OR ACCESS TO UNBUNDLED**  
 24 **NETWORK ELEMENTS. IS THAT A FAIR CHARACTERIZATION OF**  
 25 **AT&T'S POSITION?**

1     **A.**     **No. AT&T is seeking to collocate only the equipment necessary to interconnect with**  
2             **GTE. This can sometimes require collocation of small amounts of switching**  
3             **equipment. For example, GTE states that at least 20% of the customers on GTE's —**  
4             **local network are served by a digital loop carrier system. When AT&T wishes to**  
5             **connect a GTE unbundled loop serving one of these customers to an AT&T local**  
6             **switch, it will usually require AT&T to haul that traffic over many miles. (As a new**  
7             **entrant, AT&T likely will begin with few switches and few customers scattered over a**  
8             **wide area.) Faced with this situation, AT&T could deploy its own digital loop carrier**  
9             **system to minimize line haul costs from the collocation cage back to the AT&T**  
10            **switch. However, use of an AT&T digital loop carrier system back-to-back with a**  
11            **GTE loop carrier system leads to a significant deterioration in transmission quality**  
12            **for that customer. If, on the other hand, AT&T does not deploy its own digital loop**  
13            **carrier system, the cost of serving the customer is increased because each and every**  
14            **individual loop must be hauled back to the AT&T switch. The best answer in these**  
15            **situations is to deploy a remote switch module instead of a digital loop carrier system**  
16            **and to switch the call at the collocation cage. This avoids both a deterioration in call**  
17            **quality and much of the backhaul costs. GTE has remarked of its network that "one**  
18            **size does not fit all". And this is true of the interconnection equipment AT&T must**  
19            **deploy to interconnect with their GTE network.**

20  
21    **Q.     SHOULD THE FLORIDA COMMISSION LIMIT WHERE COLLOCATION**  
22            **MAY OCCUR?**

23    **A.**     **No. The Commission should order GTE to allow collocation at all collocation**  
24            **facilities that house GTE network facilities, unless GTE makes an appropriate**  
25            **showing before this Commission that it is not technically feasible to allow collocation**

1 at a given facility requested by an ALEC. By adopting this policy approach, the  
2 Commission will ensure that competition will not be stifled and consumers will  
3 benefit from reduced interconnection cost. The FCC recognized that there is a broad  
4 array of points at which interconnection is permitted as GTE witness Ries observes:

5

6 GTE recognizes that the FCC's Order requires collocation to be  
7 provided at all structures that house GTE network facilities,  
8 including "any structures that house LEC network facilities on public  
9 rights-of-way, such as vaults containing loop concentrators or similar  
10 structures."

11

12 The FCC also interpreted the Act as requiring the incumbent LEC to prove that a  
13 given point is not feasible .

14

15 **Q. GTE ASSERTS THAT THIS COMMISSION SHOULD ALLOW IT TO**  
16 **RESERVE POLE AND CONDUIT CAPACITY FOR ITS OWN FUTURE**  
17 **NEEDS AND SHOULD PERMIT IT TO DENY SUCH RESERVE**  
18 **CAPACITY TO ALECS. DO YOU AGREE WITH GTE'S POSITION?**

19 **A.** No. GTE witness Bailey beginning on page 15 of his testimony is essentially advocating  
20 that this Commission sanction GTE's desire to discriminate between itself and ALECs.  
21 GTE is willing to provide ALECs with the same access to poles and conduits that GTE  
22 provides to other ALECs but is not willing to provide such access on the same terms and  
23 conditions afforded to GTE. This is inappropriate because such a policy will allow GTE to  
24 manipulate the development of competition by increasing its reserves to foreclose the use of  
25 pole and conduit capacity by its competitors. Moreover, GTE's position is directly at odds

1 with the Act which requires "nondiscriminatory" access to poles, conduits and rights of  
2 way. The FCC also prohibited any reservation of pole and conduit capacity by incumbent  
3 LECs.

4

5 **Q. IS IT NECESSARY FOR GTE TO PROVIDE THE FOUR INTERIM**  
6 **NUMBER PORTABILITY OPTIONS REQUESTED BY AT&T?**

7 **A. Yes.** Maximum flexibility with respect to INP is necessary given the technical  
8 limitations of all switch-based options and the attendant impacts to various  
9 customer segments. Given that no single INP option will achieve parity between  
10 GTE and its potential competitors, AT&T must be able to choose the option for  
11 each switch and for each of its customers, that can most closely approximate parity  
12 with the call processing GTE provides to its own customers.

13

14 **Q. IS ROUTE INDEXING (RI-PH) TECHNICALLY FEASIBLE?**

15 **A. Yes.** In a 1995 presentation to the Illinois Commerce Commission LNP workshop, an  
16 Ameritech speaker, Barry Bishop, proposed RI-PH (SPNP-Hub [utilizing SS7]) as an  
17 INP solution which was demonstrated to provide numerous advantages and to be  
18 technically feasible. The handout stated that RI-PH "has been tested with the SESS,  
19 DMS 100, EWSD, and IAESS." Ameritech went on to say, "It is Ameritech's  
20 opinion that the RI-PH offers a viable, proven and less burdensome near term  
21 alternative for number portability and one which does not involve a lot of throw away  
22 development and implementation costs . . ." BellSouth has agreed to provide RI-PH  
23 to AT&T. Therefore, it appears that RI-PH is technically feasible and should be  
24 made available to AT&T as an INP solution.

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**Q. GTE HAS OFFERED FLEX-DID AS AN INP SOLUTION. ARE THERE LIMITATIONS OF FLEX-DID THAT MAKE IT AN UNDESIRABLE SOLUTION IN CERTAIN INSTANCES?**

**A. Yes. Flex-DID has several limitations. First, since it is a PBX-oriented feature, Flex-DID generally supports only dial pulse or Touch Tone (DTMF) signaling. SS7 is not supported, and thus it may not be possible to pass calling line identification CgPN (or Automatic Number Identification "ANI") to the AT&T office.**

**Second, as a PBX interface, Flex-DID requires direct trunking between the GTE and AT&T offices. This solution thus appears to be both inefficient and uneconomical in the instance when only a few numbers are ported from a given GTE office.**

**Finally, Flex-DID uses analog (MF) signaling. Flex-DID using MF trunks would introduce additional post-dialing delay (as contrasted to SS7) and is clearly below parity with GTE's own customers.**

**Q. IS LERG REASSIGNMENT USEFUL AS AN INP OPTION?**

**A. Yes, in limited cases. In cases where AT&T desires to provide number portability for the entire number block (NXX) and other INP options are not available to AT&T, such as Route Indexing-Portability Hub, LERG reassignment is the only "efficient" means remaining to route the numbers to the new service provider's switch. LERG does not contribute to the reduction of numbering resources and uses**

1 more efficient routing technology. While the industry LERG reassignments  
2 normally avoids splitting NXXs across different offices, sometimes it is necessary,  
3 and it is done. Migrating of NXXs is done in the normal course of business when,  
4 for instance, an existing switch is retired.

5

6 **Q. PLEASE COMMENT ON GTE'S RESPONSE TO AT&T IN REGARD TO**  
7 **INP.**

8 **A. AT&T is disappointed and frustrated with GTE 's policy position, not to provide INP**  
9 **options that would enable AT&T to better serve its customers. Furthermore, AT&T**  
10 **does not agree with GTE's statement that its current INP offerings, especially Flex-**  
11 **DID "... is a good choice for INP because it is a reliable, proven method and is easily**  
12 **provisioned by service providers today without costly network modifications." As I**  
13 **mentioned earlier, Flex-DID would require trunks to every GTE collocated end office,**  
14 **even if traffic volumes did not justify this arrangement; and it would require MF**  
15 **trunks, which clearly are inferior to the trunks with SS7 signaling, between those**  
16 **offices. Clearly, Flex-DID is the least effective INP option. Most significantly,**  
17 **AT&T disputes GTE's statement that RI-PH has not been tested, since Ameritech**  
18 **has, in fact, stated publicly that it has been tested and has recommended it in industry**  
19 **forums.**

20

21

22

23 **Q. PLEASE COMMENT ON GTE'S RESPONSE TO AT&T IN REGARD TO**  
24 **PERMANENT NUMBER PORTABILITY (PNP).**

1 A. AT&T has requested GTE to support the development of an industry wide permanent  
2 number portability solution. PNP is currently being worked in industry forums,  
3 including, Florida docket No. 960100-TP. To the extent that this issue is resolved in  
4 Docket No. 960100-TP, this issue need not be addressed in this arbitration  
5 proceeding. However, if this issue is not resolved in that docket, it is AT&T's  
6 position that this Commission should implement PNP in accordance with the FCC's  
7 regulations promulgated in FCC Docket 95-116. The FCC set forth certain criteria  
8 that a PNP must meet. It is AT&T's position that the LRN solution is the only  
9 solution that currently meets the FCC's criteria. Therefore, the Commission should  
10 adopt LRN as the PNP solution for the State of Florida.

11  
12 Q. PLEASE SUMMARIZE AT&T'S POSITION WITH RESPECT TO  
13 NUMBER PORTABILITY.

14 A. AT&T believes that Number Portability is a necessary and essential component of  
15 effective local competition. Congress, the Florida legislature and the FCC have also  
16 reached this firm conclusion. AT&T, recognizing the delay in the availability of a  
17 permanent number portability solution, seeks to obtain from GTE four distinct INP  
18 solutions, each of which is technically feasible. In addition, AT&T seeks the  
19 necessary operational interfaces and flexibility to implement these INP options, so  
20 that AT&T can best meet the needs of its various customer segments.

21

22 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

23 A. Yes.



1 BY MR. TYE:

2 Q Mr. Crafton, have you prepared a summary of your  
3 testimony?

4 A Yes, I have.

5 Q Okay. Could you give us that summary at this  
6 time, please, sir?

7 A I'd be delighted. Good afternoon.

8 My testimony addresses unbundled network  
9 elements, or UNEs, and ancillary functions. The Commission  
10 has a unique and historic opportunity to create an  
11 environment of greater consumer choice in Florida's local  
12 telephone industry, and this environment depends upon the  
13 creation of a menu of building blocks available to new  
14 entrants which provide them access to today's monopoly  
15 local exchange network. More menu choices available to new  
16 entrants translates in a direct and tangible way to more  
17 choices for Florida consumers.

18 The 12 unbundled network elements sought by AT&T  
19 constitutes such an array of options. These 12 UNEs are a  
20 technically feasible and reasonable set of elements based  
21 upon industry standards. They should be made available to  
22 new entrants with an absolute minimum of restrictions on  
23 their use and on the ability of new entrants to combine  
24 them to serve consumers.

25 AT&T is requesting all 12 UNEs, including the

1 subloop elements, because AT&T and GTE have yet to reach  
2 agreement on a bona fide request process for the subloop  
3 elements. You will recall from last week's proceeding that  
4 such an agreement has been reached by AT&T with BellSouth.

5           Now last week you also heard BellSouth  
6 characterized as the Frankenstein's monster of the Telecom  
7 Act, the ability of a new entrant to buy all or nearly all  
8 of the UNE piece parts and to resurrect them into a  
9 competitive monster. I think that you are going to hear  
10 that old horror story told again this week, but let's focus  
11 on four fresh realities instead.

12           First, to deny recombination of elements at  
13 cost-based prices is simply contrary to the plain language  
14 of the Telecom Act. Second, the use of combinations will  
15 directly benefit consumers, and I'll give you an example in  
16 a moment. Third, if the goal is to get new entrants into  
17 the market quickly, the Commission needs to provide the UNE  
18 platform to reach that goal, and I'll explain how and give  
19 you an example in a moment. And the fourth reality about  
20 the UNE platform is that it is the doorway to  
21 facility-based competition. Having entered a market using  
22 the UNE platform, a new entrant will then be free to  
23 substitute their network elements and those obtained from  
24 third parties for those initially obtained from the  
25 incumbent monopolist whenever this is economically

1 efficient.

2           Let me give you an example of point number 2  
3 about consumer benefit. By using UNE combinations instead  
4 of resale, new entrants will be able to differentiate their  
5 offers from the incumbent and provide customers with more  
6 bang for the buck. For example, a new entrant might decide  
7 to include in basic local service at no additional cost to  
8 consumers features such as call waiting, call forwarding or  
9 other vertical services. The UNE platform enables this  
10 when resale does not because the UNE platform cost of these  
11 features reflects their true underlying cost, which is de  
12 minimis. In other words, they are included already in the  
13 local switching element's TELRIC based price.

14           Example number 3 about faster entry. You heard  
15 Joe Gillan and Ron Shurter talk some about this this  
16 morning, and I just want to crystalize it for you. The UNE  
17 platform will get AT&T into some markets more quickly than  
18 resale will. Why? Because resale of services requires the  
19 development of more than 50 electronic operational  
20 interfaces to enter the 50 states, one for each supplier in  
21 each state in fact. This is because services and the way  
22 that they are ordered, provisioned, maintained, et cetera,  
23 differ from state to state and supplier to supplier.

24           In contrast, the network elements are more nearly  
25 the same in each supplier's network. Thus an electronic

1 interface for preordering, order and provisioning  
2 maintaining and billing of UNEs with one supplier in one  
3 state is highly likely to be reusable in Florida with GTE  
4 or BellSouth with little or at least less additional  
5 development as compared to the electronic interface for  
6 resale.

7           Finally, as to point number 4, UNE platform being  
8 the doorway to facility-based competition. It is AT&T's  
9 desire to use some of its own world class network assets in  
10 combination with those of the incumbent LECs wherever this  
11 is possible. I think one really good example of this that  
12 you've heard in these proceedings is our operator services  
13 platform, another is the signaling network.

14           The combination of AT&T's operator systems  
15 element with GTE's local switching element is only  
16 possible, however, if GTE provides customized routing  
17 within its local switching element. Based upon  
18 correspondence with GTE and with the manufacturers of  
19 switches used in GTE's network, we believe that customized  
20 routing is feasible in nearly all of GTE's switches in the  
21 State of Florida and should be so ordered by this  
22 Commission. For an example of that correspondence is a  
23 Mr. Paul Guanari in Lucent network management recently  
24 issued instructions for implementing the line class code  
25 customized routing solution in the 5ESS.

1 MR. GILLMAN: Chairman Clark, I object. This is  
2 not part of his testimony; it's part of ours.

3 MR. TYE: I believe it is part of his rebuttal  
4 testimony.

5 CHAIRMAN CLARK: Mr. Tye, there has been an  
6 objection. Can you point to the rebuttal testimony where  
7 it's covered?

8 MR. TYE: Could I have just a minute, Chairman?

9 (WHEREUPON, MR. TYE REVIEWED DOCUMENTS)

10 MR. TYE: Chairman Clark, on page 5 of the  
11 witness's testimony, he talks about the line class codes.  
12 There is a letter referenced there. I'm not sure it's the  
13 same letter, and if it's not, we'll move on and get on into  
14 the rest of his summary.

15 MR. GILLMAN: It's not the same person, so I  
16 don't think it's the same letter.

17 MR. TYE: I believe that what the witness was  
18 discussing is a more recent bit of correspondence that has  
19 to do with clarification of that particular letter. I will  
20 admit that it's not in this --

21 CHAIRMAN CLARK: Mr. Gillman, do you object to  
22 having him cover that?

23 MR. GILLMAN: Yes, I do.

24 CHAIRMAN CLARK: Okay.

25 MR. TYE: We'll move on.

1           CHAIRMAN CLARK:  If it's outside the scope of his  
2 testimony, then it shouldn't be summarized.

3           MR. TYE:  Yes, ma'am, I will represent to the  
4 Commission that it is a more recent correspondence that was  
5 received after the filing deadline, so I'm sorry it's not  
6 in there, but we'll move on.

7 BY MR. TYE:

8           Q     Could you proceed with your summary, Mr. Crafton?

9           A     I will.

10           I would now like to use the CD-ROM presentation  
11 as Mr. Tamplin did last week.  And in this presentation I  
12 will trace the path of a type of local call that  
13 illustrates the kind of innovative services AT&T hopes to  
14 one day make available to Florida consumers.  My intent  
15 here is to draw a connection between benefits to Florida  
16 consumers and two of AT&T's requests, one for unmediated  
17 access to the advanced intelligent network, or AIN  
18 triggers, in GTE's local switch network elements; and the  
19 second for unbundling of GTE's signaling network elements.

20           After the CD-ROM presentation, I will make some  
21 final remarks about AT&T's request for a set of interim  
22 local number portability solutions and other ancillary  
23 functions.

24           What you are about to see is an example of a  
25 local AIN call from customer 1 to customer 2.  It begins

1 with customer 1 lifting her telephone receiver. The  
2 off-hook signal is carried from her customer premise  
3 equipment to the local switch via the network interface  
4 device, loop distribution and loop feeder network  
5 elements.

6           The local switch element has been previously  
7 programmed by, in this example, by its owner, the incumbent  
8 local exchange carrier, to recognize any off hook from  
9 customer 1 as an immediate triggering of AIN. The local  
10 switch element immediately launches a query over the  
11 signaling network to the data base of customer 1's AIN  
12 provider asking for call processing instructions. The AIN  
13 provider need not be the incumbent local exchange carrier  
14 under AT&T's proposal for AIN access.

15           Let us assume for a moment that it is AT&T. The  
16 AT&T-AIN data base receives the query, looks up the  
17 relevant instructions in its memory, and formats and sends  
18 a signaling message back to the local switch containing the  
19 relevant instructions for this customer. In this case the  
20 switch is instructed to connect customer 1's line to a  
21 speech recognition platform. The use of existing  
22 safeguards in the signaling network and the prior thorough  
23 testing of this call flow by AT&T and GTE ensure that the  
24 integrity of both the network and customer service are  
25 maintained. The switch receives and processes the response

1 from the AT&T-AIN data base. Note that the preprogramming  
2 placed in the switch by the incumbent local exchange  
3 carrier has the final say in how to treat the instructions  
4 it has just received.

5           The local switch network element routes the call  
6 to the speech processing platform designated in the  
7 received instructions. The speech recognition platform may  
8 be provided by AT&T, GTE, or a third party. In any event,  
9 this is another example requiring customized routing, and  
10 in this case customized routing has been accomplished by  
11 the AIN solution. This is one of the long-term solutions  
12 to the customized routing problem. It is free of the  
13 capacity limitations that may sometimes exist for the  
14 interim line class code solution. This long-term solution  
15 for customized routing has been agreed by Bell Atlantic for  
16 example. Returning now to our AIN call flow --

17           ELECTRONICALLY TRANSMITTED: Say the name of the  
18 person you are calling.

19           A     The speech recognition platform prompts the  
20 customer.

21           ELECTRONICALLY TRANSMITTED: Call mom.

22           A     The customer speaks her dialing instructions, and  
23 the speech recognition platform dials mom's telephone  
24 number into the switch, and the local switch element sets  
25 up the call which then completes over a combination of



1 common transport, local switching, loop network interface  
2 device, unbundled network elements to customer 2.

3           If AT&T's request for unmediated access to AIN  
4 triggers is granted, customer 1 will hear the speech  
5 recognition systems prompting her to speak the called  
6 party's name as soon as she gets the handset to her ear.  
7 On the other hand, if AT&T's request is not granted,  
8 customer 1 will experience a perceptible delay before the  
9 prompt is delivered. Also, there will be additional cost  
10 elements introduced by the extra data base processing  
11 inherent in mediation as well as the increased probability  
12 of call failure introduced by the unnecessary processing.

13           The extra processing inherent in mediation is  
14 depicted on the chart entitled "AIN Access with Mediation"  
15 as the green SCP data base. If mediation is applied only  
16 to the new entrants AIN queries and responses and not to  
17 those of the incumbent, the result is poorer, costlier  
18 service when a new entrant attempts to provide innovative  
19 services combining its own AIN data base with network  
20 elements purchased from the incumbent.

21           And let me just take a moment and explain this  
22 chart because it's a little complicated. In our call-mom  
23 example, let's assume that customer 1 is over here  
24 (indicates). These wine-colored network elements are those  
25 of the incumbent LEC, and so we could for a moment assume

1 that customer 1 is served by the UNE platform, has become  
2 an AT&T customer, is still served by assets in the  
3 incumbent LEC's network.

4           The switching system is this SSP (indicates) in  
5 which the AIN triggers reside. The signal transfer point  
6 is responsible for sending signaling messages from switches  
7 to data bases, and that is what the SCP is. The service  
8 management system manages customer records in this data  
9 base. The service creation environment is, think of it as  
10 a work station at which a designer designs a new service at  
11 a terminal and then downloads it into the SMS who  
12 subsequently places it in the data base for use.

13           Now in our example, and I'm going to label -- let  
14 me just put a yellow sticker here, so there is our customer  
15 1 (indicates), and she is the one making the AIN call. Mom  
16 is over here (indicates). This blue network, different  
17 color because for a moment we'll assume this is the AT&T  
18 local network, so the call is eventually going to go from  
19 switch to switch; but before it can do so, since both of  
20 these customers happen to be AT&T, this one on the UNE  
21 platform, this one on a facility-based platform of AT&T's  
22 own construction, the query and response to the data base  
23 that you saw has to get from here (indicates) over to a  
24 data base belonging to AT&T since we are the AIN provider.  
25 And the point is that mediation, which is introduced by

1 this green widget (indicates) here involves the STP  
2 checking whether it's okay to send out the query, and then  
3 when the response comes back, it once again checks the  
4 content of the response to say, is this okay to send to the  
5 switch? And that's not necessary given the mediation and  
6 protection and testing that we do in the network today.

7           Since AIN calls use the signaling network, I  
8 would like to remark briefly now on the unbundling of these  
9 network elements. Signaling network standards and  
10 interconnection make it technically feasible for a new  
11 entrant to obtain signaling links, signal transfer points  
12 and service control point data bases from a variety of  
13 sources and to combine them with the incumbent local  
14 exchange carrier's signaling network elements in a number  
15 of arrangements. And a good example of this was the recent  
16 New York local number portability trial in which an  
17 alternative local carrier's local switch communicated with  
18 an interexchange carrier's data base through a third-party  
19 signaling network.

20           Since some new entrants like AT&T have a mature  
21 signaling network while another new entrants have none at  
22 all, signaling elements should be unbundled so that new  
23 entrants can purchase just what they need to serve  
24 consumers. This allows different entrants to enter both  
25 quickly and in an economically efficient manner. And the

1 ultimate winners when this happens are the consumers of  
2 Florida.

3 I would like to now summarize AT&T's request for  
4 ancillary functions. AT&T has requested four ancillary  
5 functions: Interim local number portability, collocation,  
6 access to right-of-way conduits and pole attachments, and  
7 the fourth, access to dark fiber. We ask that these be  
8 provided with a minimum of restrictions on their  
9 availability and capability in order to bring choice  
10 quickly to consumers.

11 For instance, AT&T has requested a set of interim  
12 local number portability options, and these are listed on  
13 this checklist chart that is being placed. They include  
14 remote call forwarding, RCF; directory number route  
15 indexing, or DN-RI; route indexing portability hub, or  
16 RI-PH; and local exchange routing guide reassignment, which  
17 is abbreviated as LERG. Direct inward dialing, DID is  
18 listed on the chart, although we have not asked for that;  
19 it is listed here for the sake of comparison. So we have  
20 asked for the right-hand four set of elements, not  
21 elements, but portability options, and we have made this  
22 request for two reasons.

23 The first is that most consumers desire to keep  
24 their existing telephone number when choosing a new local  
25 exchange provider, and the second reason is that these same

1 consumers' needs and expectations differ as to the number  
2 of numbers they need to have ported. Some people have only  
3 one number, some have thousands. And it also varies as a  
4 function of which call-related features each consumer needs  
5 to have preserved when changing carriers. And as indicated  
6 on this chart, headlined, "Route Indexing Portability Hub  
7 and LERG Reassignment," have the fewest performance  
8 deficits. These two options in fact do have the cleanest  
9 bill of health when it comes to customer effecting  
10 performance deficits. In recognition of consumers needs  
11 and expectations and the various limitations of all of  
12 these portability options, GTE is -- or AT&T is asking GTE  
13 to provide for all four of them. As the Commission  
14 provides for access without artificial and unneeded  
15 limitations, the unbundled network elements, the AIN,  
16 interim local number portability and the monopoly control  
17 central office space, rights of way, poles, conduits and  
18 dark fiber, it will literally light the path to an era of  
19 facility-based competition and hasten the dawn of greater  
20 consumer choice.

21 In conclusion, we are asking the Florida  
22 Commission to take action in three areas to speed entry  
23 into markets now served only by GTE. First, we ask you to  
24 direct GTE to provide the 12 unbundled network elements as  
25 well as any technically feasible combination of these

1 elements. Second, we ask the Commission to direct GTE to  
2 provide the set of interim local number portability options  
3 requested by AT&T. And third, we ask that you direct GTE  
4 to provide access to AIN, central office space, rights of  
5 way, poles, conduits and dark fiber without artificial and  
6 unneeded limitations. Thank you.

7 Q Thank you, Mr. Crafton. Does that conclude your  
8 summary?

9 A It does.

10 MR. TYE: Madam Chairman, the books that we  
11 passed out earlier have these charts in them. I understand  
12 there may be a few books that don't have all the charts.  
13 If anybody wants additional copies, we have some right  
14 here. And the witness is available for cross examination.

15 CHAIRMAN CLARK: Ms. McMillin.

16 MS. McMILLIN: No questions.

17 CHAIRMAN CLARK: Mr. Gillman.

18 MR. GILLMAN: I'm up finally.

19 CROSS EXAMINATION

20 BY MR. GILLMAN:

21 Q Good afternoon, Mr. Crafton.

22 A Good afternoon.

23 Q The chart -- well, on page 2 where you talk about  
24 some of your qualifications, am I correct in assuming that  
25 you are not an engineer?

1           A     I don't have a professional engineer's degree.

2           Q     Okay. In your present position regarding, take a  
3 look at Page 3, does not require the exercise of  
4 engineering expertise, does it?

5           A     I assume you are referring to my current role as  
6 business manager.

7           Q     That's correct.

8           A     It does not. However, I'm here today because of  
9 my 20 something years of experience with the network.

10          Q     Okay. So your present job on, specifically on  
11 line 10 and 11, one of your responsibilities is for the  
12 profit and loss of the local product portfolio of AT&T?

13          A     That's part of it.

14          Q     So you are here today based on your 20 years'  
15 experience, but your job responsibilities are more for the  
16 profit and loss aspect as opposed to the technical aspect  
17 of these sort of issues?

18          A     That's correct.

19          Q     What specifically over the 20 years' dealings  
20 have you had with AIN?

21          A     Oh, I've been a part of a number of teams in the  
22 last five or six years looking at the design and systems  
23 engineering of AIN.

24          Q     You didn't mention those in your qualifications?

25          A     I don't remember mentioning them. I have done a

1 lot in 20 years, so I have trouble remembering it all.

2 Q And what specifically did you, was your role on  
3 these teams?

4 A Generally, as a systems' engineer or as a network  
5 architect in which we looked at things like the performance  
6 and how AIN ought to be set up.

7 Q Were you assigned to the project of the test that  
8 you refer with with Bell -- refer to regarding BellSouth on  
9 AIN?

10 A No, I wasn't a part of that team.

11 Q Okay. Were you a part of any other team similar  
12 to that?

13 A Oh, yes, I have been.

14 Q The network that you depict, I guess behind you  
15 might be the best way to look at it, how typical of that  
16 is -- Or let me ask you this, did you look at any specific  
17 GTE networks within Florida in preparing that chart?

18 A No, we did not.

19 Q Have you done any investigation regarding GTE's  
20 specific network in Florida?

21 A Yes, I have.

22 Q Okay. And what was the nature of that  
23 investigation?

24 A Oh, understanding issues such as the types of  
25 switches, local switches deployed in the network, what



1 software capabilities they might have.

2 Q What type --

3 A Looking at things like the kinds of loops that  
4 are deployed in the network, specifically integrated  
5 digital loop carrier since there are often issues around  
6 it.

7 Q Okay. You're aware that GTE has instances where  
8 there is integrated digital loop carriers involved?

9 A Yes, I understand that.

10 Q Okay. And that's not depicted on your chart, is  
11 it?

12 A Well, yes, it is depicted on the chart. We show  
13 the loop concentrator and multiplexer element.

14 Q That is in element 3 there?

15 A That's right, and on either side of it the loop  
16 feeder and the loop distribution elements. So those are  
17 the kinds of elements -- what we have abstracted here is a  
18 generic example. An IDLC is a specific example of those  
19 three elements.

20 Q Okay. Are you familiar with the type of central  
21 offices that are in the Florida area?

22 A I've gained some acquaintance with that in the  
23 last few weeks, yes.

24 Q Based upon information given to you by GTE in  
25 this proceeding?

1           A     I think the first acquaintance I had with it came  
2 from, I believe it was the local exchange routing guide.  
3 It was not a GTE source. I have since received more  
4 information from your company.

5           Q     And what type of COs does the company have to  
6 your knowledge?

7           A     What I noticed in your serving area are there are  
8 something like 59 GTD 5-EAXs, a handful of 5-ESS systems  
9 manufactured by Lucent, oh, a couple of Northern Telecom  
10 DMS-100s and an assortment of miscellaneous.

11          Q     Miscellaneous offices?

12          A     Miscellaneous office types.

13          Q     Does your exhibit behind you depict a main cable  
14 fed design?

15          A     A main cable fed design? It does in the sense  
16 that the loop concentrator/multiplexer, as we've said,  
17 doesn't always appear on a loop connection. Some of them  
18 are of the design that you, I believe, are referring to.

19          Q     Am I correct in assuming in that particular  
20 design they're essentially, the entire loop would be a loop  
21 feeder?

22          A     No, that would be an inaccurate characterization.

23          Q     Are you saying that there is loop distribution in  
24 a main cable fed design?

25          A     Yes, there is. In the sense that there is an

1 interface cross connect where one changes to the other.

2 Q In every instance?

3 A I'm sure that these loops have been engineered in  
4 some instances where that might not be true because there  
5 are such a variety, but I would say in general.

6 Q So in the instances where there may not be any  
7 distribution loop, how would you propose to provide subloop  
8 unbundling in that situation?

9 A Well, we have asked GTE that question.

10 Q Okay.

11 A We believe it's incumbent on them under the Act  
12 to provide unbundling of loops in order to comply with the  
13 law.

14 Q Well, if you ask us to unbundle the loop at the  
15 loop distribution and GTE answers that there is no loop  
16 distribution, I mean what should GTE unbundle in that  
17 situation?

18 A Well, in many cases there are alternate  
19 facilities in place. What you normally find in a local  
20 exchange carrier's loop plant is that you have varieties of  
21 equipment coinciding with one another on the same sequence  
22 of poles and conduits. So for instance, when you run into  
23 a problem like that, with one type of loop plant, you can  
24 often roll the customer over onto a different neighboring  
25 piece of facility and accomplish it.

1           Q     When those problems come up, you are not really  
2 going to know they are a problem until you go out there and  
3 check it; isn't that correct?

4           A     I think it depends on how good GTE's records are  
5 on their loop plant.

6           Q     Would you expect GTE to provide you unbundled  
7 services based only on its records and not do a physical  
8 examination of the loop?

9           A     I wouldn't presume to tell GTE how to do its  
10 business on that point.

11          Q     Okay. It would not be unreasonable for GTE to be  
12 able to go out and take a look at each one of your  
13 requests, would it?

14          A     Again, I think it depends on the accuracy and  
15 completeness of the plant records, and I have no idea about  
16 those things.

17          Q     Okay. And GTE does. So from the standpoint that  
18 GTE feels it reasonable -- I mean you wouldn't disagree  
19 with that, that it may be reasonable in certain instances  
20 to investigate your particular request for unbundling?

21          A     I guess if you're asking me is it okay for you to  
22 go and look at your plant, you certainly have my  
23 permission, if that's what it takes.

24          Q     And we would be able to look at the plant before  
25 we make a commitment to unbundle it or not?

1           A     I would hope that your loop plant records are in  
2 good enough shape that you could tell us when we ask you,  
3 but obviously if you can't, you don't know what you don't  
4 know.

5           Q     All right. Now it would not be unreasonable in  
6 addressing an unbundled loop request from AT&T for GTE to  
7 do some investigation to determine the existence or  
8 nonexistence of these varieties of network situations that  
9 you described?

10           MR. TYE: Madam Chairman, I think that is the  
11 third time that question has been asked. It has been  
12 answered both times by the witness, that hopefully the  
13 cable records will show GTE what facilities they've got  
14 there.

15           MR. GILLMAN: The reason I'm asking again is that  
16 it wasn't answered. He said it would not be unreasonable  
17 for us to look at our plant, and now he went back to say,  
18 no, we shouldn't look at our plant, we should only look at  
19 our records.

20           MR. TYE: I believe what he said was he would  
21 presume that the cable records would be in good enough  
22 shape for GTE to assume what facilities it has got out  
23 there.

24           CHAIRMAN CLARK: Okay. Mr. Gillman, ask your  
25 question again for the last time. And if you would answer

1 the question.

2 WITNESS CRAFTON: Yes, ma'am.

3 BY MR. GILLMAN:

4 Q In considering a request for an unbundled,  
5 subloop unbundled by AT&T, it would not be unreasonable for  
6 GTE to investigate to determine whether -- what type of  
7 plant or network situation was involved, would it?

8 A Since you are using the word, it would not be  
9 unreasonable, I would say in response it would not be  
10 unreasonable if your loop plant records are that poor. My  
11 hope is that they would be good enough that that would be  
12 unnecessary.

13 Q Let's look at page 3 of your testimony, of your  
14 rebuttal testimony.

15 A Of the rebuttal testimony?

16 Q Specifically where you address the integrated  
17 digital loop concentrator. Before we go on, do you know  
18 what percentage of GTE lines in Florida utilize an  
19 integrated digital loop concentrator?

20 A No, I don't know right offhand. I understand  
21 that, and I believe the statistic is about 26 percent have  
22 digital loop carrier on them. And frankly, I don't  
23 remember whether that was integrated digital loop carrier  
24 or that was all digital loop carrier. At any rate, it  
25 certainly places an upper bound on the number.

1 Q Do you agree with GTE that in order to unbundle a  
2 loop with integrated digital loop concentrator that some  
3 channel banks would have to be installed?

4 A I agree that deploying channel banks is one way  
5 to unbundle an integrated digital loop carrier system.  
6 There are perhaps as many as half a dozen other ways to do  
7 it.

8 Q Okay. And is it up to GTE which way to do it?

9 A Yes, it would be. I don't think that -- Once  
10 again, we would place a request for unbundling, and how  
11 it's accomplished is up to you as long as the circuit  
12 performs.

13 Q What if it entails additional costs, AT&T would  
14 be expected to pay those, would they not?

15 A Well, it isn't clear to me with the number of  
16 entrants in the local market all requesting unbundled  
17 elements, and the requirement under the Act that GTE has to  
18 provide those elements, it's not clear to me how much of  
19 that cost you assign to AT&T versus all the other carriers  
20 that are going to be requesting these sorts of things.

21 Q And what if AT&T is the only party requesting  
22 that particular loop?

23 A I think the way that would be calculated,  
24 Mr. Gillman, is it would be folded into the TELRIC based  
25 cost for the unbundled loop element; and beyond that, I'm

1 not very good at cost matters.

2 Q So let's assume that in respect to the integrated  
3 digital loop concentrator situation that GTE chooses to  
4 install two channel banks, GTE would have to -- the cost of  
5 those channel banks would have to be incurred within the  
6 unbundled loop rate; is that what you're saying?

7 A That's what I'm saying, and I'm making a  
8 presumption here along with you that the use of those  
9 channel banks is in fact the most efficient way to do  
10 this. That may not be the case, and I just want to caveat  
11 that.

12 Q Doesn't the Act as well as the FCC order require  
13 entrants who cause additional costs in upgrading or  
14 conditioning the loop, that that entrant should pay for it?

15 A I don't remember what it says in the Act about  
16 that.

17 Q Okay. Nor do you remember what is in the FCC  
18 order about that?

19 A No, I don't right offhand.

20 Q Okay. But it's your opinion that all those costs  
21 need to be rolled up into the unbundled loop rate?

22 A That's correct.

23 Q Have you reviewed Mr. Wood's testimony and the  
24 Hatfield model?

25 A I have a nodding acquaintance with it. I can't



1 tell you that I can give you chapter and verse on that.

2 Q Would you agree with me that the installation of  
3 two additional channel banks or 26 percent of GTE's lines  
4 is not included within that study?

5 A Q I don't know whether it is or isn't; you  
6 might want to ask Mr. Wood.

7 Q But if Mr. Wood asked you, then you would, of  
8 course, say that they ought to be included, would you not?

9 A It seems to me like that ought to be part of it.

10 Q Do you expect GTE to install these digital, these  
11 concentrators on a loop before AT&T asks for it?

12 A No, I don't think that that would be necessary,  
13 unless that is something you need to do to comply with the  
14 Act because you are getting requests from others.

15 Q Okay. So take an example of where AT&T would ask  
16 for subloop unbundling and it had an integrated digital  
17 loop concentrator, GTE would have to look at its records or  
18 do whatever investigation it feels -- or you feel necessary  
19 to identify what it would take to provide that unbundled  
20 loop, would it not?

21 A Yes, I think that is what we were talking about a  
22 few minutes ago, isn't it?

23 Q In essence, each one of AT&T's requests would be  
24 handled by GTE on a case by case basis?

25 A Well, certainly we are going to send you requests

1 that are individual requests for customers for whom we use  
2 the unbundled loop.

3 Q And we would have to look on those requests on a  
4 case by case basis, wouldn't we?

5 A I think that would be a normal thing to do.

6 Q Thank you.

7 Now on page 7 of your testimony where you list  
8 the 12 elements -- I'm sorry, are you there?

9 A I'm with you.

10 Q GTE has agreed to unbundle the network interface  
11 device, has it not?

12 A Yes, I believe that's the case.

13 (Transcript follows in sequence in Volume 4)

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