

1                   BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

2

3                   In the Matter of                    )

4                   Determination of the cost of            ) DOCKET NO. 980696-TP

5                   basic local telecommunications        )

6                   services, pursuant to                    )

                  Section 364.025, Florida            )

                  Statutes.                            )

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10   VOLUME 16

11   Pages 1821 through 1935

12                   PROCEEDINGS:                   HEARING

13                   BEFORE:                           CHAIRMAN JULIA L. JOHNSON

14   COMMISSIONER J. TERRY DEASON

15   COMMISSIONER SUSAN F. CLARK

16   COMMISSIONER E. LEON JACOBS, JR.

17   COMMISSIONER JOE GARCIA

18                   DATE:                               Wednesday, October 14, 1998

19                   TIME:                               Commenced at 9:00 a.m.

20                   PLACE:                             Betty Easley Conference Center

   Room 148

   4075 Esplanade Way

   Tallahassee, Florida

21                   REPORTED BY:                   NANCY S. METZKE, RPR, CCR

22

23                   APPEARANCES:

24                   BUREAU OF REPORTING (As heretofore noted.)

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1 Q Okay. So if you will accept that then, then that  
2 means in the least dense area staff came up with an input  
3 for aerial drop placement that was approximately four times  
4 plus a fraction what was recommended by Hatfield, correct?

5 A (Witness Wood) In that specific density zone,  
6 that's right.

7 Q Okay. Now as to the buried drop sharing  
8 fraction, and just to clarify, this is a fraction that had  
9 Hatfield Model assigns -- or applies, rather, to the drop  
10 line on the theory that some other carrier will bear some  
11 percentage of the cost of the drop line, correct?

12 A (Witness Wood) For the placement, yes.

13 Q For placement?

14 A (Witness Wood) That's right.

15 Q Now Hatfield proposed a 50% sharing. Staff  
16 rejected this and assumed that there would be no sharing,  
17 correct?

18 A (Witness Wood) They did.

19 Q Okay. Now as to whole cost of materials, the  
20 staff rejected the Hatfield proposed inputs and used  
21 BellSouth specific costs, correct?

22 A (Witness Wood) That's the way they characterized  
23 them, that's right.

24 Q Okay. And I'm sorry, I missed the first part of  
25 your answer.

1           A     (Witness Wood) That's the way they are  
2 characterized here in the order, or in the staff  
3 recommendation.

4           Q     Thank you.

5                     Now large and small digital line carrier channel  
6 unit carts, the staff determined that they needed to add  
7 extra expense so that there would be electronics to support  
8 the extended loops in the Hatfield Model; that is, the  
9 loops beyond 13,200 feet; isn't that correct?

10          A     (Witness Wood) Yes, I think this is a point --  
11 Yes.

12          Q     Okay. Now for sharing of the expense to support  
13 buried cable, and again, this is an assumption that --  
14 Well, let's define it first. This is an assumption that  
15 the Hatfield Model makes that buried cable costs would be  
16 supported by some other carrier to some extent, correct?

17          A     (Witness Wood) Yes, which is consistent with  
18 sound engineering and my personal experience.

19          Q     Okay. And Hatfield proposed a 33% sharing factor  
20 for buried cable, correct, distribution?

21          A     (Witness Wood) I'd have to look that up.  
22 It's --

23          Q     Okay.

24          A     (Witness Wood) What they list here are the  
25 adjusted numbers, not the original numbers.

1 Q Well, do you know if 33% is what Hatfield  
2 typically used?

3 A (Witness Wood) I can tell you very quickly.

4 Q Okay. And, again, I guess we are getting into  
5 the engineering a little bit, so if you want to defer these  
6 questions to Mr. Wells, that's fine too.

7 A (Witness Wood) No, as far as what the order says  
8 or doesn't say, I don't think we need Mr. Wells.

9 Q Okay. Well, let me just ask you, just so we are  
10 clear: A 33% factor would mean that the carrier, the one  
11 building the network that is being costed out here, would  
12 bear 33% of the total cost of those particular support  
13 structures and some other carrier or some other entity  
14 would bear 67% of the cost, correct?

15 A (Witness Wood) That's right, in the case of  
16 poles. Since Bellsouth actually owns less 20% of the poles  
17 that it actually attaches to, I think that is a fairly good  
18 number.

19 Q Okay. Well, we are not talking about poles right  
20 now. We are talking about buried cable, which obviously  
21 buried cable would not be on poles, would it?

22 A (Witness Wood) No, it would not.

23 Q Okay.

24 A (Witness Wood) And if you pay 33% of a buried  
25 cable cost, you are also over paying because, when I've

1 watched you share the buried cable process directly, the  
2 bulk of the cost was actually caused by the power company  
3 and the separation requirements for the power company. So  
4 there were three facilities going into that particular hole  
5 in the ground, and the bulk of the cost was caused by  
6 power. If you paid a third of the cost, you over paid  
7 because you didn't cause a third of that cost.

8 Q So basically, you've just explained to us the  
9 Hatfield theory for putting it at 33%, correct?

10 A (Witness Wood) Actually, I described to you my  
11 direct experience of watching your contractors, the cable  
12 contractor and the electric contractor put cable in front  
13 of my house.

14 Q So it's anecdotal evidence, it's one particular  
15 instance in which you saw sharing?

16 A (Witness Wood) That's my personal experience.  
17 The Hatfield basis is based on the engineers who, in fact,  
18 have seen and validated this process.

19 Q And one of those would be Mr. Wells?

20 A (Witness Wood) Certainly the team did. I don't  
21 know the degree of Mr. Wells's personal participation in  
22 that particular assumption.

23 Q Well, if I wanted to go beyond anecdotal  
24 information and see what type of effort had been made to  
25 check this -- well, first of all, to develop it and then to



1 check it, would Mr. Wells be the member of the Hatfield  
2 team that I should talk to?

3 A (Witness Wood) Yes, he would.

4 Q Okay. Thank you.

5 To get back to my question: Hatfield recommended  
6 a 33% sharing factor; that is, someone else would pay for  
7 the two thirds. The Louisiana staff rejected that and set  
8 that sharing factor at 75%, correct?

9 A (Witness Wood) I'm apparently on a different  
10 page than you are. I'm looking at 65 and 25.

11 Q Yes, and if you look after the 25%, they go on to  
12 clarify it. Basically they stated it in the reverse of the  
13 way Hatfield does. When they say 25%, they mean that 25%  
14 of the cost would be defrayed by sharing as opposed to 75%  
15 being borne by the company. Do you see that? Would you  
16 like a more specific reference?

17 A (Witness Wood) I'm sorry, I'm just reading this  
18 passage. I will catch up with you very quickly,  
19 Mr. Carver.

20 Q If it helps, it's at paren 10 in the input  
21 section.

22 A (Witness Wood) Right. That's what I'm reading.  
23 That's their sharing percentage rather than your  
24 percentage, that's right.

25 Q Okay. So if we do that conversion, basically to

1 make theirs comparable to Hatfield, basically what they  
2 recommended was 75% sharing, in other words, some other  
3 company would be assumed to bear 25% of the cost, correct?

4 A (Witness Wood) Or group of companies, that's  
5 right.

6 Q Thank you.

7 A (Witness Wood) We are not assuming one other  
8 company on any of these cases.

9 Q I understand. Now the staff also rejected the  
10 Hatfield switching expense factor, correct? And while  
11 you're looking, if I could refresh your recollection, the  
12 Hatfield factor was 2.69%. Staff --

13 A (Witness Wood) Went to 4.1709%, yes.

14 Q Okay. Now in doing that, the staffs specifically  
15 base their decision on the fact that the HAI model  
16 documentation reveals very little about what is included in  
17 the switch price; isn't that true?

18 A (Witness Wood) No, I think they say that -- oh,  
19 I see that particular line. They didn't find the cost of  
20 generic upgrades or whether they were or not included,  
21 which is unfortunate, because the documentation indicated  
22 that they were. But, yes, they took a forward-looking  
23 adjustment to BellSouth values. They did not take  
24 BellSouth values per se.

25 Q Okay. Well, we were talking about the adjustment

1 they made and why they made it. So just to be clear, let  
2 me read the passage that on my copy appears on Page 44 of  
3 51 and tell me if this agrees with what you have in the  
4 copy before you. Beginning on the second line: Staff  
5 reviewed the source of the switching cost used in the  
6 Hatfield Model and did not find that the cost of generic  
7 upgrades were included. The documentation tells one little  
8 about the specifics of what is included in the switch  
9 prices."

10 Does't that language appear in the order on that  
11 page?

12 A (Witness Wood) Yes, and then it goes on for  
13 quite a bit. What occurs before that is that they  
14 adjust -- they made forward-looking adjustments to the  
15 BellSouth numbers but did not use the BellSouth numbers.

16 Q But the bottom line is that Hatfield recommended  
17 2.69 and staff utilized 4.17, correct?

18 A (Witness Wood) That's correct.

19 Q Now also on switching, there were several  
20 specific switching inputs of Hatfield that the staff  
21 rejected, and instead they used values that were  
22 specifically proposed by the Georgetown Group, correct?

23 A (Witness Wood) Yes in part and no in part.

24 Q Well, let's --

25 A (Witness Wood) Yes, they changed the values,

1 some of which were based on the Georgetown recommendations.

2 Q Well, let's be specific. The same page, switch  
3 port administrative fill, constant end office switching  
4 investment, and switching installation multiplier, all of  
5 those were based specifically on the Georgetown --

6 A (Witness Wood) Right. Those are the subset that  
7 are footnoted to the Georgetown report, that's right.

8 Q Thank you.

9 Now let's move to Kentucky. In Kentucky,  
10 similarly the commission there adopted Hatfield as a  
11 platform but rejected most of the major cost-driving  
12 inputs, correct?

13 A (Witness Wood) They changed a very small  
14 percentage of the total inputs, and they are not  
15 necessarily the primary cost drivers; but they did  
16 certainly change some inputs.

17 Q Now when you say those aren't primary cost  
18 drivers, have you done any sort of a sensitivity analysis  
19 to make that determination?

20 A (Witness Wood) Yes, I've gone through quite a  
21 number of sensitivity analyses on a number of different  
22 inputs. Some of these are significant; some of these are  
23 much less so.

24 Q Okay. So then you would concede that at least  
25 some of them are significant cost drivers in your view?

1           A     Some of them are. I would also make it clear  
2 that it's still an outstanding issue in Kentucky exactly  
3 how some of the changed values are to be applied and  
4 whether they've been calculated correctly, so I don't think  
5 we've gotten the final word in Kentucky on, especially  
6 structure percentages, exactly what the value is going to  
7 be.

8           Q     Well, you cited the Kentucky order in your  
9 testimony, so I guess I assumed that you were representing  
10 that as being --

11          A     (Witness Wood) Oh, they have made a final  
12 decision to use the Hatfield Model, and they made a final  
13 decision to reject the BCPM, there is no doubt about that.  
14 In terms of the specific inputs to be used, there are a  
15 number of those that are on reconsideration in terms of how  
16 they are to be developed and applied, and I know comments  
17 have been filed by all the parties on some of these.

18          Q     How many are on reconsideration?

19          A     (Witness Wood) It is structure percentages, and  
20 costs -- I don't know how many specific inputs that turns  
21 into. It's a single category.

22          Q     Okay.

23          A     (Witness Wood) The problem is that it's nine  
24 inputs into the Hatfield Model but the value they selected  
25 is only the statewide average value, and now there is a

1 question of how you disaggregate that into the nine density  
2 zones. So we don't know yet exactly what the adjustment,  
3 if any, is going to be.

4 Q But they have made conclusions as to numbers on a  
5 statewide basis though, correct?

6 A (Witness Wood) Yes, the question is now whether  
7 that's really different than the Hatfield number, and we  
8 don't know that because we are comparing density zone  
9 numbers to a statewide number; and the issue right now in  
10 the reconsideration is to find out if these numbers are  
11 actually different. That is going to depend on how the  
12 statewide average was done. What the commission noted was  
13 it came from Georgetown and they didn't really provide any  
14 information on how they made this composite, so we've got  
15 to resolve that issue.

16 Q Well, let's take an example then. Kentucky  
17 commission rejected the Hatfield buried drop sharing  
18 fraction, correct?

19 A I'm sorry, what page are you on? I was looking  
20 at --

21 Q Page 19. If it will be helpful, let me tell you  
22 that Hatfield proposed .50 as a sharing fraction, the  
23 commission chose .85. Does that help?

24 A (Witness Wood) On page 19?

25 Q I'm sorry, page 20, my fault. The second

1 paragraph on page 20. I was looking at the wrong  
2 reference.

3 A (Witness Wood) Yes, they changed the 50% to 85%.

4 Q And the Hatfield Model proposed 50% for all  
5 density zones, correct?

6 A (Witness Wood) That's what the order says. I'm  
7 not really sure if that's the way we did the inputs.

8 Q Okay. Well, at least --

9 A (Witness Wood) It certainly says that they  
10 changed it, and they certainly concluded that Georgetown's  
11 recommendation was unreasonable regarding this input.

12 Q So what they did was instead they substituted a  
13 value of 85% rather than 50%?

14 A (Witness Wood) They used their own number,  
15 that's right.

16 Q Right. And they used that number -- Before you  
17 were telling us that the numbers had to be deaveraged. In  
18 this particular instance, what they recite on page 20 is  
19 the Hatfield proposed .5 for every density zone, and they  
20 rejected that and supplied instead .85 for every density  
21 zone, correct?

22 A (Witness Wood) That's right, and this was not  
23 the input I was referring to.

24 Q Okay. Now to go back to one just a little bit  
25 earlier in their order, the commission rejected Hatfield's

1 input for distribution fill, correct? Let me help you out  
2 a little.

3 A (Witness Wood) Yes, it's on the bottom of Page  
4 19.

5 Q Yes, the point where it says, "The commission has  
6 used the input of 65% for distribution fill for all density  
7 zones."

8 A (Witness Wood) Yes.

9 Q "The commission believes that default values in  
10 the Hatfield Model overstate the amount of fill that would  
11 be observed in the current and future of  
12 telecommunications." Do you see that language?

13 A (Witness Wood) Yes.

14 Q Okay. Thank you.

15 Now the Kentucky commission also rejected  
16 Hatfield input for the NID and instead used amounts that  
17 were proposed by Georgetown, correct? Page 20, bottom.

18 A (Witness Wood) Yes.

19 Q Okay. And the commission rejected the input  
20 suggested by Hatfield for digital loop carrier and, again,  
21 they used the Georgetown percentage, correct?

22 A (Witness Wood) Yes in part and no in part,  
23 because of the two different systems.

24 Q Well, I think it says the commission's output  
25 does not incorporate the Life span system.



1 A (Witness Wood) That's right.

2 Q But with that caveat the order also makes plain  
3 that they adopted the recommendation by Georgetown,  
4 correct?

5 A (Witness Wood) In terms of the investment  
6 specific for the DLC systems, that's right.

7 Q And the commission also rejected the Hatfield  
8 value and substituted the Georgetown value for distribution  
9 cable investment, correct?

10 A (Witness Wood) On a per foot basis for the  
11 acquisition of the material.

12 Q Okay.

13 A (Witness Wood) And -- Yes.

14 Q In terms of the serving area interface outdoor  
15 investment, the Kentucky commission rejected Hatfield and  
16 used the Georgetown input again, correct?

17 A (Witness Wood) That's right.

18 Q And in doing so, the commission specifically  
19 noted that the Hatfield default values were not  
20 representative of conditions in Kentucky and that the  
21 origin of this particular input is questionable, correct?

22 A (Witness Wood) The genesis of the default  
23 values, yes.

24 Q Okay. And the commission rejected Hatfield and  
25 used the Georgetown input for copper feeder fill and for

1 fiber feeder fill, correct?

2 A (Witness Wood) Yes.

3 Q And for fiber feeder and copper feeder investment  
4 per foot, again, Kentucky used the Georgetown value rather  
5 than the Hatfield, correct?

6 A (Witness Wood) That's right.

7 Q And in reaching that conclusion, they  
8 specifically said that the default values of the Hatfield  
9 Model lacked necessary supporting documentation, correct?

10 A (Witness Wood) Yes, and let me be very clear.  
11 I'm agreeing all these are changed. I'm not discussing at  
12 all whether they changed much; but, yes, they changed.

13 Q Okay. And finally, in terms of the sharing  
14 factors, the sharing factors specifically for buried  
15 distribution, again, Hatfield proposed a 33% factor and  
16 Kentucky rejected that and set the factor at 85% correct?

17 A (Witness Wood) Yes, for buried and underground  
18 is 85, for aerial is 48.

19 Q Okay. And again, 85 would mean that 85% of the  
20 cost would be borne by the carrier and 15% would be borne  
21 by some other company or companies?

22 A (Witness Wood) Yes.

23 Q Thank you.

24 MR. CARVER: That's all that I have.

25 CHAIRMAN JOHNSON: Mr. Fons.

1 MR. CARVER: Oh, one other thing. Madam  
2 Chairman, I would like to request that judicial notice or  
3 official recognition be taken of the Kentucky and Louisiana  
4 orders and the staff recommendation in Louisiana, in as  
5 much as both the direct testimony and the cross examination  
6 referred to it quite a bit.

7 MR. LAMOUREUX: I think the Louisiana rec. is  
8 already part of one of staff exhibits?

9 MS. CARTER-BROWN: Yes, Madam Chairmar. I think  
10 that's correct. We are checking it right now.

11 CHAIRMAN JOHNSON: Did it also include --

12 MS. CARTER-BROWN: It may be part of our big list  
13 that we put in.

14 CHAIRMAN JOHNSON: Did it include the staff  
15 recommendation, the attached -- Was it attached?

16 MS. CARTER-BROWN: Just one second and we'll  
17 check.

18 MR. CARVER: It appears -- It has an order number  
19 on it, so I assume it's not a staff rec., but I can't tell  
20 from the list.

21 CHAIRMAN JOHNSON: I'm sorry?

22 MR. CARVER: I'm sorry. The official  
23 recognition list has an order, so I assume that the staff  
24 rec. would not be part of that.

25 CHAIRMAN JOHNSON: Would not be part?

1 MR. CARVER: Unless it's in an attachment to the  
2 order.

3 CHAIRMAN JOHNSON: In your question you said it  
4 was referenced in the order, but it wasn't attached to it.

5 MR. CARVER: What happened is the staff wrote a  
6 rather extensive recommendation, and then there was an  
7 order adopting the recommendation as the order.

8 CHAIRMAN JOHNSON: Okay.

9 MR. CARVER: So in effect the recommendation  
10 became the order, but I don't know that that underlying  
11 document was attached, so I would like to --

12 CHAIRMAN JOHNSON: I see.

13 MS. CARTER-BROWN: Well, it may not be attached,  
14 but it was officially recognized if it was part of the  
15 order that incorporated it and adopted it.

16 CHAIRMAN JOHNSON: Well, we'll just be clear that  
17 we are taking official recognition of the Louisiana order  
18 and the staff recommendation upon which it's based.

19 And the other document?

20 MR. CARVER: The other document was the order of  
21 the Kentucky commission.

22 MR. LAMOUREUX: I don't have any objection to  
23 that. I'd also like to make the order from the Kentucky  
24 commission --

25 CHAIRMAN JOHNSON: We'll take official

1 recognition of the Kentucky order.

2 MR. LAMOUREUX: Well, also I'd like to make the  
3 record complete to take official recognition of the order  
4 from the Kentucky commission denying the motion for  
5 reconsideration after the order as well.

6 MR. CARVER: I'm not sure what he is talking  
7 about, but I have no objection to taking recognition of  
8 anything filed in Kentucky, so --

9 MR. LAMOUREUX: Okay.

10 MS. CARTER-BROWN: We have already taken official  
11 recognition of the Kentucky order. It's on our list.

12 COMMISSIONER GARCIA: That's not what he --

13 CHAIRMAN JOHNSON: No, that's not what he  
14 just --

15 MR. LAMOUREUX: There is also an order out of the  
16 Kentucky commission denying motions for reconsideration of  
17 the order, and I just want to make that --

18 MS. CARTER-BROWN: That I don't think we have on  
19 our list.

20 CHAIRMAN JOHNSON: Tell you what, we'll take  
21 official recognition of it.

22 MR. LAMOUREUX: That's fine.

23 MR. WILLIAMS: Your Honor, while we're on that  
24 page, I mention the decision of the Washington --

25 CHAIRMAN JOHNSON: Your mike isn't on, and you

1 said the Washington?

2 MR. WILLIAMS: Yes, during the cross examination,  
3 I asked some questions about the decision of the Washington  
4 Utilities and Transportation Commission. I see that is not  
5 on the official recognition list, and I'd like to ask that  
6 it be added to it. It is a decision of, I believe it's May  
7 11th of this year, with respect to the Hatfield issues as  
8 well.

9 CHAIRMAN JOHNSON: You said the Washington?

10 MR. WILLIAMS: State of Washington Utilities and  
11 Transportation Commission. They had a decision addressing  
12 the same issues that are on the official recognition list,  
13 but this one was not -- this particular Washington decision  
14 was not on the official recognition list.

15 MS. CARTER-BROWN: That's correct, Madam  
16 Chairman. If we could have an order number, and staff has  
17 no problem with having that on the list.

18 MR. WILLIAMS: Yes, it's entitled the eighth  
19 supplemental order, interim order establishing cost for  
20 determining prices in phase 2, and the date is April 16th,  
21 1998, and I'll give you my copy.

22 MS. CARTER-BROWN: The eighth supplemental order?

23 MR. WILLIAMS: Isn't that something? The eighth  
24 supplemental order.

25 MR. HATCH: Madam chairman, I would make a

1 request associated with that. I was not aware that it was  
2 the eighth supplemental order. It may necessitate us  
3 looking to see if there are -- if the previous seven and  
4 the original underlying order --

5 COMMISSIONER GARCIA: Tracy, we predicted that.  
6 We were discussing that back here.

7 MR. WILLIAMS: I'm happy to provide every order  
8 and supplemental order in the State of Washington. I can  
9 tell you having participated in this proceeding that this  
10 was the one that brought to a close all of the other issues  
11 on these cost models.

12 COMMISSIONER GARCIA: Maybe we should let  
13 Mr. Hatch go through the first seven and see if he needs  
14 them.

15 MR. WILLIAMS: Absolutely. And why don't I  
16 provide those to Mr. Hatch, and he can submit whatever he  
17 chooses.

18 CHAIRMAN JOHNSON: That will be fine.

19 MR. CARVER: If we could go back to Kentucky for  
20 just a moment. It's a little bit confusing because  
21 Kentucky doesn't issue order numbers, so the order is only  
22 referenced by the case number. and there have been a lot of  
23 orders -- in fact, a lot of orders regarding the different  
24 aspects of universal service in that case. So just to be  
25 clear, the order that I was reading from was the May 22nd,

1 1998, order which dealt specifically with a cost model  
2 segment of what is an ongoing case.

3 CHAIRMAN JOHNSON: Do you have an order number?

4 MR. CARVER: No, they don't have order numbers  
5 there.

6 CHAIRMAN JOHNSON: Oh, that's just the title?

7 MR. CARVER: That's the problem.

8 CHAIRMAN JOHNSON: Okay.

9 MS. CARTER-BROWN: Do you have a case number?

10 MR. CARVER: It is 360.

11 MS. CARTER-BROWN: Okay.

12 MR. CARVER: And it is noted on the recognition  
13 list, but it's just --

14 MS. CARTER-BROWN: But that's the same case?

15 MR. CARVER: They've had several different  
16 segments to their ongoing universal service proceeding, and  
17 they've had a number of final orders for that particular  
18 part; so I just wanted to be clear on the part that I was  
19 referring to.

20 CHAIRMAN JOHNSON: Okay. Thank you.

21 MR. FONS: Thank you, Madam Chairman.

22 CROSS EXAMINATION

23 BY MR. FONS:

24 Q Mr. Pitkin and Mr. Wood, my name is John Fons,  
25 and I'm representing Sprint-Florida in this proceeding.



1           I believe my first line of questioning goes to  
2 Mr. Wood. Earlier this afternoon, there was some  
3 discussion between I believe yourself and Commissioner  
4 Clark concerning the difference between housing units and  
5 households with telephone. Do you remember that?

6           A     (Witness Wood) Yes.

7           Q     Let me ask you a couple of questions about how  
8 that might work out. When you filed the HAI model in this  
9 proceeding, how many residential lines did the HAI model  
10 build in Destin, Florida?

11          A     (Witness Wood) I could look that number up for  
12 you, but I don't know.

13          Q     Would you agree, subject to check, that it was  
14 6,328 residential lines?

15          A     (Witness Wood) If that's the number you've  
16 somehow derived, then we can certainly talk about it.

17          Q     You could check that out, can you not?

18          A     (Witness Wood) I can find out how many lines we  
19 have.

20          Q     And do you know how many residential lines there  
21 actually are in Destin, Florida?

22          A     (Witness Wood) No.

23          Q     Would you accept, subject to check, that it's  
24 12,770 residential lines?

25          A     (Witness Wood) Again, I don't know -- Well.

1 I'm not sure how I would check that right now. I mean when  
2 you say Destin, do you mean a single exchange, or is this a  
3 collection of exchanges?

4 Q Wire center. The Destin wire center.

5 A (Witness Wood) One wire center?

6 Q Yes, sir.

7 A (Witness Wood) We can look at that, yes. What  
8 that probably means is we've got too many business lines.

9 Q And is the difference between the 6,328 that is  
10 included in your model, that was built by your model and  
11 the 12,770 that are there in actuality, is that a result of  
12 the HAI model using housing -- households with a telephone  
13 versus a housing unit?

14 A Almost certainly not. It's actually a result of  
15 this process. And, again, we can true-up to exactly the  
16 number of residence lines at the wire center level in this  
17 model if the incumbent companies provide us with, by wire  
18 center, the mix of residence and business lines, which we  
19 are happy to do. We have that as they report it for their  
20 entire service territory, which is the process we then have  
21 to use the households for, is to allocate those out. But  
22 if the companies provide that at the wire center level, we  
23 can put information directly in the model and our numbers  
24 will exactly match your numbers.

25 Q I believe earlier you said that you do true-up

1 what the model produces against what the lines are. Why  
2 didn't you do that in this case?

3 A We did do that in this case, at your service  
4 territory level, which is how you provide the information.  
5 If you provide the information at the wire center level, we  
6 can certainly do it at that level.

7 Q I believe you agreed, subject to check, that the  
8 model in this case built only 6,328 lines?

9 A (Witness Wood) No, sir. You said residence  
10 lines.

11 Q Residence lines.

12 A (Witness Wood) What we very likely have is too  
13 many business lines and too few residence lines, is a  
14 possible scenario; but what we can certainly do to  
15 eliminate the entire possibility is to take your  
16 information, if you provide it, put it into the model and  
17 we are sure we are right by wire center by line type.

18 Q Okay. And if you true it up in the fashion that  
19 you've just described, will you add more locations or more  
20 lines?

21 A (Witness Wood) Not necessarily.

22 Q What would you do?

23 A (Witness Wood) We may, in fact, have exactly the  
24 right number of lines but we've distributed them among  
25 residence and business customers inappropriately, and what

1 we would then do is go back and match the number of lines  
2 to the wire center.

3 Q Well, how did you distribute them initially  
4 inappropriately between residence and business?

5 A (Witness Wood) Through the access line model, we  
6 start with the census data for residence counts. We get  
7 residence counts, household counts from Metromail and  
8 Claritas. We compare those. We get census data on first  
9 line penetration because the census data does say by census  
10 block whether people subscribe to telephone service at  
11 all. It doesn't tell us how many lines they have. We then  
12 have additional demographic information on the age and  
13 income, the primary person at the household, which is used  
14 in a study to predict second line penetration for  
15 households.

16 On the business side, we have businesses from Dun  
17 and Bradstreet. We have the number of employees, and we  
18 have the type of business, the classification code. All of  
19 that goes to predicting the mix of lines and the  
20 distribution of lines in these smaller areas where the  
21 information isn't available. But if you would like our  
22 residence and business line counts to exactly match yours  
23 on a wire center basis, all you need do is provide the  
24 information. That's imminently doable and doable in a very  
25 short time frame.

1 Q But if you only built 6,328 residential lines in  
2 your model --

3 A (Witness Wood) Yes.

4 Q -- that meant that you only had something in the  
5 neighborhood of 6,328 locations, isn't that correct,  
6 residential locations?

7 A (Witness Wood) No, that means we had that many  
8 household counts when we tried to distribute the line count  
9 that you did report at the total.

10 Q Where would you have gotten that household count?

11 A (Witness Wood) That's the process I just  
12 described.

13 Q Is that -- PNR provides that?

14 A (Witness Wood) Well, it comes from Metromail and  
15 Claritas through PNR, yes.

16 Q Okay. So this would be all in the  
17 pre-processing. It would not be in the HAI model itself?

18 A (Witness Wood) If you want to define it that  
19 way. It's a two-step process. The National Access Line  
20 Model, which is the distribution of all of these things,  
21 happens in the first step.

22 Q And if you had the actual line count, would you  
23 go back to PNR and tell them to come up with additional  
24 locations in the Destin wire center?

25 A (Witness Wood) No, we would go back to the

1 proper structure for building the required amount of plant  
2 for residence lines in that wire center, and we would build  
3 the same number of lines that you have in service.

4 Q Where would that take place, in the model itself,  
5 or would you have to go back to PNR to put in these  
6 additional lines?

7 A (Witness Wood) No, that takes place in the model  
8 itself.

9 Q Whereabouts in the model?

10 A (Witness Wood) We actually wrote up some  
11 instructions that were provided to staff, and I can provide  
12 them to you -- they may have been distributed to you as  
13 well -- that give you the step-by-step worksheet cell by  
14 worksheet cell instructions for inserting that  
15 information. No one provided it.

16 Q But in any event, you do not add new locations,  
17 new residential?

18 A (Witness Wood) Well, we don't go back into the  
19 pre-processing. We certainly add the required number of  
20 lines.

21 Q But you'll keep the same number of household  
22 locations?

23 A (Witness Wood) We will still have the same number  
24 of household locations that we have geocodable points for.  
25 We won't gain those simply by knowing there are more lines.

1 but we can build lines, additional lines in the model.

2 Q So in your model then you will assume that there  
3 will be two lines to every one of those locations; isn't  
4 that correct?

5 A (Witness Wood) No.

6 Q Well, where do you put these lines? Where do  
7 they run to?

8 A (Witness Wood) These become a surrogate  
9 alternative, not a geocodable alternative.

10 Q Mr. Pitkin, I believe the next series of  
11 questions are for you. I believe you did the BCPM/MST  
12 analysis?

13 A (Witness Pitkin) Yes.

14 Q When you conducted that MST analysis for the  
15 BCPM, from whom did you get the information to do the MST  
16 analysis?

17 A (Witness Pitkin) We sent out a data request for  
18 that information.

19 Q To whom did you send out that data request?

20 A (Witness Pitkin) I believe it was to BellSouth.  
21 I'm not sure if it was also to Sprint and GTE.

22 Q And from whom did you get the information to  
23 respond, or what was the response to that data request?

24 A (Witness Pitkin) The response to the data  
25 request was a CD-ROM.

1 Q And who produced that CD-ROM?

2 A (Witness Pitkin) I don't remember right now. My  
3 best guess would be Stop Watch Maps who does all of the  
4 pre-processing for the BCPM. Just as the HAI model uses  
5 the pre-processing information from PNR, the BCPM model  
6 uses a significant amount of pre-processing information  
7 from a group called Stop Watch Maps.

8 Q And did you ask for housing units or locations?

9 A (Witness Pitkin) I asked for housing units.  
10 Now -- Actually that is not exactly true. The way that  
11 these data requests originated was through a large effort  
12 in Texas to do MST analyses, and as a result of that  
13 process, I had many lengthy conversations with Phil Bullion  
14 of Stop Watch Maps asking what data was available at the  
15 microgrid level that would assist me in performing this MST  
16 analysis. And we had probably somewhere between four and  
17 six discussions regarding this type of information, and I  
18 was not told that they had physical location data at the  
19 microgrid level to use. I used housing unit data which he  
20 said was available.

21 Q So in your BCPM/MST analysis, you used housing  
22 units?

23 A (Witness Pitkin) I did use housing units.

24 Q And is a housing unit a location for purposes of  
25 your MST analysis?



1 A (Witness Pitkin) Yes, it is.

2 Q And for each location then you placed a dot in a  
3 microgrid?

4 A (Witness Pitkin) Yes.

5 Q And a minimum spanning tree is kind of like  
6 connecting those dots in the microgrid, isn't it?

7 A (Witness Pitkin) Yes, that's exactly what it is.

8 Q And you have a dot for every one of those  
9 locations in the microgrid?

10 A (Witness Pitkin) I have a dot for every one of  
11 those housing units in the microgrid, yes.

12 Q And you said that a housing unit was a location  
13 for purposes of your MST analysis of the BCPM?

14 A (Witness Pitkin) Yes.

15 Q Now in an MST analysis, the more dots you have,  
16 the longer the MST distance?

17 A (Witness Pitkin) Well, that entirely depends on  
18 where the dots are.

19 Q In the dots that you would place in a microgrid  
20 that you got from Stop Watch Maps for the purposes of  
21 analyzing the BCPM, were those -- did you distribute those  
22 dots throughout the microgrid?

23 A (Witness Pitkin) I used a methodology consistent  
24 with the methodology in the BCPM to distribute those  
25 housing units in the microgrids.

1 Q And do you know how the BCPM locates customers?

2 A (Witness Pitkin) The BCPM does not locate any  
3 customers. That's why this was quite a process and very  
4 difficult to perform for both the BCPM model sponsors and  
5 for us, because the BCPM doesn't locate any customers.

6 Q Okay. So because of that, you had to distribute  
7 these housing units as dots throughout the microgrid for  
8 your MST analysis?

9 A (Witness Pitkin) Yes, I made certain  
10 assumptions. Doctor Duffy-Deno in his analysis also made  
11 certain assumptions.

12 Q And how would you define a housing unit?

13 A (Witness Pitkin) I would define a housing unit  
14 as what I believe the census bureau defines as a housing  
15 unit, which is a livable structure.

16 Q And how would you define a location?

17 A (Witness Pitkin) I would define a location for  
18 the purposes of these cost proxy models as a physical point  
19 at which you would have to build plant.

20 Q And would this location, for purposes of your MST  
21 analysis of the BCPM, did this location include -- Would  
22 you have -- Would that be synonymous with a household or  
23 a household unit, or a housing unit?

24 A (Witness Pitkin) No, the two have nothing to do  
25 with each other. The BCPM uses housing units, not

1 households.

2 Q And did you use housing units?

3 A (Witness Pitkin) Yes.

4 Q And each housing unit was a location, correct?

5 MR. LAMOUREUX: Objection. Asked and answered  
6 several times.

7 MR. FONS: I'm just trying to establish exactly  
8 how he --

9 CHAIRMAN JOHNSON: Answer the question.

10 A (Witness Pitkin) Each housing unit was a  
11 location in my analysis, yes.

12 BY MR. FONS (Continuing):

13 Q And are you aware that in the BCPM and in reality  
14 there are duplexes where two housing units exist at the  
15 same location?

16 A (Witness Pitkin) Yes, I am aware of that.

17 Q And how did you handle that for purposes of your  
18 MST analysis?

19 A (Witness Pitkin) I did not have information to  
20 determine the number of duplexes; however, in response to a  
21 data request that we received from BellSouth, we were given  
22 that information, and I went back and checked. And  
23 actually, in low-density areas there are very, very few  
24 occasions where you have duplexes; and therefore, the  
25 results that I discuss here for low-density zones are right

1 on.

2 Q Did you do your MST analysis at the wire center  
3 level?

4 A (Witness Pitkin) No, I did my MST analysis on  
5 both the BCPM and on the HAI model at the distribution area  
6 level, and that is the fundamental problem I have with the  
7 analyses presented by the BCPM sponsors in this proceeding,  
8 is that they use very different levels of aggregation for  
9 their analysis of the BCPM and their analysis of the HAI  
10 model. My intent was to use a consistent geographical area  
11 for both analyses.

12 MR. FONS: I have no further questions.

13 CHAIRMAN JOHNSON: Staff.

14 CROSS EXAMINATION

15 BY MR. COX:

16 Q Good afternoon, Mr. Wood, Mr. Pitkin. I'm Will  
17 Cox on behalf of the Commission staff. And I have just a  
18 couple of questions, and they are directed to Mr. Wood.

19 A (Witness Wood) Yes, sir.

20 Q Mr. Wood, how many user adjustable inputs are  
21 there in the Hatfield Model?

22 A (Witness Wood) 1573 will come up on the  
23 pull-down menus for you when you first start up the model,  
24 but if you go into the cluster data base, then there are  
25 several hundred thousand at your disposal; but that

1 requires a little more sophisticated approach of going into  
2 the worksheet.

3 Q Okay. So there are 1573 that staff could easily  
4 access and change the inputs for?

5 A (Witness Wood) Those are the easiest to get to  
6 because it's a simple point and click basis. You see the  
7 value, you click on the little square, the value goes away,  
8 you type in the new one.

9 Q Okay. I think in the past few days you've heard  
10 the discussions that we've had about the minimum spanning  
11 tree analyses of the two models?

12 A (Witness Wood) I have.

13 Q My question for you is what adjustments to the  
14 Hatfield Model, the HAI 5.0a could be made to correct the  
15 apparent understatement of distribution plant as indicated  
16 by the minimum spanning tree analysis?

17 A (Witness Wood) There are actually two things  
18 that I can offer you in that regard. I can't give you a  
19 cell by cell list. What we would propose to do is to apply  
20 a test that would work through in the model, and on the  
21 exhibit that we gave out, I believe it's Number 19, where  
22 you see in the lowest density zone this underage for both  
23 companies, the 24% for HAI, the 35% for BCPM, we --

24 Q I'm sorry, which exhibit is that?

25 A (Witness Wood) I thought it was 19 to the

1 rebuttal. It may be. It is Exhibit 19. It's the one we  
2 passed out at the beginning of the summary.

3           Let me be very clear. We really don't think the  
4 MST analysis, because there is not a hundred percent  
5 geocodable points for either model, really tells you much;  
6 but I understand, based on the discussion, that it's  
7 something that the staff and potentially the commissioners  
8 are interested in. We can talk you through -- we have  
9 worked out a test that would eliminate this possibility  
10 that would apply in the model and check it as it goes  
11 along. We can talk you through that, or we can provide you  
12 with the updated run of the model where we've made this  
13 analysis so that you can take the results and put them side  
14 by side and see whether this thing that we've all made much  
15 ado about is really a big issue. I think the easiest way  
16 would be to provide you with the results and the  
17 corresponding software and a complete description of  
18 exactly what has been changed and how the test was  
19 incorporated. That may be more efficient than trying to  
20 talk you through entering that information in the model.

21           Q     Okay. I think I would like you to provide  
22 information, but before we get to that, could you just  
23 generally describe what you've done there?

24           A     (Witness Wood) Well, what we want to do is, as  
25 we go through the process and we are producing a certain

1 amount of cable and there is a certain MST distance, we  
2 want to compare the two; and where the cable produced by  
3 the model is lower, we want to go to MST. I mean we don't  
4 think MST is the right standard, but if you want to see  
5 what happens if it is, then we want to produce cable  
6 consistent with the MST.

7 Q So you don't think the MST analysis is valid for  
8 estimating under building of plant?

9 A (Witness Wood) No, I don't think it tells you  
10 anything really about either model because, unless you know  
11 where a hundred percent of the people are, this test  
12 doesn't tell you anything about whether either model builds  
13 enough plant to reach actual customer locations; it just  
14 can't do that. The best you can do is compare, and we  
15 think we compare very favorably on this -- the results of  
16 this somewhat arbitrary test. But if it's something that  
17 you're interested in, we will make the adjustment to our  
18 model to ensure that it does meet exactly this test so that  
19 you can see what the impact would be, not just on cost, but  
20 specifically on feeder cable.

21 Q Is this test that you do, is it done by cluster?

22 A (Witness Wood) I believe -- well, it's done by  
23 serving area, and I actually should defer to Mr. Pitkin who  
24 has been more involved in the process to make sure that I  
25 describe this to you correctly.

1 Q Okay. Before I go to Mr. Pitkin for him to  
2 describe that, we'll go ahead and ask that you provide this  
3 test as a late-filed exhibit, this test run as a  
4 late-filed, and that would be -- I don't know how to  
5 describe what you're doing, but a test run which would  
6 incorporate the MST analysis. Is that -- How would you  
7 describe what you're doing?

8 A (Witness Wood) Why don't we call it a run that  
9 ensures MST compliance?

10 Q Okay.

11 A (Witness Wood) Because that is really what we  
12 are testing for each time. And it -- again, you know, we  
13 don't think that the test means much, but if you do, we  
14 want to show you what the results look like, if we meet the  
15 test.

16 Q Okay. Why don't we just call it -- Instead of  
17 ensuring, I was kind of -- I'm not sure if that's the right  
18 word. Why don't we say run to address MST compliance?

19 A (Witness Wood) Sure.

20 CHAIRMAN JOHNSON: That will be the short title?

21 MR. COX: Yes.

22 CHAIRMAN JOHNSON: And it's Exhibit 66.

23 BY MR. COX (Continuing):

24 Q And Mr. Pitkin, if you could describe what was  
25 done in this analysis with this test, generally?



1           A     (Witness Pitkin) Generally, this test is  
2 performed on a serving area basis. The HAI model does not  
3 cost service at any level less than serving area, and this  
4 is one of the problems that we have with the analysis -- in  
5 the MST analysis performed by the BCPM proponents on the  
6 HAI model, is that they try and break out the serving area  
7 and separate the main clusters from the outlier clusters.  
8 So the process essentially calculates the distance within a  
9 main cluster and the distance with all of the other  
10 distribution areas that are part of that serving area and  
11 ensures that for that serving area enough cable is placed  
12 to match the MST criteria.

13           Q     Okay. Mr. Wood, are you aware of any other  
14 adjustments that should or could be made to address the  
15 understatement of plant in the HAI model?

16           A     (Witness Wood) There is another adjustment that  
17 we could do, and again, this falls under the category of if  
18 you are interested in seeing the results, we'll be glad to  
19 provide them. And that is, I understand there has been a  
20 big issue made about placing surrogate points around the  
21 census block boundary rather than putting surrogate points  
22 along interior roadways. If you would like to see the  
23 results, we can perform an analysis where we actually  
24 locate all the customers that we can through the geocoding  
25 process; and then where we can't locate them specifically,

1 we default, if you will, as a second best solution to the  
2 BCPM process which is to distribute those customers along  
3 exterior and interior roadways. That is an analysis we  
4 have the capability to perform.

5 Q Okay.

6 A (Witness Wood) It makes our second best solution  
7 at least as good as the BCPM first case solution, but  
8 that's an analysis we can perform that's I think directly  
9 on the point to the issue that has been raised here. If  
10 you would like to see it, we'll be glad --

11 Q Yes, if you could provide that as a late-filed  
12 exhibit, we would like that.

13 A (Witness Wood) All right.

14 Q And for a short title for that?

15 A (Witness Wood) How about surrogates on interior  
16 roads?

17 Q Surrogates on interior roads?

18 A (Witness Wood) Yes.

19 Q But it's a complete run?

20 A (Witness Wood) Yes.

21 Q With the surrogates on interior roads?

22 A (Witness Wood) Yes, we'd simply geocode  
23 everybody we can, and instead of putting the remainder just  
24 on the boundary, we would use the BCPM process to place  
25 them on interior and the exterior roads.

1 Q Okay. Why don't we call it HAI run with  
2 surrogates on interior roads?

3 A (Witness Wood) That sounds very descriptive.

4 CHAIRMAN JOHNSON: That will be the short title,  
5 and it's marked 67.

6 BY MR. COX (Continuing):

7 Q And you're clear that that's, like we said,  
8 interior and exterior, even though we called the short  
9 title --

10 A (Witness Wood) Yes, I think we are clear on what  
11 we are running.

12 Q Okay. On these two runs, if we could ask that  
13 you use the company specific inputs and not the defaults.  
14 Were your plans to use the defaults or company specific?

15 A (Witness Wood) No, we were planning to use the  
16 same set of inputs that we used in the latest filing.

17 Q Okay.

18 A (Witness Wood) So that what you get out of the  
19 process you can lay down the results side by side with what  
20 you have --

21 Q Great.

22 A (Witness Wood) -- to meaningful see the  
23 difference. I want to make sure we've got apples to  
24 apples.

25 Q Okay. Great. Great.

1 MR. COX: That concludes staff's questions.

2 Thank you.

3 CHAIRMAN JOHNSON: We are going to take a  
4 15-minute break before we do our redirect.

5 (BRIEF RECESS)

6 CHAIRMAN JOHNSON: We are going to go back on the  
7 record. Just a preliminary housekeeping matter, we're  
8 trying to get a fix on how much more time we are going to  
9 need and whether or not we are going to be even  
10 contemplating Friday afternoon. I know Saturday is off the  
11 table, right? You all are definitely going to be finished  
12 before then, so let's see if we can --

13 MR. HATCH: We might be able to work something  
14 out.

15 CHAIRMAN JOHNSON: Excuse me?

16 MR. HATCH: I said we can work something out.

17 CHAIRMAN JOHNSON: We're hopeful. Let's go  
18 through the witnesses that are remaining. What about our  
19 redirect?

20 MR. LAMOUREUX: I don't think my redirect is  
21 going to be what keeps us to Friday afternoon.

22 CHAIRMAN JOHNSON: How much time do you think you  
23 are going to need?

24 MR. LAMOUREUX: 10 or 15 minutes.

25 CHAIRMAN JOHNSON: Okay. And then next I guess

1 we'll have Mr. Taylor.

2 MR. WILLIAMS: Taylor.

3 CHAIRMAN JOHNSON: A cross of Taylor? We are  
4 just kind of -- I know you all -- That's fine.

5 MR. HATCH: Very little to none.

6 MR. MELSON: Same, little to none.

7 CHAIRMAN JOHNSON: Staff, little, okay.

8 COMMISSIONER CLARK: Let me ask a question, if  
9 it's little to none, does he need to be here?

10 CHAIRMAN JOHNSON: Is it none?

11 MR. COX: Staff's is none.

12 CHAIRMAN JOHNSON: Staff's is none?

13 COMMISSIONER CLARK: Because he is next, isn't  
14 he?

15 CHAIRMAN JOHNSON: So there is none for  
16 Mr. Taylor?

17 MR. LAMOUREUX: I always want to listen to his  
18 summary if he summarizes, but other than that, nope.

19 MR. CARVER: On the other hand, Doctor Taylor has  
20 come here all the way from Boston, and he is here already,  
21 so I would like for him to at least, you know, do a  
22 10-minute summary.

23 CHAIRMAN JOHNSON: Okay. That's fine.

24 MR. CARVER: Okay.

25 COMMISSIONER CLARK: I have to say, I do have

1 some questions for him, which I would forego if everybody  
2 else did, but that's all right.

3 CHAIRMAN JOHNSON: The panel, GTE's panel?

4 MR. MELSON: I'm going to guess 45 minutes, maybe  
5 a little less.

6 MR. HATCH: Probably none, unless it raises a  
7 question.

8 CHAIRMAN JOHNSON: Okay. Staff?

9 MR. COX: Staff has none.

10 CHAIRMAN JOHNSON: A little?

11 MR. COX: None.

12 CHAIRMAN JOHNSON: None? Oh, we may do pretty  
13 good.

14 Sprint's witnesses?

15 MR. MELSON: On the two Sprint witnesses, maybe  
16 10 minutes total.

17 CHAIRMAN JOHNSON: Okay.

18 MR. HATCH: My guy doing Mr. Dickerson is not  
19 here, so I don't have an estimation, but there will be  
20 some. I can commit to an hour, but that's a rough guess  
21 without any accuracy as to how much work he is going to be  
22 doing.

23 CHAIRMAN JOHNSON: Okay. The cost model input  
24 witnesses, BellSouth?

25 MR. HATCH: I probably have 15, 20, 30 minutes,

1 depending on how it goes.

2 MR. MELSON: I'm guessing 30 to 45 minutes.

3 CHAIRMAN JOHNSON: Staff?

4 MR. COX: Probably half an hour to 45 minutes for  
5 BellSouth.

6 CHAIRMAN JOHNSON: Okay. GTE's input witness,  
7 Norris? None?

8 MR. HATCH: About 30 minutes.

9 CHAIRMAN JOHNSON: Oh, 30 minutes.

10 MR. MELSON: None, or five minutes.

11 MR. COX: None for Norris.

12 CHAIRMAN JOHNSON: We are doing pretty good. The  
13 other witness, however you pronounce it, Tucek?

14 MR. WILLIAMS: Tucek.

15 MR. HATCH: We've got about 30 minutes probably.

16 MR. MELSON: Five minutes.

17 MR. COX: About 30 minutes for Tucek.

18 CHAIRMAN JOHNSON: MCI's witness Wells.

19 MR. WILLIAMS: Oh, probably about, less than an  
20 hour, 45 minutes.

21 MR. CARVER: 45 Minutes.

22 MR. COX: About five minutes for Wells.

23 MR. FONS: 15 Minutes.

24 MR. COX: Five minutes for Wells.

25 CHAIRMAN JOHNSON: Dickerson?

1 MR. HATCH: That would be about an hour.

2 Madam Chairman, there may be some confusion. I  
3 probably have less than five minutes for Mr. Sichter.

4 CHAIRMAN JOHNSON: For who?

5 MR. HATCH: Mr. Sichter, I think that is who you  
6 asked for before and I said an hour.

7 CHAIRMAN JOHNSON: Oh, yeah.

8 MR. HATCH: I thought you were talking about  
9 Mr. Dickerson. My apologies for the confusion.

10 CHAIRMAN JOHNSON: Okay. And you said how much  
11 for Sichter?

12 MR. HATCH: Maybe five minutes, if that.

13 CHAIRMAN JOHNSON: Okay. And then Dickerson is  
14 the hour?

15 MR. HATCH: Yes.

16 CHAIRMAN JOHNSON: Okay.

17 MR. MELSON: Five minutes.

18 CHAIRMAN JOHNSON: Okay.

19 MR. COX: Staff has about 20 minutes for  
20 Dickerson.

21 CHAIRMAN JOHNSON: Okay. And AT&T's two  
22 witnesses?

23 MR. FONS: Lerma and Petzinger?

24 CHAIRMAN JOHNSON: Yeah, I'm looking at both of  
25 them.



1 MR. FONS: For Lerma, Sprint has about 5 to 10  
2 minutes, and for Petzinger probably half an hour.

3 MR. CARVER: BellSouth has probably 30 minutes  
4 for Lerma and less than 15 minutes for Petzinger.

5 CHAIRMAN JOHNSON: Okay.

6 MR. WILLIAMS: And GTE has probably the same, 15  
7 minutes for Lerma and no more than half an hour for  
8 Petzinger.

9 CHAIRMAN JOHNSON: About 45, okay.

10 MR. COX: Staff has probably about five minutes  
11 combined for the two.

12 CHAIRMAN JOHNSON: Okay. And BellSouth's panel.

13 MR. HATCH: We've got about an hour.

14 MR. MELSON: Five minutes.

15 MR. COX: Probably nothing for them.

16 CHAIRMAN JOHNSON: Did I leave anyone out? I  
17 left out --

18 COMMISSIONER CLARK: Curry, is just the one down  
19 at the bottom.

20 CHAIRMAN JOHNSON: Oh, Curry.

21 MR. HATCH: I was tempted to say four hours, but  
22 I'm just -- I don't think I'll have anything for  
23 Mr. Curry.

24 MR. MELSON: Nothing.

25 CHAIRMAN JOHNSON: Nothing, nothing?

1 MR. COX: I assume staff would be probably the  
2 only one questioning Mr. Curry, and we probably have  
3 between half an hour and an hour.

4 CHAIRMAN JOHNSON: Okay. I think I covered  
5 everyone. I just wanted to kind of get an indication.  
6 We'll still go until about seven tonight, 6:30, seven.  
7 And I think --

8 COMMISSIONER CLARK: I wanted to ask Mr. Wood a  
9 question, if you are ready.

10 CHAIRMAN JOHNSON: Uh-huh.

11 COMMISSIONER CLARK: Mr. Wood, are you allowed to  
12 have the exhibits from Mr., Doctor Staihr?

13 MR. WOOD: I'm sorry, what was the question?

14 COMMISSIONER CLARK: I guess I have to ask the  
15 parties. These are confidential, and are these -- I think  
16 these are actually from Mr. Wood, right?

17 MR. FONS: No.

18 MR. COX: It's information from PNR.

19 MR. HATCH: Commissioner Clark, those documents  
20 were provided by PNR directly to the parties that requested  
21 them. Mr. Wood, I do not believe, has signed that  
22 agreement; so, technically, no he shouldn't have them  
23 unless he signs the --

24 COMMISSIONER CLARK: Never mind. Thanks.

25 CHAIRMAN JOHNSON: I think we are ready for the

1 redirect.

2 REDIRECT EXAMINATION

3 BY MR. LAMOUREUX (Continuing):

4 Q Way back when. Mr. Wood?

5 A (Witness Wood) Yes.

6 Q A few hours ago you were asked a question by  
7 Mr. Williams, and as part of your answer, you said that it  
8 was ill-advised to start from where we are today, and my  
9 question to you is, by that did you mean for a particular  
10 company or for a particular geographic area?

11 A (Witness Wood) Well, for the particular company.  
12 We are certainly going to start with the characteristics  
13 in a very detailed way of the geographic area because it's  
14 the details of the geographic area that caused these costs,  
15 the so-called cost drivers to occur. Those aren't really  
16 caused by the history, or not properly caused by the  
17 history of how the company has chosen to operate in the  
18 past.

19 Q And does the Hatfield Model reflect where we are  
20 today in terms of the geographic area in Florida?

21 A (Witness Wood) Yes, absolutely. It takes the  
22 existing exchange boundaries and the existing wire center  
23 locations, but -- and from that then all the geological and  
24 geographic data of the areas themselves, but it isn't tied  
25 back to the historic operations of the company except in

1 terms of where they located the wire centers.

2 Q I want to use the example that Mr. Williams used  
3 with you of putting a pole in the ground.

4 A (Witness Wood) Yes.

5 Q Let's say that there is actually a new technology  
6 out there that's cheaper, somehow uses some other  
7 technology than what happens with the truck today but the  
8 LEC is using the truck to put in the pole today. Would it  
9 be appropriate to assume that using the truck costs are the  
10 appropriate forward-looking costs in that situation?

11 A (Witness Wood) No, that is exactly the discussion  
12 I had with him. It's the new technology costs, and you  
13 may, in fact, have a situation where the companies have not  
14 bought the new technology, even though a competitive  
15 company would have, because they've still got undepreciated  
16 assets associated with the old technology that they want to  
17 keep using.

18 Q You engaged in some discussion with Mr. Williams  
19 about the process of selecting quotations for the Hatfield  
20 Model inputs, and I wanted to ask you, have you ever gotten  
21 quotes for work done on the house that you described.

22 A (Witness Wood) Well, actually, yes, I've just  
23 had some painting done and the deck pressure washed.

24 Q Did you pick the most expensive quote for the  
25 contractor to do that work?

1           A     (Witness Wood) No, I got bids from several  
2 contractors. I selected a subset of those that I thought  
3 would do quality work, and then I took from that group the  
4 lowest bid.

5           Q     Did you average all the quotes you got and then  
6 go out and look for a contractor who would sell it to you  
7 for that average?

8           A     No, I would have been, frankly, a fool to do  
9 that.

10          Q     I want to talk to you a little bit about this  
11 discussion about New York labor rates, and I want to put it  
12 in a little bit of a hypothetical. If the New York labor  
13 rate was a hundred dollars an hour and the Florida labor  
14 rate \$68 an hour, would multiplying 68% by the hundred  
15 dollars an hour give you \$68 per hour Florida labor rate?

16          A     (Witness Wood) Yes.

17          Q     How is the 68% calculated?

18          A     (Witness Wood) It's the percentage of the total  
19 from the state by state labor factor in the R.S. Means  
20 publication.

21          Q     Does the 68 percentage factor give you a Florida  
22 specific labor rate?

23          A     (Witness Wood) Yes, based on that published  
24 data.

25          Q     To your knowledge, do the LECs use the R.S.

1 Means?

2       A       (Witness Wood) They do. In fact, they use it --  
3 I know Ms. Caldwell is here. I actually used to work in  
4 the same organization, and that particular document is used  
5 quite often in that costing organization for just this type  
6 of information.

7       Q       I want to ask a question in response, or  
8 following up on something that Mr. Fons talked to you  
9 about. Have the LECs provided line count information at a  
10 wire center level to be able to run line count information  
11 in the Hatfield Model at the wire center level?

12       A       (Witness Wood) We do not yet have that  
13 information, but if we had it, we could use it.

14       Q       Mr. Pitkin, following up on, I think, something  
15 you said in response to Mr. Fons or the staff, I'm not sure  
16 I remember which. Why is it that the MST is an  
17 inappropriate benchmarking tool?

18       A       (Witness Pitkin) Well, simply put, we know that  
19 the MST distance based on surrogate locations is  
20 exaggerated. If you space customers as far apart from one  
21 another on a road network as possible, then you are  
22 guaranteeing that you are maximizing the dispersion of  
23 those customers; and since the MST is a measure of  
24 dispersion, it is given that that will exaggerate the MST  
25 distance. And, in fact, not only do we prove this in our

1 testimony, and it shows that if you take only surrogate  
2 locations for road network and you substitute a percentage  
3 of those surrogate locations with actual locations, the MST  
4 distance goes down, proving that actual customer  
5 dispersion -- actual customers are not spaced as far apart  
6 from one another as possible.

7           Similarly, Doctor Duffy-Deno filed a Late-filed  
8 Exhibit 3, I believe this was -- this may have been a  
9 deposition exhibit, I'm not exactly sure; but it performs  
10 an MST analysis on an observed satellite location data and  
11 also using only surrogate points. And this analysis shows  
12 that the MST distance using the surrogate points is 26%  
13 greater than the MST using actual or observed locations.

14           And this is interesting because it corresponds to  
15 a wire center. If you look at Exhibit DJW/BFP-18, we  
16 actually perform MST analyses on a wire center by wire  
17 center basis; and for this particular wire center, it shows  
18 that the HAI model is 9%, builds 9% fewer route miles than  
19 the MST. However, if you consider the fact that in this  
20 wire center Doctor Duffy-Deno has proven that the surrogate  
21 locations overstate dispersion, you will now bring the MST  
22 distance down by enough so that you will guarantee that the  
23 model will actually meet the MST distance for that wire  
24 center, which is why we think it is a mistake for somebody  
25 to use this MST distance as a lower bound because we know,

1 and it's been proven in our testimony and proven by Doctor  
2 Duffy-Deno that this MST distance is overstated and is not  
3 the proper benchmark to use for these cost proxy models.

4 Q In response to a question you got from Mr. Fons,  
5 you mentioned different units of analysis between the MST  
6 done for BCPM in the Hatfield Model, and my question is  
7 what do you mean that the sponsors of BCPM used different  
8 units of analysis in doing the MST for the BCPM and the  
9 Hatfield Model?

10 A (Witness Pitkin) Well, simply put, the BCPM  
11 sponsors used the serving area as their unit of analysis  
12 for their MST analysis on the BCPM; however, they used only  
13 main clusters in the HAI model, and I can perhaps show it  
14 better by drawing this.

15 The HAI model defines as a serving area a main  
16 cluster and the outlier clusters that are associated with  
17 that main cluster. You have multiple distribution areas  
18 within a single serving area. Now the BCPM sponsors have  
19 eliminated this part (indicates) of the serving area from  
20 their analysis. And according to Doctor Duffy-Deno, he  
21 says that, well, when you take this cable for this entire  
22 serving area, we know that there is enough cable built  
23 there. We know that these outlier clusters and the cable  
24 to get to them do satisfy the MST criteria; however, he  
25 eliminates them from his analysis. In their equivalent



1 analysis on the BCPM, they have a serving area.

2 MR. FONS: Madam Chairman, I'm going to object to  
3 this. This has nothing do to do with my direct  
4 examination. He has gone far beyond. My questions were  
5 asked about his analysis, MST analysis, not what Doctor  
6 Duffy-Deno did. It has nothing to do with his analysis --  
7 the questions that I asked on cross examination. It's gone  
8 far beyond. He is just rearguing a point that was made  
9 yesterday.

10 MR. LAMOUREUX: Mr. Fons is absolutely  
11 incorrect. Mr. Fons asked him about the MST analysis about  
12 BCPM that elicited discussion about different units of  
13 analysis in conducting the MST for the BCPM and for  
14 Hatfield Model, and all I asked Mr. Pitkin to explain what  
15 he meant by that.

16 MR. FONS: And I take exception to your statement  
17 because my questions went only to what did he use in his  
18 analysis of the BCPM for MST purposes, and I only asked him  
19 whether he used household units and the locations that he  
20 plotted. I asked nothing about any of the things that he  
21 is into now.

22 MR. LAMOUREUX: The obligation is that my  
23 redirect has to be within the scope of the cross  
24 examination, and that's exactly what it is.

25 MR. FONS: I don't agree. I think it goes far

1 beyond.

2 CHAIRMAN JOHNSON: Mr. Fons, I guess your  
3 objection --

4 MR. LAMOUREUX: And actually, if I may add one  
5 other thing, it's certainly within the scope of cross that  
6 some of the staff questions went to as well.

7 CHAIRMAN JOHNSON: Your objection goes not  
8 necessarily that he wasn't -- he didn't talk about these  
9 things, but he wasn't being responsive to your question  
10 when he raised them?

11 MR. FONS: Oh, no, not at all. What he is  
12 talking about now has nothing to do with the questions I  
13 asked about on cross examination. My cross examination was  
14 limited solely to the analysis that he made. Now he is  
15 talking about an analysis somebody else made, and that's  
16 not proper redirect.

17 MR. LAMOUREUX: I took very good notes of what  
18 Mr. Pitkin said in response to -- and I didn't write down  
19 if it was staff or Mr. Fons -- but in response to the  
20 question, he specifically talked about the different  
21 levels -- units of analysis used by the BCPM sponsors in  
22 doing an MST for BCPM and for the Hatfield Model; and my  
23 redirect is simply asking Mr. Pitkin to explain what he  
24 meant by that.

25 CHAIRMAN JOHNSON: I'm going to allow him to

1 explain?

2           A       (Witness Pitkin) Thank you. As I was saying, in  
3 the BCPM they create serving areas and have up to four  
4 discreet distribution areas within the serving area. In  
5 their analysis, they are including the cable to connect the  
6 various distribution areas.

7                   We know that there is enough cable there. They  
8 did not include it here (indicates). They did not do it on  
9 a serving area basis. They did do it here (indicates), so  
10 they are using distribution areas for the HAI model, and  
11 they are using serving areas for the BCPM; thereby,  
12 excluding cable in the HAI model that they include in the  
13 BCPM model.

14                   In addition, by eliminating specific distribution  
15 areas from their analysis in the HAI model, they are  
16 eliminating those distribution areas that they know and  
17 Doctor Duffy-Deno stated are going to satisfy the MST  
18 criteria; therefore, any statistic citing that the HAI  
19 model only meets the MST in a certain percentage of  
20 distribution areas is biased because they are not including  
21 the full sample of distribution areas. However, in the  
22 BCPM, they are including the full sample of distribution  
23 areas, even the ones where they are guaranteed to meet the  
24 MST, thereby lowering the percentage of BCPM distribution  
25 areas that do not meet the MST standard.



1 address?

2 A My name is William E. Taylor. My business  
3 address is Nera One Main Street, Cambridge, Massachusetts,  
4 02142.

5 Q Doctor Taylor, by whom are you employed and in  
6 what capacity?

7 A National Economic Research Associates Inc.,  
8 senior vice president.

9 Q Doctor Taylor, have you caused to be filed in  
10 this case 34 pages of rebuttal testimony dated September  
11 22nd, 1998, along with one exhibit title WET-1?

12 A Yes, I did.

13 Q Was this testimony prepared by you or at your  
14 direction?

15 A Yes.

16 Q Do you have any changes to your rebuttal  
17 testimony?

18 A No.

19 Q Doctor, if I were to ask you today the same  
20 questions that were asked in your rebuttal testimony, would  
21 your answers be the same?

22 A Yes, they would.

23 MS. KEYER: Madam Chair, I would move that Doctor  
24 Taylor's testimony, rebuttal testimony be inserted into the  
25 the record as if read.

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CHAIRMAN JOHNSON: It will be inserted.

1           **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**  
2           **REBUTTAL TESTIMONY OF WILLIAM E. TAYLOR**  
3           **ON BEHALF OF BELL SOUTH TELECOMMUNICATIONS, INC.**  
4           **DOCKET NO. 980696-TP**

5  
6           **Introduction and Summary**

7  
8           **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND CURRENT**  
9           **POSITION.**

10  
11          A. My name is William E. Taylor. I am Senior Vice President of National Economic  
12          Research Associates, Inc. ("NERA"), head of its Communications Practice, and  
13          head of its Cambridge office located at One Main Street, Cambridge,  
14          Massachusetts 02142.

15  
16          **Q. PLEASE DESCRIBE YOUR EDUCATIONAL, PROFESSIONAL, AND**  
17          **BUSINESS EXPERIENCE.**

18  
19          A. I have been an economist for about twenty-five years. I earned a Bachelor of Arts  
20          degree from Harvard College in 1968, a Master of Arts degree in Statistics from  
21          the University of California at Berkeley in 1970, and a Ph.D. from Berkeley in  
22          1974, specializing in Industrial Organization and Econometrics. For the past  
23          twenty-five years, I have taught and published research in the areas of  
24          microeconomics, theoretical and applied econometrics, which is the study of  
25          statistical methods applied to economic data, and telecommunications policy at

1 academic and research institutions. Specifically, I have taught at the Economics  
2 Departments of Cornell University, the Catholic University of Louvain in  
3 Belgium, and the Massachusetts Institute of Technology. I have also conducted  
4 research at Bell Laboratories and Bell Communications Research, Inc. I have  
5 participated in telecommunications regulatory proceedings before many state  
6 public service commissions, including the Florida Public Service Commission  
7 ("Commission") in Docket Nos. 820537-TP (on premium intraLATA access charges),  
8 820400-TP (on marginal costs for private line services), 880069-TL (on the  
9 Florida Rate Stabilization Plan), 900633-TL (on cross-subsidization), 920385-TL  
10 (on depreciation, investment and infrastructure development), and 920260-TL (on  
11 price cap regulation), all on behalf of Southern Bell Telephone & Telegraph (now  
12 d/b/a BellSouth Telecommunications). In addition, I have filed testimony before  
13 the Federal Communications Commission ("FCC") and the Canadian Radio-  
14 television Telecommunications Commission on matters concerning incentive  
15 regulation, price cap regulation, productivity, access charges, local competition,  
16 interLATA competition, interconnection and pricing for economic efficiency. I  
17 have also testified on market power and antitrust issues in federal court and on  
18 telecommunications matters before federal and state legislative bodies. My vita is  
19 attached as Exhibit WET-1.

20

21 **Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

22

23 A. The purpose of my rebuttal testimony is to respond, on behalf of BellSouth  
24 Telecommunications ("BST"), to the economic issues raised in the direct  
25 testimonies filed in this proceeding by Richard Guepe (for AT&T) and Joseph



1 A. No. Fundamentally, this claim incorrectly confuses subsidies to customers, (e.g.,  
2 residential customers) with subsidies to services (e.g., basic residential local  
3 exchange service). While for some public policy purposes it might be useful to  
4 know whether a particular class of customers is receiving a subsidy, it is far more  
5 important for sizing a universal service fund to know whether residential basic  
6 local exchange service is subsidized.

7  
8 **Q. WHY SHOULD THE REQUIRED UNIVERSAL SERVICE SUBSIDY BE**  
9 **MEASURED AT THE SERVICE LEVEL (RESIDENTIAL LOCAL**  
10 **EXCHANGE SERVICE) RATHER THAN AT THE CUSTOMER LEVEL**  
11 **(FLORIDA RESIDENTIAL CUSTOMERS)?**

12  
13 **A.** Measuring the universal service subsidy at the service level (rather than at the  
14 customer level) is important because firms compete to provide services to  
15 customers and distortions in the prices of those services will lead to inefficient  
16 competition. Inefficient competition, in turn, leads to higher-cost supply of  
17 services and higher prices or lower service quality for consumers.

18 To see this, consider the example used by Mr. Gillan [at 8-9]:

- 19
- the fixed costs of the local loop and switch are \$20 per month
  - the price of residential local exchange service is \$15 per month, and
  - on average, the incumbent local exchange carrier ("ILEC") sells its customer  
21 \$10 worth of optional services that cost \$1 per month to supply.
- 22

23 From this example, Mr. Gillan concludes that the customer is profitable to serve  
24 and that "[n]o external subsidy is needed or appropriate since the consumer is an  
25 attractive customer in its own right." [at 9]. The first conclusion is true but the

1 second is false. While the average residential customer is profitable to serve (in  
2 this hypothetical example), the carrier that supplies local exchange service is  
3 placed at a competitive disadvantage compared with carriers that supply optional  
4 services (e.g., toll services). When markets are opened to competition, no carrier  
5 would willingly supply basic local exchange service at a loss (to be offset by  
6 contribution from optional services sold to that customer) because it would be  
7 more profitable to sell the optional services without incurring the loss on basic  
8 local exchange service.

9 To continue Mr. Gillan's example, suppose BellSouth is required to supply  
10 basic local exchange service for \$15 per month while incurring a cost of \$20 per  
11 month. Competition for optional services—vertical services, toll, directory (in Mr.  
12 Guepe's opinion), etc.—will drive prices of those services towards their respective  
13 economic costs, reducing BellSouth's ability to use contribution from these  
14 services to fund the (assumed) \$5 per month subsidy to basic local exchange  
15 service.

16

17 **Q. BUT, IN MR. GILLAN'S EXAMPLE, SERVING THE RESIDENTIAL**  
18 **CUSTOMER IS STILL PROFITABLE. SHOULDN'T THE COMMISSION**  
19 **DELAY IMPLEMENTATION OF A UNIVERSAL SERVICE FUND UNTIL**  
20 **BELLSOUTH CAN NO LONGER FUND THE \$5 SUBSIDY FROM**  
21 **CONTRIBUTION FROM OPTIONAL SERVICES?**

22

23 **A. Emphatically, no. In Mr. Gillan's example, an egregious subsidy undeniably**  
24 **remains: the \$5 per month subsidy to basic local exchange service. One important**  
25 **public policy intent of the Telecommunications Act of 1996 was to remove**

1 subsidies from the telecommunications price structure or, at least, to make such  
2 implicit subsidies explicit (and competitively neutral) through the implementation  
3 of a universal service fund. The problem is that the assumed subsidy to basic local  
4 exchange service is not competitively neutral. It effectively taxes any carrier that  
5 chooses to supply residential basic local exchange service and unavoidably taxes  
6 the ILEC that is required to supply residential basic local exchange service at the  
7 (assumed) \$15 price. Firms that do not bear this burden have an artificial  
8 advantage in the market for optional services. BellSouth must earn \$5 contribution  
9 from optional services in order to break even in supplying the bundle of basic and  
10 optional services. The long distance carriers (that Messrs. Guepe and Gillan  
11 represent) break even with \$0 contribution from optional services.

12 In addition to distorting competition, delaying implementation of a universal  
13 service fund will delay and discourage facilities-based (including UNE's) local  
14 exchange competition in Florida. Why would an alternative local exchange carrier  
15 ("ALEC") voluntarily incur a \$5 loss to supply basic local exchange service (using  
16 either its own facilities or the ILEC's UNEs) to a residential customer when it  
17 could earn the contribution from optional services without incurring the loss on  
18 basic local exchange service? A properly-sized universal service fund would give  
19 all carriers the proper incentive to supply basic local exchange service rather than  
20 providing optional services and requiring the ILEC to lose money on basic  
21 exchange service.

22

23 **Q. MR. GILLAN OBSERVES [AT 12] THAT RAZOR HANDLES AND**  
24 **CELLULAR TELEPHONES ARE OFTEN PRICED BELOW ECONOMIC**  
25 **COST WHILE RAZOR BLADES AND CELLULAR AIRTIME ARE**

1     **PRICED WELL ABOVE COST. DOES IT MATTER HOW INDIVIDUAL**  
2     **COMPONENTS OF SERVICES THAT ARE TYPICALLY PURCHASED**  
3     **AS A FAMILY ARE PRICED?**

4  
5     A. Yes. In some markets, firms voluntarily price components of services differently  
6     in order to target their services towards particular segments of the market. For  
7     example, a free cellular phone coupled with a high calling price attracts low  
8     volume users or potential customers unsure of the use they might make of the  
9     phone. Charging full price for the phone and a price nearer economic cost for  
10    usage attracts high-volume users. Carriers will typically offer a continuum of such  
11    packages to extract as much profit as the market permits from customers who are  
12    free to choose service from other suppliers.

13         The important difference in the wireline local exchange market is that  
14    BellSouth is not permitted to charge more than \$15 per month for residential basic  
15    local exchange service (in Mr. Gillan's example) and is required to supply the  
16    service to any customer who demands it. ALECs are free to charge more than \$15  
17    per month for residential basic local exchange service (in combination with lower-  
18    priced optional services), or to not supply residential basic local exchange service  
19    where the cost of doing so exceeds the price at which they can sell the service.

20    ***The cost of residential basic local exchange service can be calculated***  
21    ***unambiguously.***

22  
23    **Q. MR. GILLAN ASSERTS [AT 8] THAT IT IS IMPOSSIBLE TO**  
24    **DETERMINE THE COST OF BASIC LOCAL SERVICE WITHOUT**  
25    **INCLUDING IN THAT COST THE FUNCTIONALITY THAT IS USED BY**

1     **OTHER (OPTIONAL) SERVICES. DO YOU AGREE?**

2

3     A. No. In particular, it does not lead to Mr. Gillan's conclusion [at 8] that "there is no  
4     economically correct method to attribute...the cost of these facilities to individual  
5     services." This justification is the same tired argument about the "loop being a  
6     joint or common cost" that the following economists have thoroughly discredited:  
7     Alfred E. Kahn and William B. Shew, "Current Issues in Telecommunications  
8     Regulation: Pricing," 4 Yale Journal on Regulation 191, 1987; William E. Taylor,  
9     "Efficient Price of Telecommunications Services: The State of the Debate,"  
10    Review of Industrial Organization, Vol. 8, pp. 21-37, 1993, and Steve G. Parsons,  
11    "Seven Years After Kahn and Shew: Lingerin Myths on Costs and Pricing  
12    Telephone Service," 11 Yale Journal on Regulation 149, 1994.

13       Proponents of the loop-as-a-joint-or-common-cost idea fail, or refuse, to  
14    recognize that the loop can be a service that a person may demand in its own right,  
15    even without any need to make long distance calls or to use call waiting.  
16    Therefore, by the principle of cost-causation, the cost is uniquely identified with  
17    the loop; the action that causes the cost to be incurred is the customer's ordering  
18    the loop. Usage-based (or "associated") services, in contrast, generate traffic-  
19    sensitive costs which, even if not large relative to the cost of a loop, may  
20    nevertheless be avoided when the customer does not have any usage. It follows  
21    from this fact that the cost of basic local telecommunications service can be  
22    calculated in a discrete manner, one component at a time. It also follows that other  
23    usage-based services have positive incremental costs over and beyond the  
24    combined cost of the components of basic local telecommunications service.

25

1 Q. IS THERE EVER ANY ECONOMIC JUSTIFICATION FOR  
2 ALLOCATING THE COST OF THE LOOP AMONG DIFFERENT  
3 SERVICES THAT THE LOOP CAN CARRY?  
4

5 A. No. Cost causation, not usage patterns or benefits received, should drive cost  
6 attribution and cost recovery. As long as a residential loop (or access to the public  
7 switched network) is a service that can be demanded in its own right, the cost of  
8 which cannot be avoided by not consuming any of the usage-based services, its  
9 cost should not be allocated to those services. To recover such costs on a usage  
10 basis would be unsustainable in markets opened to competition because high-  
11 volume users would prefer to pay the full cost of their loops in exchange for a  
12 more cost-based price for usage.

13 I use my loop to make long distance calls and to order pizza. Neither of those  
14 activities affects the cost of my loop, and there is no economic basis to seek  
15 recovery of my loop costs from long distance carriers or pizza parlors or from me,  
16 based on my usage of long distance services or anchovies.  
17

18 *The Revenue Benchmark approach to sizing the Universal Service Fund*  
19 *is incorrect.*  
20

21 Q. ALTHOUGH THAT ISSUE GOES BEYOND THE SCOPE OF THIS  
22 PROCEEDING, MR. GUEPE PROPOSES [AT 14] THE USE OF A  
23 REVENUE BENCHMARK BASED ON ALL REVENUES THAT A  
24 CARRIER WOULD RECEIVE FOR DETERMINING WHETHER  
25 UNIVERSAL SERVICE SUPPORT IS NEEDED. DO YOU AGREE?

1 A. Absolutely not. From an economic standpoint, such a benchmark would only  
2 succeed at perpetuating the flow of subsidy from optional services to residential  
3 basic local exchange service. A universal service fund based on this concept  
4 would provide insufficient incentives for ALECs (and ILECs) to provide  
5 residential basic local exchange service in high cost areas.

6

7 **Q. MR. GUEPE CLAIMS [AT 14] THAT THE FCC HAS USED**  
8 **ESSENTIALLY HIS METHOD OF CALCULATING THE REVENUE**  
9 **BENCHMARK FOR THE PURPOSE OF DETERMINING THE SIZE OF**  
10 **THE INTERSTATE UNIVERSAL SERVICE FUND. DO YOU AGREE?**

11

12 A. No. It is true that in its Universal Service Order (In the Matter of Federal-State  
13 Joint Board on Universal Service, CC Docket 96-45, Order released May 8, 1997),  
14 the FCC proposed a revenue benchmark as a means for determining the level of  
15 support for which each line served by a universal service provider should be  
16 eligible. As proposed by the FCC (Universal Service Order, ¶¶ 263-267), the  
17 revenue benchmark (to be set at \$31 per line per month) is the average revenue per  
18 line from a basket of services containing *both* supported (basic local exchange) and  
19 supporting (discretionary) services. However, the FCC's proposed revenue  
20 benchmark, unlike Mr. Guepe's, does not include revenue from yellow pages, as  
21 claimed by Mr. Guepe [at 13, and in Table 1 at 18]. Yellow pages provide a  
22 revenue stream that is separate from the revenues generated by direct purchases of  
23 usage services by an ILEC's customers. Averaging in yellow pages revenue into  
24 an estimate of a residential customer's average monthly bill is simply an  
25 accounting gimmick to raise the revenue benchmark as much as possible. Even

1 the inclusion of intraLATA toll revenues in that benchmark is troubling. Unlike  
2 the other services currently included in the proposed benchmark, intraLATA toll  
3 may be purchased from carriers other than the ILEC (e.g., by dial-around means  
4 or, where possible, through presubscription to other providers of intraLATA toll).  
5 Therefore, *any* use of intraLATA toll by a customer should not automatically be  
6 tied back to the revenues earned by the ILEC from that customer.

7 The FCC's proposed revenue benchmark is itself deficient from an economic  
8 perspective for reasons discussed in the previous answer, and repeating that error  
9 when the Florida Commission effectively determines the total size of the fund  
10 would be a serious error.

11

12 **Q. SHOULD ANY BENCHMARK BE USED TO SIZE THE UNIVERSAL**  
13 **SERVICE FUND?**

14

15 A. Yes, but the *only* benchmark that should be used is the combined price of the  
16 supported services. For obvious reasons, a better description of this formulation  
17 would be the term *price benchmark*.

18

19 **Q. WHAT IS YOUR ASSESSMENT OF MR. GUEPE'S PROPOSED**  
20 **REVENUE BENCHMARK FOR FLORIDA?**

21

22 A. Based on his calculations, Mr. Guepe proposes [Table 2, at 18] that the revenue  
23 benchmark per line for BST in Florida should be over \$27 per month.

24 Furthermore, since Mr. Guepe compares *aggregate* revenue from all sources with  
25 the *aggregate* cost of providing universal service, the \$27 per line per month



1 "benchmark" ensues, in effect, that there can be little or no case for establishing a  
2 universal service fund in Florida. AT&T's strategy here is clear: by combining  
3 underestimated costs from the HAI Model with a grossly overestimated revenue  
4 benchmark, it is able to "demonstrate" that aggregate revenues exceed aggregate  
5 costs for residential customers in Florida [Guepe, at 20] and, hence, no universal  
6 service fund is necessary. Mr. Guepe's estimate [at 12] of a \$15.11 average  
7 monthly cost to serve a residential line, relative to a \$27 revenue benchmark,  
8 would seem to imply precisely that.

9 There is additional confirmation of this strategy from the testimony of Mr. Don  
10 Wood (on behalf of MCI and AT&T). Exhibit DJW-5 of his testimony reports  
11 HAI Model-generated "average monthly cost" estimates for 193 of BST's wire  
12 centers in Florida. Taking Mr. Guepe's recommended revenue benchmark for  
13 BST, 152 of those 193 wire centers (i.e., nearly 79 percent) have average monthly  
14 costs below the benchmark and, hence, would appear not to qualify for universal  
15 service support in Florida. Thus, even with universal service support needs  
16 assessed at the proper point, i.e., at the wire center level, the HAI Model-based  
17 AT&T cost "estimates" would downplay the need for universal service funding in  
18 Florida. The Commission should attach no credence whatsoever to this strategy  
19 and instead focus more closely on true costs, the *price* benchmark, and price-cost  
20 comparisons at the individual residential line level in every wire center.

21

22 **Q. WHAT ELSE IS PROBLEMATIC ABOUT MR. GUEPE'S PROPOSED**  
23 **REVENUE BENCHMARK?**

24

25

1 A. Mr. Guepe's discussion and calculation of the revenue benchmark do not  
2 acknowledge the overall context in which the state universal service support  
3 should be determined. For example, he ignores the link between the size of the  
4 Florida state universal service fund and the amount of support that would be  
5 forthcoming from a federal universal service fund. Mr. Guepe accepts uncritically  
6 the definition of the revenue benchmark that the FCC and the Federal-State Joint  
7 Board have proposed as a device for determining the federal subsidy. The FCC has  
8 itself acknowledged that a majority of state members on the Federal State Joint  
9 Board preferred cost-based to revenue-based benchmarks, and recognized that  
10 using a revenue-based benchmark may be difficult (Universal Service Order, ¶  
11 266). Unfortunately, Mr. Guepe passes up the opportunity to apply proper  
12 economic principles for selecting such a benchmark. I explained above why this  
13 average revenue figure doesn't make sense for determining the level of support  
14 required. Conveniently, every dollar by which Mr. Guepe can increase the  
15 benchmark also reduces the Florida state fund.

16

17 **Q. PLEASE EXPLAIN HOW MR. GUEPE'S TREATMENT OF THE**  
18 **REVENUE BENCHMARK IGNORES THE OVERALL CONTEXT IN**  
19 **WHICH THE FLORIDA UNIVERSAL SERVICE FUND SHOULD BE**  
20 **DETERMINED.**

21

22 A. Even within the issues framework established for this proceeding, it is appropriate  
23 to examine how basing a state universal fund solely on a *state-specific* revenue  
24 benchmark ignores the link between that fund and the size of the *federal* universal  
25 service fund. The idea behind a universal service fund is to provide *explicit*

1 support (rather than *implicit* price-based subsidies) for prices that are set below  
2 cost, particularly in high-cost areas, for the components of residential local  
3 exchange service that make up the universal service program.

4 Once the *total* implicit support nationwide has been determined, the provision  
5 of that support from explicit sources could reasonably be managed by a  
6 combination of a federal and various state funds. How would such a goal be  
7 affected by using one revenue benchmark to set the federal fund and another to  
8 determine the state fund? Unfortunately, *any* revenue benchmark—whether at the  
9 federal or the state level—that is not the same as the proper price benchmark will  
10 necessarily result in funds of the wrong size. Ideally, every ILEC should be able to  
11 fully recover its legitimate universal service support needs from a combination of  
12 federal and state support payments. So, while it is possible for the federal and  
13 state universal service funds to be based on different benchmarks, only  
14 benchmarks formed from the combined prices of supported services would ensure  
15 the establishment of efficiently-sized funds. Mr. Guepe's proposals do not  
16 accomplish this.

17  
18 **Q. HOW DOES MR. GUEPE JUSTIFY HIS REVENUE BENCHMARK?**

19  
20 A. Mr. Guepe's justification for the revenue benchmark is twofold. First, he claims  
21 [at 14-15] that because a carrier that sells local exchange service to a customer will  
22 also likely sell other services to that customer, the full revenue "potential" of that  
23 customer ought to be in the revenue benchmark. Accordingly, he argues that the  
24 revenue benchmark should be the average revenue from all services "a local  
25 telecommunications carrier can expect to receive" [at 14].

1 Q. IN YOUR VIEW, DOES THAT JUSTIFICATION REFLECT SOUND  
2 ECONOMIC ANALYSIS?

3

4 A. No, this reasoning confuses a subsidy to a service with a subsidy to a customer,  
5 and when applied to other circumstances, the argument has obvious absurd  
6 implications. Suppose a person buys water, snow removal, and trash recycling  
7 services from the same source, say, his town's municipal authority. Suppose also  
8 that, for whatever reasons, water is available from the town at a subsidized rate  
9 (price below cost). Does that mean that the amount of subsidy received by that  
10 person for water cannot, or should not be, calculated without taking account of his  
11 purchases of snow removal and trash recycling as well? In that event, is it ever  
12 possible to establish that any given service out of the three that he purchases is  
13 subsidized?

14 In economic theory, a cross-subsidy is defined and measured on a service-by-  
15 service basis. When determining whether the components of universal service are  
16 receiving a subsidy, it is not appropriate to involve other services that are not  
17 connected to universal service even though the same carrier may provide both sets  
18 of services. Under competition, a customer may certainly opt to purchase local,  
19 long distance, and enhanced services from different service providers, even though  
20 the same telephone line will serve as a conduit for all those services. For example,  
21 even now I can use the same telephone line that I purchase from my local carrier to  
22 receive services from other carriers of internet and satellite services. Mr. Guepe's  
23 reference [at 15] to the "one-stop-shopping environment" is a red herring that  
24 confuses *uses* of the loop with *cost causation*, the only proper basis for pricing.

25 Finally, the "average revenue from all sources" makes even less sense when

1 one considers that customers do not all purchase the same services beyond the  
2 components of universal service. While all customers may be said to purchase the  
3 components of universal service, they do not all purchase the other services  
4 available. For example, it is well known to telephone demand analysts that the  
5 majority of consumers do not use long distance services, and that subscribership to  
6 most vertical services (barring the two or three most popular among them) is  
7 generally quite low. In stating [at 15] that "... consumers do not subscribe to  
8 phone service simply to make and receive local calls," Mr. Guepe overlooks this  
9 empirical reality. Therefore, within a state, each customer's average revenue from  
10 all services may be quite different even though the average revenue from the  
11 universal service components may not.

12

13 **Q. WHAT IS MR. GUEPE'S SECOND JUSTIFICATION, AND IS THAT**  
14 **BASED ON SOUND ECONOMIC ANALYSIS?**

15

16 A. Mr. Guepe's second justification (echoed by Mr. Gillan at 7-8) is that the facilities  
17 used to provide local exchange service can also be used to provide other services.  
18 Therefore, according to Mr. Guepe, if the cost of those facilities can be included in  
19 the cost of universal service, the revenues associated with services carried over  
20 those facilities should be included in the revenue benchmark as well. This  
21 reasoning is exactly the kind of justification that lacks a firm economic  
22 underpinning because it relies solely on the premise that the loop is a source of  
23 joint or common cost, an idea widely discredited by economists. There is simply  
24 no economic rationale for counting revenues from all sources simply because the  
25 loop that carries universal service components can also be the channel for

1 receiving other services.

2

3 **Q. WHAT WOULD BE THE PRACTICAL IMPACT OF MR. GUEPE'S**  
4 **PROPOSED REVENUE BENCHMARK OF \$27 FOR BST?**

5

6 A. Mr. Guepe's calculation of the revenue benchmark is palpably an effort to "set the  
7 bar" so high that a large number of lines (or wire centers) otherwise eligible for  
8 universal service support would fail to qualify for that support. Even going by Mr.  
9 Guepe's calculations [at 18], removal of all but the universal service components  
10 from his benchmark would very likely produce a figure more like \$19 in Florida.  
11 If the true price benchmark is at or below this figure, it is clear to see just how  
12 much more of a bar Mr. Guepe proposes setting for qualifying for universal service  
13 support. For example, even with the downward-biased wire center-specific  
14 average monthly cost per line estimates produced by the HAI Model, the number  
15 of wire centers that would fail to qualify for universal service support with a \$19  
16 revenue benchmark drops to 123 (about 63 percent). Clearly, with costs and price  
17 benchmarks set at the proper levels, the percentage of wire centers qualifying for  
18 universal service support in Florida could be significantly higher. Unfortunately,  
19 as long as AT&T insists that only aggregate revenues and costs matter for  
20 determining the need for a state universal service fund, the bias in determining the  
21 universal service fund size would simply be exacerbated.

22

23 **Q. DO YOU ACCEPT MR. GUEPE'S REASONING [AT 16] THAT FAILING**  
24 **TO INCLUDE OTHER REVENUES IN THE COMPARISON COULD BIAS**  
25 **THE UNIVERSAL SERVICE FUND IN THE DIRECTION OF BEING**

1       **"TOO LARGE?"**

2

3   A. Not at all. I have explained why proper economic principles require that the price-  
4   cost comparison to determine support needs be done exclusively for universal  
5   services. In fact, the opposite charge applies to Mr. Guepe's approach: not that  
6   comparing only the revenues of local exchange service (at the aggregate level)  
7   with costs would result in a fund that is too large, but that failure to "do it right"  
8   would lead to a fund that is too small. Mr. Guepe's approach would inevitably  
9   disregard the fundamental link between federal and state support shares and lead to  
10   too small a state fund (in the present instance, no fund at all!).

11

12   *Consequences of an Improperly sized Universal Service Fund.*

13   **Q. MR. GUEPE SUGGESTS [AT 16-17] THAT A UNIVERSAL SERVICE**  
14   **FUND THAT WAS "TOO LARGE" WOULD HARM CONSUMERS**  
15   **BECAUSE PRICES FOR TELECOMMUNICATIONS SERVICES WOULD**  
16   **BE TOO HIGH AND WOULD NEVER BE COMPETED AWAY. DO YOU**  
17   **AGREE?**

18

19   A. No, I disagree. While social welfare would be greatest if the total size of the  
20   universal service fund (interstate as well as intrastate) were exactly correct—i.e.,  
21   sufficient to provide complete recovery of the implicit subsidy for universal  
22   service from an explicit mechanism—the damages from a fund that was too large  
23   would be competed away. If the fund were too large at the outset, ALECs that  
24   were less efficient than the ILEC could match the ILEC's price, collect their  
25   universal service fund payments and still make profits.

1           Consider Mr. Gillen's example [at 8]. Suppose an ALEC had higher costs than  
2           BellSouth (say \$22 per month). The correct per-line support from a universal  
3           service fund in this example would be \$5 per line per month (\$20 cost less \$15  
4           price). Suppose by mistake the fund were set at \$8 per line per month. Then the  
5           inefficient ALEC could price basic local exchange service at \$15, collect \$8 from  
6           the universal service fund and still make a profit, despite the fact that its costs are  
7           (as assumed) \$22 per month.

8           Of course, with a portable universal service fund of \$8 per month, BST (and  
9           other efficient competitors) could compete by reducing their price to end users.  
10          BST's profits would be higher if it captured the retail customer (and the universal  
11          service fund payment) at any retail price equal to \$12 or more: at a retail price of  
12          \$12 per month, BST would just break even in this example, having revenues of  
13          \$12, a universal service fund payment of \$8 and economic costs of \$20.

14

15 **Q. WOULD A UNIVERSAL SERVICE FUND THAT WAS TOO LARGE**  
16 **HAVE NO NEGATIVE CONSEQUENCES?**

17

18 **A.** No. A fund that was too large would inefficiently distort consumers' choices  
19          between (subsidized) universal services and all other (subsidizing)  
20          telecommunications services. Consumers who valued basic local exchange service  
21          less than the economic cost of supplying the service would be induced to subscribe  
22          to the service, and customers would inefficiently reduce their purchases of all non-  
23          universal telecommunications services. Thus, it is important to size the fund  
24          correctly; however it is not true that a fund that was too large would cause  
25          customers to pay more in total for telecommunications services or that it amounts



1 that customers pay for local exchange service would be somehow quarantined  
2 from the forces of competition.

3

4 **Q. WHAT WOULD BE THE CONSEQUENCES OF AN INSUFFICIENT**  
5 **UNIVERSAL SERVICE FUND?**

6

7 A. An insufficient universal service fund would have the effect of preventing efficient  
8 competition and harming economic efficiency. Without sufficient universal  
9 service support, a competitor's (i.e., ALEC's) incentive to provide local service to  
10 high cost areas would be diminished. If, as a consequence, an ALEC that could  
11 provide service at a lower cost than the incumbent should choose not to do so,  
12 there would be sacrifices of both allocative and technical efficiency. To be  
13 induced to provide such service, the ALEC must be not only more efficient than  
14 the ILEC but sufficiently more so in order for it to overcome the disincentive to  
15 serve created by an insufficient universal service fund.

16

17 **Q. PLEASE PROVIDE AN EXAMPLE OF HOW THIS COULD HAPPEN.**

18

19 A. Assume, in the example I provided above, that the per-line support available is  
20 only \$4 per line, not \$5 (perhaps because the federal fund is insufficient, or  
21 because the state fund does not fully recover the difference (per line) between the  
22 total implicit subsidy for universal service and the amount of federal support  
23 available, or both). In this scenario, despite being more efficient than the ILEC,  
24 the ALEC could well be dissuaded from providing universal service. With a \$4  
25 support per line and a \$15 price, the ALEC would voluntarily enter only if its

1 incremental cost were \$19 rather than \$20. In other words, it would have to be not  
2 merely more efficient than the ILEC but sufficiently more so (approximately 5%  
3 more than in the example above).

4

5 **Q. COULD THERE BE OTHER ADVERSE EFFECTS OF AN**  
6 **INSUFFICIENT FUND?**

7

8 A. Yes. Continuing with this example, because of its carrier of last resort obligations,  
9 the ILEC would have to continue providing universal service despite making a loss  
10 of \$1 per line. While in the past, this shortfall would likely have been made up  
11 from other revenue sources, such recourse will no longer be available to the same  
12 degree for two reasons. First, implementation of a universal service fund—even  
13 one that is insufficient—would appropriately be accompanied by mandatory and  
14 commensurate reductions in the ILEC's revenues from other services. Second, as  
15 the ILEC faces general competition, the degree to which it could rely on revenues  
16 from those other services to mitigate its universal service losses would also be  
17 reduced.

18

19 **Q. PLEASE SUMMARIZE THE CONSEQUENCES OF HAVING**  
20 **INSUFFICIENT UNIVERSAL SERVICE SUPPORT.**

21

22 A. An insufficient universal service fund would have two serious consequences for  
23 economic welfare and public policymaking. First, by reducing the incentive of  
24 more efficient competitors to provide universal service, the cost to society of  
25 providing universal service would not be minimized and economic efficiency and

1 welfare could suffer. The degree to which such incentives are reduced would be a  
2 function of the amount by which the per-line support *actually* available falls short  
3 of the per-line support that would be available from a *sufficient* universal service  
4 fund. Such a disincentive to compete would be especially acute in higher cost and  
5 rural areas where competing carriers would have to exceed the efficiency of  
6 incumbent carriers by even wider margins.

7 Second, an insufficient universal service fund could inflict (especially in high  
8 cost areas) universal service-related losses that ILECs would find increasingly  
9 difficult to offset with revenues from other services. As a consequence, those  
10 carriers could then be seriously impaired in their ability to undertake greater  
11 network investment, improve service quality, and actively seek out and promote  
12 technological advancements, particularly in high-cost areas. Again, economic  
13 efficiency and welfare would be the big loser.

14

15 ***There is a need for a Florida Universal Service Fund***

16 **Q. MR. GUEPE CONCLUDES [AT 20] THAT THERE IS NO NEED FOR A**  
17 **STATE UNIVERSAL SERVICE FUND. IS A STATE UNIVERSAL FUND**  
18 **NEEDED IN FLORIDA?**

19

20 **A.** Yes. Converting the implicit subsidies currently contained in various supporting  
21 services into explicit support for the supported services requires the collective  
22 efforts of both federal and state regulators. In proposing rules for sizing the federal  
23 universal service fund, the FCC has already indicated the fraction of the current  
24 implicit subsidies that would likely be recovered in the federal jurisdiction. By  
25 design, the federal share will be insufficient to fully recover those implicit

1 subsidies. The FCC's current proposal is to provide federal support calculated as  
2 25 percent of the extent to which the cost per line exceeds a revenue benchmark of  
3 \$31 per line per month. Even if the revenue benchmark is chosen correctly (and  
4 my testimony shows why it is not), it is clear that the federal share will be a  
5 relatively small fraction of the required support that should come from federal  
6 sources. It is, therefore, imperative that the size of the state fund be determined on  
7 the basis of properly estimated wire center-specific universal service costs and the  
8 combined price of all supported services. Otherwise, the state fund would be of  
9 the wrong size, and either over- or underfunding (with attendant efficiency losses)  
10 could result.

11

12 **Q. WHAT WOULD BE THE CONSEQUENCES OF NOT ESTABLISHING A**  
13 **FLORIDA UNIVERSAL SERVICE FUND?**

14

15 A. Not establishing a Florida fund could have serious adverse consequences for  
16 carriers and consumers alike in the state. Federal and state laws and subsequent  
17 actions by regulators (including this Commission) have laid the foundations for  
18 telecommunications competition at all levels in Florida. This process is  
19 irreversible, and all carriers are going ahead with their business plans to adjust to  
20 and participate in the new open market reality. ILECs are seeking to enter into the  
21 provision of long distance service, and carriers that hitherto specialized in long  
22 distance service are seeking out opportunities as providers of local exchange  
23 services. There is frequent talk of the inevitability of "convergence" or "service  
24 packaging" so as to be able to satisfy "all-distance" telecommunications needs of  
25 consumers. In this environment, as entry barriers are lowered or removed by

1 network unbundling, resale, and interconnection agreements, competitive entry  
2 will most likely target services and consumers from whom the highest margins are  
3 currently earned. Usually, this means consumers (mainly businesses) with high  
4 volumes of demand or those for whom the cost to serve is relatively small  
5 compared to the prices they pay (mainly urban consumers). Thus, the two  
6 traditional subsidy streams that had sustained universal service in the past will be  
7 under great pressure as competitors take aim at the services that generate those  
8 subsidies. Without recourse to alternative sources of support, providers of  
9 universal service will be forced to choose between becoming uncompetitive or  
10 reneging on their universal service obligations. As dire as this may seem for  
11 carriers, the consequences for Florida consumers could be worse. The first  
12 casualty would be universal service itself, as consumers in high-cost areas would  
13 no longer be able to receive service on demand because carriers would be unable to  
14 recover the higher costs associated with those consumers. Florida could very  
15 possibly be divided between telecommunications haves and have-nots. For  
16 precisely this reason, the *status quo* is not an option. Like all other states, Florida  
17 telecommunications policy must adapt to the new competitive world. In order to  
18 protect the tradition of universal service, it must migrate to an external source of  
19 funds for universal service, and free all carriers from the burden of recovering their  
20 universal service costs in their rates even as they face intense competition. Stated  
21 another way, the days of implicit subsidies for universal service in Florida are  
22 numbered.

23

24 **Q. WOULD YOU PLEASE SUMMARIZE YOUR VIEW OF MR. GUEPE'S**  
25 **SUBSIDY CALCULATION?**

1 A. Yes. A service is subsidized in economics, for a firm that at least breaks even, if  
2 the service's total service incremental cost exceeds the service's incremental  
3 revenue. If the firm earns as much, or more, in total revenue as it incurs in total  
4 cost (the "break even" condition), then the only way it can price one of its services  
5 below cost is by increasing prices for one or more of its other services. Therefore,  
6 even if Mr. Guepe's estimates of aggregate costs and revenues were acceptable  
7 (which they are not), his figures are, in fact, consistent with the presence of a  
8 subsidy to residential local exchange service. To determine whether residential  
9 local exchange service *as a whole* is subsidized, it is necessary to compare the cost  
10 of *that service* with *only* the revenue attributable to it. Unfortunately, Mr. Guepe's  
11 "kitchen sink" approach leads him to include revenues from other services as well  
12 in his aggregate revenue estimate. This is plainly and simply incorrect. Without  
13 breaking down costs and revenues by their *causal sources*, it is impossible to tell  
14 from the aggregate figures whether or not a subsidy exists and to what service or  
15 group of services. More fundamentally, the logic of Mr. Guepe's approach is  
16 completely circular. Having already included the implicit subsidies on the revenue  
17 side of the comparison (and, thus, having inflated revenues relative to costs), he  
18 concludes that there is no subsidy. Frankly, I would be very surprised if he found  
19 otherwise.

20 Second, the entire thrust of universal service reform is to move from provision  
21 of support to *all* residential and business customers to only those for whom the  
22 cost to serve exceeds the price of supported services. The Universal Service Order  
23 makes clear its interest in only supporting customers in high-cost areas or those  
24 below a certain affordability threshold. This standard clearly requires knowing  
25 whether a subsidy is needed on *an individual line* basis. That is, a subsidy would

1 be required only if the cost to serve a *given* line were to exceed the price paid to  
2 obtain that line. Only such an approach could properly steer the universal service  
3 program in the direction of supporting only customers in high-cost areas or those  
4 unable to afford service. Accordingly, Mr. Guepe's approach of comparing  
5 aggregate revenues and costs to determine the need for support is fundamentally  
6 incorrect.

7 Third, Mr. Guepe's approach is designed to mask genuine instances of subsidy  
8 where they exist. Suppose, for example, there are three customers, one of whom  
9 lives in a high-cost area. Disregarding other services for the moment, assume the  
10 price they all pay for universal service is \$20 per month. Now, suppose that the  
11 cost to serve two of the customers is \$15 each and the corresponding cost for the  
12 customer in the high-cost area is \$28. Properly applying economic principles for  
13 detecting subsidy, the third customer would clearly be identified as being in need  
14 of support. However, a comparison of aggregate revenues (\$60) and costs (\$58)  
15 will fail to show this; in fact, such a comparison would indicate no need for  
16 support.

17 To summarize, Mr. Guepe's approach confuses the real situation with respect  
18 to support needs at two levels. First, as the example above demonstrates, his  
19 approach can easily mask the need for support in high-cost areas or for customers  
20 below a certain affordability threshold. Second, by adding revenues from other  
21 services into the comparison, that masking effect would only be expanded, leaving  
22 a system of implicit support flows among services instead of making all support  
23 flows explicit.

24

25

1 **GEOGRAPHIC AGGREGATION**

2

3 **Q. MR. GUEPE [AT 11] AND MR. GILLAN [AT 20] BOTH ASSERT THAT**  
4 **COSTS SHOULD BE AGGREGATED FOR A UNIVERSAL SERVICE**  
5 **FUND TO THE SAME GEOGRAPHIC BASIS ON WHICH UNES ARE**  
6 **PRICED. DO YOU AGREE?**

7

8 A. No. In principle, all three relevant costs and prices—retail prices, wholesale prices  
9 and universal service costs—should be measured and determined at a consistent  
10 geographic level of aggregation which is as small as possible, consistent with the  
11 need to control transactions costs. Thus, all prices—retail and wholesale—should  
12 be permitted to differ over any geographic unit for which costs or demand  
13 conditions differ sufficiently to warrant differences in market prices. If wholesale  
14 and retail prices were set in this fashion, then calculating the required universal  
15 service fund size at this level of geographic aggregation would make sense because  
16 the UNE prices that ALECs must pay in a given wire center—and the ILEC retail  
17 prices against which they compete—would be based on costs calculated  
18 consistently with the universal service payment they would receive for serving  
19 customers in that wire center. Note that inconsistency in this respect is not  
20 necessarily anti-competitive. Because the Universal Service Fund is portable (and  
21 whichever ALEC or ILEC serves the customer receives the same payment from  
22 the fund), it doesn't matter for competitive equity whether the fund is too big or  
23 too small in a particular region.

24 However, it makes no sense to measure the subsidy to universal service at a  
25 statewide level of geographic aggregation. Because retail prices are set at



1 statewide averages and costs vary significantly across the state, retail local  
2 exchange services are subsidized in some high-cost wire centers with contribution  
3 that comes from the same services in some low-cost wire centers. To induce  
4 voluntary entry by ALECs—and to remove implicit subsidies from the ILEC's  
5 prices—universal service support must, therefore, be higher in those high-cost wire  
6 centers and should be unnecessary in low-cost wire centers. To mix high-cost and  
7 low-cost wire centers together for sizing the universal service fund would only  
8 perpetuate the current flow of implicit subsidy.

9

10 **Q. MR. GUEPE ASSERTS [AT 19] THAT IT IS APPROPRIATE TO SUM**  
11 **POSITIVE AND NEGATIVE SUBSIDIES ACROSS ALL WIRE CENTERS**  
12 **TO CALCULATE THE OVERALL SUBSIDY REQUIREMENT. DO YOU**  
13 **AGREE?**

14

15 A. No. Mr. Guepe reasons that

16 until competition drives prices toward costs in these exchanges where a  
17 surplus exists and cost based unbundled network elements are not only  
18 deaveraged but easily available for use, it is appropriate to determine  
19 the total subsidy by netting the revenue and cost differences across all  
20 wire centers. It is not appropriate to look only at the wire centers that  
21 have a negative contribution ... and ignore the revenues from those  
22 wire centers that have a positive contribution. [at 19]

23 Obviously, such a calculation would hide subsidies to high-cost wire centers,  
24 funding them implicitly by contributions from low-cost wire centers. A universal  
25 service fund based on such a calculation would provide inadequate incentives for

1 carriers to serve high-cost exchanges and would overcompensate carriers for  
2 serving low-cost exchanges. Such a plan would be a windfall for carriers that  
3 intend to serve primarily low-cost metropolitan areas and would correspondingly  
4 be a disaster for carriers that chose or were required to serve high-cost rural areas.

5

6 **Q. MR. GILLAN DISCUSSES [AT 20] AN EXAMPLE THAT PURPORTS TO**  
7 **ILLUSTRATE "WHY THE SAME GEOGRAPHIC ZONES SHOULD BE**  
8 **USED FOR NETWORK ELEMENT PRICES AND UNIVERSAL SERVICE**  
9 **SUPPORT." DO YOU AGREE WITH HIS INTERPRETATION OF THIS**  
10 **EXAMPLE?**

11

12 A. No. In Mr. Gillan's example, there are two wire centers: a high-cost wire center  
13 with a cost of \$30 per month and a low-cost wire center with costs of \$10. Mr.  
14 Gillan assumes that UNE prices are the same across the two wire centers (at \$20),  
15 and I assume that retail prices are identical across the two wire centers (at \$15).  
16 This assumption is justified because, in Florida, retail prices are averaged across  
17 the state and prices for UNEs are set at state-wide averages. If they were not,  
18 ALECs would be unable to compete efficiently in high-cost rural areas (where  
19 deaveraged UNE costs would be high but retail prices would be average) and  
20 would be artificially induced to compete in low-cost urban areas (where  
21 deaveraged UNE costs would be low but retail prices would be average).

22 Given Mr. Gillan's and my assumed figures, a universal service fund based on  
23 geographically averaged wire center costs and prices would pay \$5 per line in both  
24 wire centers, while a deaveraged universal service fund would pay \$15 in the high-  
25 cost wire center and nothing in the low-cost wire center.

1           While Mr. Gillan's preferred solution of averaging the subsidy calculation  
2 across wire centers does permit the ALEC to break even in both the high-cost and  
3 low-cost wire center in this example, it does not work as well for the ILEC. Under  
4 these assumptions, the ILEC charges a \$15 retail price and receives a \$5 universal  
5 service fund payment in both the high-cost and low-cost wire centers, which leaves  
6 it \$10 short in the high-cost wire center and \$10 ahead in the low-cost wire center.  
7 As long as the ILEC's costs vary across wire center and retail and wholesale prices  
8 do not, there is no reason necessarily to size the universal service fund at the same  
9 level of aggregation as UNEs are priced.

10

### 11 **The HAI Model is the Wrong Choice for Estimating Costs**

#### 12 **Q. HOW WOULD THE COSTS PRODUCED BY THE HAI MODEL AFFECT** 13 **THE CALCULATION OF THE FLORIDA UNIVERSAL SERVICE FUND?**

14

15 A. The HAI Model, Release 5.0a, (a direct successor to the Hatfield Model)  
16 underestimates the forward-looking incremental cost of network facilities, often  
17 seriously. Mr. Guepe's insistence that the same cost methodology be employed for  
18 calculating both the cost of network facilities and for sizing the universal service  
19 fund merely confirms my belief that his (and AT&T's) intent is to make the  
20 universal service fund as small as possible and to minimize the contribution  
21 obligations of interexchange carriers like AT&T. The combination of a seriously  
22 overestimated revenue benchmark and seriously underestimated costs could go a  
23 long way to contrive precisely that result. The Commission should, therefore,  
24 reject the methodology proposed by Mr. Guepe in favor of sizing the state  
25 universal service fund in accordance with correct economic principles.

1 **Q. HOW SHOULD THE COST OF UNIVERSAL SERVICE BE**  
2 **DETERMINED FOR THE PURPOSE OF ESTABLISHING A STATE**  
3 **FUND IN FLORIDA?**

4  
5 A. The cost of universal service should be determined separately for each wire center.  
6 The cost estimated for that purpose should be that of an efficient service provider  
7 using forward-looking technologies and operating practices. The specific cost  
8 *model* adopted for that purpose, however, should reflect actual serving conditions  
9 in each wire center, use realistic network design and financial parameters, and  
10 recognize that the primary components of universal service are retail (rather than  
11 wholesale) services. The HAI Model is unsuitable on all these counts. It is my  
12 understanding that the BCPM Model (Release 3.1) is far better suited for the  
13 purpose of estimating universal service costs.

14  
15 **Q. WHAT WOULD BE THE CONSEQUENCE OF FAILING TO PROPERLY**  
16 **ESTIMATE UNIVERSAL SERVICE COSTS?**

17  
18 A. The most important consequence of that failure would be a universal service fund  
19 of the wrong size. Underestimated costs are just the mirror image of overestimated  
20 revenue benchmarks: both lead to inefficient underfunding of universal service.  
21 Given the HAI Model's tendency to underestimate costs, my fear is that any use of  
22 that model will result in finding that universal service is not presently subsidized in  
23 some wire centers when, in fact, it is. With an insufficient fund, competitive entry  
24 in high-cost areas even by more efficient carriers will be discouraged. Moreover,  
25 incumbent carriers that have universal service obligations presently would not

1 receive enough support and would sustain losses that, in the face of increasing  
2 competition and thinning margins for their other services, would become  
3 increasingly difficult to offset. Those carriers would, over time, find it  
4 increasingly difficult to undertake new network investments, improve service  
5 quality, or promote new services and technologies.

6

## 7 **Summary and Conclusions**

### 8 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS AND** 9 **RECOMMENDATIONS.**

10

11 A. Mr. Guepe's proposal to use a seriously overestimated revenue benchmark (based  
12 on a "kitchen sink" approach to accounting for the revenues associated with  
13 universal service) and the seriously underestimated costs produced by the HAI  
14 Model will undoubtedly result in too small a state universal service fund in  
15 Florida. In addition, any adherence to Mr. Guepe's suggestion for determining  
16 whether a subsidy exists by comparing aggregate revenues with aggregate costs  
17 will likely have the absurd conclusion that *no* state universal service fund is  
18 necessary in Florida. Nothing could be more detrimental for telecommunications  
19 customers in Florida than that conclusion.

20

21 The sizing of the state fund cannot be done outside the overall context in which  
22 the federal fund plays an important part. That task will certainly be made even  
23 harder by any failure to use the proper economic basis to calculate the subsidy  
24 associated with universal service. One such failure would be to adopt Mr. Guepe's  
25 view that the cost of the loop is common to both components of universal service  
and other services.

1 My recommendation to the Commission is to reject the HAI Model as the basis  
2 for calculating the cost associated with universal service. If a cost proxy model is  
3 to be used, the BCPM represents a better source for forward-looking incremental  
4 costs, and should be used instead of the HAI Model. At the same time, as the  
5 process of setting up a universal service fund in Florida gets under way, it would  
6 be necessary to be mindful of the following two additional issues:

- 7 1. The implicit subsidy at the state level should be determined as the difference  
8 between the cost associated with the Florida legislature-defined components of  
9 universal service and the combined price of those services. Revenues from  
10 other services should not be included for making this comparison.
- 11 2. The only level of geographic aggregation that is relevant for establishing and  
12 sizing a state universal service fund is that of the wire center. The cost of  
13 providing universal service and the need for any universal service support  
14 should both be determined at that level.

15

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

17 A. Yes.

18

19

20

21

22

23

24

25

1 MS. KEYER: And I would like to have exhibit  
2 WET-1 marked for identification.

3 CHAIRMAN JOHNSON: It will be marked as 68.

4 BY MS. KEYER (Continuing):

5 Q Doctor Taylor, have you prepared a summary of  
6 your testimony today?

7 A Yes, I have.

8 Q Would you like to give that to the commissioners?

9 A Sure. I'll be brief. My purpose was to address  
10 two economic issues raised by Mr. Gillan and Mr. Guepe,  
11 issues that go to not how you calculate costs for universal  
12 service but what costs you calculate.

13 The two issues are that Mr. Gillan and Mr. Guepe  
14 would calculate the cost of universal service as a cost of  
15 all services that use the local loop, so in their view, a  
16 subsidy calculation would compare benchmark revenue and  
17 costs for all services that use the loop.

18 And the second point I would address is that they  
19 assert that costs for universal service should be measured  
20 geographically by averaging together both high-cost and  
21 low-cost areas done at the same level of aggregation as was  
22 used to set prices for unbundled network elements. I think  
23 both of those assertions are wrong.

24 I won't repeat what Mr. Danner said earlier. The  
25 first assertion that we should set -- measure costs for all

1 services that use the local loop, what is wrong with that?  
2 What is wrong with the argument that because the average  
3 residential customer is profitable to serve, measuring all  
4 of the services that he takes, why do we need a subsidy?  
5 The average customer is profitable to serve.

6           There are three reasons why, and to answer that,  
7 we really don't have to address at all the question of loop  
8 as a common cost, so we won't have to go through that  
9 again. My three reasons: First, you can't mix together the  
10 different services that customers buy because, if you did,  
11 you would not be making implicit subsidies explicit. You  
12 would still be in a situation in which your average  
13 residential customer is paying more than the cost to serve  
14 for toll or for vertical services and less than the cost to  
15 serve for the loop.

16           The second reason is that it distorts competition  
17 for optional services. If one firm is required to provide  
18 a loop for less than the cost of producing the loop and  
19 other firms are not, then why would you want to be the firm  
20 that has to build the loop? Much better just to sell toll  
21 service. Let someone else take the loss on the loop. You  
22 provide the customers toll service. You can compete for  
23 those optional services at an advantage compared with  
24 whichever poor ILEC is stuck having to provide the loop at  
25 a price below the cost of the loop.



1           And then finally, such a policy discourages entry  
2 into local service. Who would -- what company would want  
3 to enter the local service market to serve a profitable  
4 customer when they could serve the profitable customer  
5 without buying UNEs or without building their own loop and  
6 merely provide the profitable services?

7           My second point is really the first point just  
8 done geographically; that is, the universal service fund  
9 whose costs we are busy trying to calculate here, should  
10 flow support from low-cost to high-cost areas. It's wrong  
11 to average together high- and low-cost areas when what we  
12 are trying to do is identify and make explicit subsidy  
13 flows, in this case from low-cost urban to high-cost rural  
14 areas. And why? For the same sorts of reasons. It  
15 distorts entry. Who would want to enter -- provide service  
16 in rural areas where you can't make enough money selling  
17 the loop in rural areas to cover your costs? That's why we  
18 want a universal service fund that will help encourage  
19 entry into rural areas.

20           It is similarly anti-competitive, if one firm is  
21 required to serve in rural areas and others are not. The  
22 fact that unbundled network elements are geographically  
23 averaged in Florida doesn't mean that universal service has  
24 to be calculated at a statewide average basis. I mean,  
25 first, because it removes the whole reason we are doing the

1 calculation; but second is because we are in a second-best  
2 world to begin with. The reason unbundled network elements  
3 are done on a statewide basis is because retail rates are  
4 done on a statewide basis. The best thing would be to do  
5 all rates and costs on a wire center level basis if those  
6 costs differ a lot, but that's silly. I mean it's got too  
7 much -- costs are too high to try to set different rates  
8 for every wire center, so we don't do that for retail  
9 prices. We don't do that for unbundled network elements,  
10 and nothing requires that because we average UNES and  
11 retail prices that we must somehow calculate costs at a  
12 statewide average.

13 So the bottom line is for economic efficiency but  
14 mainly for efficient competition, costs should be  
15 calculated not at the level of the customer and not at the  
16 level of the state but at the level of the service, and  
17 that concludes my summary.

18 MS. KEYER: Doctor Taylor is available for cross.

19 MR. LAMOUREUX: I actually just have a couple of  
20 questions based on his summary.

21 CROSS EXAMINATION

22 BY MR. LAMOUREUX:

23 Q I think I heard you say, Doctor Taylor, in your  
24 summary that the best thing for all costs would be to be  
25 able to vary the costs according to whatever unit the cost

1 for those things vary?

2 A Whatever causes costs to vary, yes. I mean let's  
3 be frank, costs do vary by wire center. The question is,  
4 is it worth measuring the differences? And it may not be  
5 if we are not going to make use of the differences.

6 Q You agree with me that the cost of loops vary by  
7 wire center, would you not?

8 A Sure.

9 Q In fact, they can vary fairly substantially by  
10 wire center, can't they?

11 A Certainly even costs for loops of the same length  
12 can vary by wire center.

13 Q So under your analysis then, the best thing would  
14 be to be able to vary the cost of purchasing loops by wire  
15 center; would you agree with me on that?

16 A I'm sorry, do you mean the price?

17 Q Cost and, therefore, price of purchasing loops by  
18 wire center.

19 A And by purchasing loops, do you mean both retail  
20 and wholesale?

21 Q Yes.

22 A Yes, that would be first best, unless  
23 transactions costs outweigh the benefit of doing that.

24 MR. LAMOUREUX: I have no further questions.

25 CHAIRMAN JOHNSON: Staff.

1 MR. COX: Staff has no questions.

2 CHAIRMAN JOHNSON: Commissioners.

3 COMMISSIONER CLARK: Yes. Mr. Taylor, I wanted  
4 to ask you -- well, first of all, are we always going to  
5 need a universal service fund, do you think?

6 MR. TAYLOR: Are you always going to need one?  
7 Yes, I guess you will under the assumption that costs in  
8 some areas, let's call them rural areas, are higher than we  
9 can expect or you would want customers to pay to have  
10 access to the network; so, yes, you will always have the  
11 universal service fund.

12 COMMISSIONER CLARK: But I take it it is  
13 something we'll have to address periodically.

14 MR. TAYLOR: That's certainly true. As costs  
15 change, it would have to be adjusted, but that's true of  
16 almost everything you do in this room. I mean the prices  
17 you set are cost based. For unbundled network elements,  
18 costs change, those change.

19 The big features that we are talking about for  
20 universal service though aren't, I think, anywhere near as  
21 subtle as small changes in costs for changes in unbundled  
22 network element prices. These are really the fact that,  
23 you know, loop costs vary by factors of 10 or 20 or 30 from  
24 urban areas to the tops of mountains or the middles of  
25 swamps, and it's capturing that difference that I think is

1 the big picture in universal service, and that probably  
2 won't change much.

3 COMMISSIONER CLARK: I had a question on page 19  
4 of your testimony.

5 MR. TAYLOR: Yes.

6 COMMISSIONER CLARK: And it just inspired a  
7 question, I guess. If you have -- Suppose we set the  
8 universal service fund and a competitor is -- the ALEC is  
9 providing the service through resale.

10 MR. TAYLOR: Through resale, okay.

11 COMMISSIONER CLARK: Who gets the subsidy, the  
12 explicit subsidy?

13 MR. TAYLOR: Well, my understanding, certainly at  
14 least for the interstate piece of it, is if it's by resale,  
15 the ILEC that is providing the resold service gets the  
16 subsidy. If it's an unbundled network element loop that is  
17 purchased, that's thought to be the equivalent of being a  
18 facilities-based provider, so in that case it would be the  
19 CLEC -- the ALEC that gets the subsidy.

20 COMMISSIONER CLARK: I had a question about  
21 vertical services, some of the vertical services, and I  
22 understand that you indicate we should determine what  
23 services cost, not what customers cost.

24 MR. TAYLOR: Yes.

25 COMMISSIONER CLARK: But there are some services

1 you -- Aren't there some services you have to be the  
2 provider of the local service in order to be able to  
3 provide? And if that's the case, why shouldn't we include  
4 that in the total definition of service?

5 MR. TAYLOR: For one very good reason. Let's --  
6 And the reason is because the customer doesn't have to buy  
7 the additional service, and the way I think of it is if you  
8 get a loop from, say, BellSouth, you can still get some  
9 services from somebody else. You can get AT&T's toll  
10 service. You can get somebody's -- but it's hard to get  
11 AT&T's call waiting service if you are a BellSouth local  
12 customer.

13 COMMISSIONER CLARK: Right.

14 MR. TAYLOR: But the point is, you can be a  
15 BellSouth local customer and not buy call waiting.

16 COMMISSIONER CLARK: Okay.

17 MR. TAYLOR: If -- Take a different example.  
18 If whenever BellSouth supplied local service they supplied  
19 call waiting too, that is, it was bundled together in the  
20 only package that people could buy, then you'd be right,  
21 then there is no point in distinguishing between the costs  
22 of call waiting and local service or pricing them  
23 differently because everyone who bought one had to buy the  
24 other. But that isn't the case even for a service like  
25 call waiting which by assumption we've said, if you have

1 BellSouth local, you've got to have BellSouth call waiting.  
2 You still want to have those two services priced at the  
3 cost of providing those two services so people will have --  
4 customers will have the right signal for, do I really want  
5 to pay an extra buck for call waiting?

6 COMMISSIONER CLARK: Okay. Does that mean then  
7 if we do an explicit fund based on the cost of basic local  
8 service and we allocate all loop costs to the basic service  
9 as opposed to the family of services, should we also  
10 require that those services that are not -- have to be  
11 provided by the local exchange provider, have to be  
12 provided at cost plus some markup? Do we then sort of  
13 retake regulation over those services and require them to  
14 be at cost? I mean it strikes to me, if you give them the  
15 implicit subsidy that takes into account loop and then  
16 allow them to charge whatever they want for the vertical  
17 services you've just increased their revenues.

18 MR. TAYLOR: Well, you won't just increase their  
19 revenue because, by definition, this universal service fund  
20 will be revenue neutral, so that isn't what is going to  
21 happen.

22 COMMISSIONER CLARK: Well, but I guess -- all  
23 right.

24 MR. TAYLOR: My concern -- I understand your  
25 concern that if we have, say, call waiting which is if

1 BellSouth is the local supplier, BellSouth -- the customer  
2 then has no choice, hypothetically, but to buy her call  
3 waiting from BellSouth.

4 COMMISSIONER CLARK: Right.

5 MR. TAYLOR: Should that then be regulated?

6 Well, I don't think so any more than other optional  
7 services ought to be regulated. I mean we don't regulate  
8 every service for which companies have market power. In  
9 fact, in the past, it's been the practice, I don't know in  
10 Florida, but certainly almost universally to mark up the  
11 prices of vertical services as high as the market will bear  
12 in order to keep local rates low. In fact, one of the  
13 problems with call waiting is, by and large, it's priced  
14 quite high, maybe even above the monopoly price.

15 COMMISSIONER CLARK: Yeah, but if you do  
16 something that is revenue neutral, you are only doing it on  
17 a snapshot basis, right?

18 MR. TAYLOR: Yes.

19 COMMISSIONER CLARK: And it seems to me it has  
20 the potential, if they are allowed to charge whatever they  
21 want for those vertical services that they must buy from  
22 whoever is buying the local exchange, then you will, in  
23 fact, provide them the opportunity to increase prices to  
24 customers higher than they would have been?

25 MR. TAYLOR: Well, let's see, I don't think it



1 will be to increase prices. I mean let's suppose today --  
2 and I don't know the situation in Florida -- but suppose  
3 call-waiting prices aren't regulated, so if that's the  
4 case, then the local exchange carriers will have set the  
5 profit maximizing price for those services today. And what  
6 would happen tomorrow if this universal service fund went  
7 in, the ALECs would receive payments from the universal  
8 service fund if they can capture the customer. Other ALECs  
9 will now be trying to come in and capture the customer.

10 COMMISSIONER CLARK: You're saying that they --

11 MR. TAYLOR: But there is no reason why the price  
12 ought to -- a price of call waiting ought to go up. That  
13 should be --

14 COMMISSIONER CLARK: If they price that too high,  
15 then they will go to somebody else?

16 MR. TAYLOR: They won't take the service, just as  
17 what happens today.

18 COMMISSIONER CLARK: Well, if they price it too  
19 high, they'll go to somebody else to get local service  
20 from.

21 MR. TAYLOR: If we have a universal service fund  
22 and competition for local exchange service, yes, you're  
23 right. I guess I was making a narrower point, that the  
24 price of call waiting, I had assumed, was already set at  
25 the profit maximizing price; so there is no reason why

1 simply because the ILEC now receives a payment from the  
2 universal service fund that it would raise that price. I  
3 don't think it would.

4 COMMISSIONER CLARK: Well, I'm not so sure.

5 MR. TAYLOR: Well, it's already as high -- I mean  
6 if they would raise it tomorrow --

7 COMMISSIONER CLARK: You assume that --

8 MR. TAYLOR: -- why wouldn't they raise it today.

9 COMMISSIONER CLARK: You assume that they priced  
10 it currently as high as the market will bear?

11 MR. TAYLOR: Correct.

12 COMMISSIONER CLARK: With respect to assuring  
13 that it's revenue neutral, do we have to revisit that every  
14 period of years too?

15 MR. TAYLOR: Well, I have to confess, I haven't  
16 thought the details of that out. I mean there is a danger  
17 in revisiting in the sense that --

18 COMMISSIONER CLARK: Yes, you become -- it looks  
19 like rate of return again.

20 MR. TAYLOR: Yes, and it distorts competition a  
21 bit. I mean if when BellSouth loses a customer somehow it  
22 gets to make that up by an increase in a universal service  
23 fund or something, then you've undone the benefits of  
24 competition, so you don't want to do that.

25 COMMISSIONER CLARK: Well, what, and I guess

1 maybe what I'm concerned about too is the transition. I  
2 don't think we are going to have -- I guess we're -- I  
3 think we're going to have -- there is going to be a  
4 mismatch between the time you do have robust competition  
5 such that people can choose their carriers and when we  
6 might -- when the universal service fund will go into  
7 account. It seems to me, strike me that there may be a  
8 period there that the incumbent local exchange companies  
9 will be able to raise their prices for vertical services  
10 and for at least a short period of time earn monopoly  
11 profits.

12 MR. TAYLOR: Well, I mean you may be right. My  
13 own sense of it is, if my assumption is correct, that today  
14 they are free to raise prices of vertical services. Is  
15 that a fact?

16 COMMISSIONER CLARK: I'm pretty sure they are,  
17 but I can't remember if it's limited by 20% or something.

18 MR. TAYLOR: But supposing that it is, or  
19 whatever the rule is today will also be the rule tomorrow,  
20 the fact that there is now competition for the customer,  
21 that is, even the customer in rural areas, where if the  
22 ILEC wins the customer it gets a payment from the fund, but  
23 if AT&T wins the customer, it gets a payment from the fund  
24 too, I don't see why that would affect the ILEC's decision  
25 as to what level to price call waiting; that, you know,

1 today I'm trying to make as much money from it as I can,  
2 subject to your rules. Tomorrow I will try to make as much  
3 money from it as I can, again, subject to your rules, and  
4 if those rules don't change, it seems to me my price is  
5 unlikely to change. Now I may be making more money if I am  
6 able to win the competition for the customer, but on the  
7 other hand we'll have more competition for the customer.

8           COMMISSIONER CLARK: I'm sorry, did you make a  
9 decision as to whether or not we should revisit revenue  
10 neutrality?

11           MR. TAYLOR: Yes, I don't think you should  
12 visit -- revisit revenue neutrality per se. I think you  
13 should revisit universal service fund as costs change, or  
14 if costs change. I mean I think revisiting has bad  
15 implications in general in regulation because it then  
16 distorts the incentives of the firms that you regulate to  
17 worry about what happens when you revisit. But if costs  
18 change -- I mean you are going to have to change unbundled  
19 network element prices for even the resale discount in  
20 principal if costs were to change, so that's already on the  
21 books.

22           COMMISSIONER CLARK: I want to did you one more  
23 thing, you have indicated that -- well, it's probably a  
24 better question for Commissioner Johnson, but I guess I  
25 have to ask you. Is the FCC still looking at a revenue

1 benchmark for their universal service fund.

2 MR. TAYLOR: My understanding is the decision  
3 that they made is still in place, and my view of it is  
4 still that it's wrong, so --

5 COMMISSIONER CLARK: And that the revenue is set  
6 at \$31.

7 MR. TAYLOR: Business at -- the revenue benchmark  
8 is at 33 maybe or 30 -- no, I'm sorry, yes, 31, and there  
9 is a different business one possibly.

10 COMMISSIONER CLARK: So if they, assuming they go  
11 with the \$31 and they are saying that if it costs more than  
12 \$31 to provide the service --

13 MR. TAYLOR: Right.

14 COMMISSIONER CLARK: -- there will be a fund  
15 to --

16 MR. TAYLOR: Equal to the difference.

17 COMMISSIONER CLARK: Equal to the difference.

18 MR. TAYLOR: Of which the state will get 25%, or  
19 which will go 25%.

20 COMMISSIONER CLARK: I'm confused. The state  
21 will make up 75% of that or 25% of it?

22 MR. TAYLOR: The state will make up 75% of it.  
23 The government will send -- will make up 25%.

24 COMMISSIONER CLARK: Right. Assume that goes  
25 into effect. Then they'll tell us how much we have to come

1 up with?

2 MR. TAYLOR: No. Well, the eighth circuit may  
3 prevent them from saying that. My understanding of it is  
4 the FCC can set, determine what it thinks the appropriate  
5 sized fund is in total and can tell you what they believe  
6 the interstate fraction of that is. It's now a \$31  
7 benchmark or whatever and 25%.

8 My view of what the state then has to do is to  
9 make its own calculation as to what it thinks the correct  
10 total universal service fund should be, take the check from  
11 Washington, subtract that amount, and what's left is what  
12 the state ought to provide. If you happen to agree with  
13 the FCC that a \$31 benchmark was right and the 25/75 split  
14 was exactly right, then what you describe would be the  
15 case. You would simply take their fund and come up with  
16 three quarters of it, but I don't believe you are compelled  
17 to do that.

18 COMMISSIONER CLARK: What do they, what revenues  
19 do they include in the \$31? Do they include vertical but  
20 not yellow pages?

21 MR. TAYLOR: Yes, but not yellow pages, that's  
22 correct.

23 COMMISSIONER CLARK: Okay. Thank you.

24 COMMISSIONER JACOBS: If you were to adopt the  
25 \$31 dollar figure -- I'm sorry, I don't have the

1 percentages, but I think there was a discussion that that  
2 still would place a high percentage of wire centers  
3 amongst -- around the state into the high-cost category  
4 which would have the effect of creating a substantial fund.

5 MR. TAYLOR: Well, I guess it depends on whether  
6 you think the glass is half empty or half full. I think in  
7 my testimony using, I think, Mr. Gillan's cost from the  
8 Hatfield Model, I looked at a \$19 benchmark and a \$22  
9 benchmark, and I'm trying to find where I got the answer;  
10 but my understanding was a lot of wire centers would not be  
11 eligible for service at these lower benchmarks and thus  
12 even fewer at \$31.

13 COMMISSIONER JACOBS: I'm sorry, rather than  
14 prolong that --

15 MR. TAYLOR: I found it.

16 COMMISSIONER JACOBS: Okay.

17 MR. TAYLOR: Let's see, taking a \$27 revenue  
18 benchmark, which I actually did the calculation for, which  
19 was, I think, Mr. Guepe's recommended revenue benchmark, a  
20 152 of 193 wire centers, roughly 80% would have monthly  
21 costs below the benchmark, so 80% would be below the  
22 benchmark using Hatfield costs, which I don't believe in,  
23 but let's just use that for the moment; and thus, would not  
24 qualify for a universal service fund payment; and that's  
25 at, I said \$27. At \$31, it would be more than 60% would

1 not qualify. So I don't know whether that is a lot or a  
2 little, but most wire centers -- surely most wire centers  
3 in Florida would not be eligible for universal service fund  
4 support at a \$31 benchmark.

5 COMMISSIONER JACOBS: Well, that doesn't take me  
6 to my next question then. Thank you.

7 MR. TAYLOR: Sure.

8 COMMISSIONER CLARK: Can I ask you one more  
9 question? Are you familiar with the high-cost fund?

10 MR. TAYLOR: The old high-cost fund?

11 COMMISSIONER CLARK: Yeah. Is it old? I mean do  
12 we still have one?

13 MR. TAYLOR: No, I think it was over as of  
14 January 1st, but I was sort of familiar with it.

15 COMMISSIONER CLARK: We don't have a high-cost  
16 fund any more that is distributed?

17 MR. TAYLOR: No. As I think about it, no, it  
18 must be going on until the universal service fund kicks in.

19 COMMISSIONER CLARK: Okay.

20 MR. TAYLOR: So I guess it's in place.

21 COMMISSIONER CLARK: I guess one of the things  
22 that concerns me about a universal service fund being based  
23 solely on cost is the notion that you subsidize areas where  
24 the people in those areas certainly don't need to be  
25 subsidized, and I certainly think that happened with the



1 high cost fund.

2 MR. TAYLOR: Correct.

3 COMMISSIONER CLARK: How do you adjust for that?

4 I mean it seems to me that there are, the notion of  
5 ensuring universal service for those areas where you would  
6 not otherwise get the service because of the high cost and  
7 there are people there that need the service, but it  
8 strikes me as something we shouldn't do, for instance, to  
9 serve somebody like Bill Gates, you know, and I --

10 MR. TAYLOR: Well, certainly not him, but --

11 COMMISSIONER CLARK: You know, I understand he is  
12 like on a cliff overlooking Lake Washington or something  
13 like that. Certainly --

14 MR. TAYLOR: Yes, and I imagine he has a lot of  
15 loops too.

16 COMMISSIONER CLARK: Well, you know, why -- and  
17 if you do it the high-cost fund way, I assume that the cost  
18 of serving him is going to be part of that fund.

19 MR. TAYLOR: Quite high, that's right.

20 COMMISSIONER CLARK: How can we adjust for that  
21 sort of --

22 MR. TAYLOR: Well, in the first place, I don't  
23 think I would recommend that you would. I mean what you  
24 are bringing in when you take income into account, I mean  
25 it's part of your job to worry about why we are having this

1 fund; but you've sort of shifted to worrying about  
2 subsidizing people or not subsidizing people as opposed to  
3 subsidizing or not subsidizing a service. Suppose --  
4 I take your point that it's aggravating to tax one set of  
5 people to support another set of people who don't need it.  
6 But on other hand, the purpose, I take it, of the universal  
7 service fund is as much to have competition for serving  
8 Bill Gates or for serving high-cost even affluent wire  
9 centers to have competition there as opposed to not having  
10 competition there.

11 COMMISSIONER CLARK: I disagree with you.

12 MR. TAYLOR: Okay.

13 COMMISSIONER CLARK: I'm not worried about  
14 competition to those people, frankly. It seems to me if  
15 they are a high revenue, there will be plenty of people out  
16 there --

17 MR. TAYLOR: Oh, but, no, there won't. There  
18 will be competition to provide toll service and vertical  
19 services to Bill Gates, but no one is going to want to put  
20 the loop to his house.

21 (Transcript continues in sequence in Volume 17).  
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