

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In the Matter of	)	
	)	DOCKET NO. 980696-TP
Determination of the cost of	)	
basic local telecommunications	)	
services, pursuant to	)	
Section 364.025, Florida	)	
Statutes.	)	

VOLUME 20

Pages 2256 through 2364

PROCEEDINGS:	HEARING
BEFORE:	CHAIRMAN JULIA L. JOHNSON COMMISSIONER J. TERRY DEASON COMMISSIONER SUSAN F. CLARK COMMISSIONER E. LEON JACOBS, JR. COMMISSIONER JOE GARCIA
DATE:	Thursday, October 15, 1998
TIME:	Commenced at 9:00 a.m.
PLACE:	Betty Easley Conference Center Room 148 4075 Esplanade Way Tallahassee, Florida
REPORTED BY:	NANCY S. METZKE, RPR, CCR
APPEARANCES:	
BUREAU OF REPORTING	(As heretofore noted.)

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1    P R O C E E D I N G S

2  
3    (Transcript Continues in sequence from Volume  
4 19).

5    CHAIRMAN JOHNSON: We are going to get ready to  
6 go back on the record. I think we were, we had marked all  
7 of the exhibits and the witness had been tendered.

8    MR. COKER: Thank you, Madam Chairman.

9    DAVID G. TUCEK

10 continues his testimony under oath from Volume 19.

11    CROSS EXAMINATION

12 BY MR. COKER:

13    Q     Mr. Tucek, my name is Gene Coker. I represent  
14 AT&T.

15    As I understand your task in this proceeding is  
16 to report all the inputs for GTE's BCPM presentation; is  
17 that correct?

18    A     My role is to sponsor all of the inputs that GTE  
19 has offered for use in BCPM and to explain why those inputs  
20 are forward-looking and to explain why this Commission  
21 should recommend company-specific inputs as opposed to  
22 inputs -- one set of inputs for every carrier in the state.

23    Q     Did you develop all these inputs yourself?

24    A     No, I did not.

25    Q     Did you develop any of them personally?

1           A     I reviewed many -- yeah, many of the inputs, a  
2 substantial number of their development. I am the  
3 individual that chose the fill factor for feeder that we  
4 had a conversation about during the deposition.

5           Q     Who developed the others?

6           A     We have a team in Dallas who were charged with  
7 developing the inputs for use in BCPM. They use the same  
8 information that other folks might use in Dallas to develop  
9 inputs for use in our own company cost model,  
10 company-specific cost model.

11          Q     Does that team in Dallas work under your  
12 direction and supervision?

13          A     No, they do not. They work under the direction  
14 of a gentleman by the name of John Gehagan, G-e-h-a-g-a-n,  
15 but I work closely with them in times like these, probably  
16 on a daily or hourly basis.

17          Q     Who is Randy Knox and Steve Schroeder?

18          A     You're referring to the people I identified in my  
19 deposition?

20          Q     Yes.

21          A     I misidentified Randy Knox. It should have been  
22 Randy Patton. Randy Patton is, or was a planning engineer  
23 for GTE, now heads a group that is part of the model  
24 development -- cost model development group in Texas. He  
25 is charged in that cost model development to making sure

1 that the cost model is consistent with GTE's engineering  
2 practices. Steve Schroeder is a network planning engineer  
3 for GTE. He fills the position that Randy Patton formerly  
4 occupied.

5 Q Are they part of that Dallas team you referred  
6 to?

7 A They are all located in Dallas. They are not  
8 part of the team that works on the BCPM input development,  
9 but all of these folks work closely together to make sure  
10 that's what's filed in BCPM is consistent with what is  
11 filed our own company-specific cost model.

12 Q Do you know how many user adjustable inputs there  
13 are in the BCPM?

14 A I heard a number this morning. It was in the  
15 thousands. I pointed out in my opening statement it's not  
16 useful to try to count how many there are or how many  
17 you've populated for the reasons I gave.

18 Q Does a number 12 thousand or thereabouts ring a  
19 bell?

20 A I'm sure the record will show that.

21 Q How many of the user adjustable inputs did you or  
22 the people in Dallas adjust for Florida?

23 A I've answered that in my opening statement. It's  
24 not a useful question to ask. I haven't tried to count  
25 them. Part of the problem of trying to count them is how

1 far down in the process do you go. We filed all our inputs  
2 on a combined material and labor basis. We've done that  
3 for two reasons: To make it easy to talk about them, is the  
4 cost of a pole, what is the installed cost of a pole. We  
5 did it for another reason, that reason being is that we use  
6 our vendor prices which is competitively sensitive  
7 information from material. We also use our vendor or our  
8 contractor prices for the labor placement. If I give those  
9 to you in piece parts for the -- in my public record  
10 testimony, I would have violated that confidentiality that  
11 requires, so we combine those together. I can't remember  
12 your question. I'm sorry, I got off track. Could you  
13 repeat it? I'll finish it in my answer.

14 Q I was trying to obtain a number, an approximate  
15 number of the number of user adjustable inputs that you  
16 changed.

17 A I recall now. And I was trying to explain why  
18 it's difficult to count them because we file on a combined  
19 basis, so if you count the numbers that just appear in  
20 Exhibit DGT-1R, you are going to get one number; but behind  
21 that is the base price for the material, the freight, the  
22 sales tax, provisioning, my material expense, the  
23 engineering labor and placement labor. You know, so is  
24 that one input or eight? So it's just difficult to count.

25 Q I'm trying to get a relative idea compared to the

1 12 thousand user adjustable inputs what an apples to apples  
2 comparison would be. Do you have any rough idea?

3 A I have not counted them. As I stated earlier,  
4 we've updated the most important ones.

5 Q Would you have any idea on what percentage,  
6 whether it was 5%, 10%?

7 A I would have to count them to get an idea of the  
8 percentage. I haven't counted them.

9 Q And you wouldn't have any rough idea of the  
10 estimated number?

11 A That's what I just said.

12 Q Okay. Would you agree or disagree that a cost  
13 model should produce a forward-looking cost of an efficient  
14 provider in the market?

15 A I would agree that's one of the standards. I  
16 think it's important that it also produce the  
17 forward-looking cost of the incumbent carrier out of whose  
18 network the supported services are going to be provided.

19 Q In coming up with your input values, can you  
20 explain what you did to make the values reflect the use of  
21 the most current technology?

22 A Yes, I can. If we have open wire, for example,  
23 in our network, that is certainly not in the modeled  
24 network. If we outmoded technology in our network, like  
25 load coils or T1s, that is not in our modeled network. It



1 turns out in Florida we don't have any analog switches, but  
2 had we had analog or electromechanical switches, they would  
3 not be in our network. We only use forward-looking  
4 switches in our inputs, so that's what we have done with  
5 respect to the technology.

6 Q And what have you done to conclude that the  
7 proposed inputs are the cost of an efficient provider?

8 A Well, I've thought about it from the other side,  
9 from the position that someone might take that GTE is not  
10 efficient, and the implications of that are that we have  
11 been misregulated for a long time by this Commission, and I  
12 certainly wouldn't accept that, but the Commission can  
13 decide on that as they want. Or, the point I've thought  
14 about it, in terms of the way we are regulated currently,  
15 we are under price-cap regulation, and that gives us every  
16 incentive to deploy capital and labor in an efficient  
17 manner. Those are scarce resources. If we thought there  
18 was a better way to operate our network, we would do so,  
19 because it would be money in our pocket.

20 Q Is this thought process you just described all  
21 you did, or have you done any specific study or analysis to  
22 determine that the values you are suggesting here are  
23 indeed representative of an efficient provider?

24 A Well, the input values are market-driven values.  
25 They are not -- I'm talking about the input values for the

1 cost of material and placement labor. They are not the  
2 result of a group opinion of what might be a pole cost.  
3 They are not the result of a survey. They are market-based  
4 transactions. My training is in economics. I think you  
5 can learn more from what people actually pay for a pole as  
6 to what someone thinks that they might pay for a pole.

7 Q Mr. Tucek, my question really was, have you done  
8 any kind of a specific study or analysis to determine that  
9 your values are representative of an efficient provider?

10 A Very succinctly, what I have done is I've  
11 considered the framework that were --

12 Q Excuse me, could you give me a yes or no, and  
13 then please explain?

14 A Yes, I have. And what I have done is considered  
15 the framework under which we're regulated and realize that  
16 the incentive is there for GTE to be efficient. I answered  
17 your second question which went directly to the prices and  
18 told you that I considered that those are market-based  
19 results, and so I consider that to be indicative of what an  
20 efficient provider would do.

21 Q Has this analysis that you're talking about, has  
22 that been reduced to writing?

23 A No, that was a mental analysis.

24 Q And that would be the only analysis that you have  
25 undertaken in this respect?

1           A     It was all that was required.

2           Q     I'd like to refer you to Page 7 of your testimony  
3 and a discussion about structure sharing at that -- near  
4 the bottom of the page. You indicate that the sharing  
5 inputs of a hundred percent for buried placement and 97.18%  
6 for conduit and manholes. Do those numbers mean that GTE  
7 bears one hundred percent of the cost for the buried and  
8 97.18% of the conduit and manholes?

9           A     That is the effect of those numbers in the model,  
10 yes.

11          Q     In your opinion, is this the most efficient way  
12 to place aerial and buried structure conduit?

13          A     The input values we've used are based on what our  
14 actual experience has been. Those are the level of sharing  
15 that when it occurred was available to us; so, yes, it is  
16 efficient.

17          Q     That's based on your historical experience, but  
18 my question is, is that the most efficient way to do it on  
19 a going-forward basis?

20          A     On a going-forward basis, I don't think that  
21 there will be enough opportunities to share that is going  
22 to change these numbers for the network as a whole, so it  
23 would be the most efficient, or these inputs are the  
24 most -- are representative of the most efficient levels.

25          Q     Well, if a new entrant came into the market and

1 started to build its own network, would you say that it  
2 would be an efficient thing to do for that new entrant to  
3 seek out opportunities to share the cost of burying cable?

4 A It may be efficient for them to seek it out. I'm  
5 not sure that they would find the opportunities. With  
6 respect to buried cable in particular, we certainly are not  
7 going to dig up the plant that is in the ground today in  
8 order to rebury it. For the opportunity to exist for the  
9 new entrant, there has to be someone there willing and able  
10 at that point in time and at that particular location who  
11 wants to bury the plant.

12 Q Does GTE have a group of people somewhere that  
13 seeks out these opportunities?

14 A We have a work group in Florida who are charged  
15 with administering the joint-use contracts and that over --  
16 joint use would be like joint use for poles, and they are  
17 also involved in actually managing the construction --

18 Q How about --

19 A -- construction projects in GTE.

20 Q Excuse me, I'm sorry.

21 A Yes.

22 Q How about with respect to the buried placement or  
23 buried cable and conduit, do you have a group that seeks  
24 out opportunities to share the cost of that?

25 A I spoke to -- and I can't remember his name, I

1 apologize -- I spoke to the individual who heads up the  
2 group that I referred to, and he indicated to me that they  
3 had tried in the past to share buried plant and could not  
4 coordinate the process with other utilities to make it a  
5 useful or widespread phenomenon. And whether there is a  
6 group that goes door to door to every utility and says, do  
7 you want to share this pole, that I do not know.

8 Q Okay. And would you know if there is a  
9 particular process, procedures in place that are followed  
10 whenever you undertake construction of buried cable or  
11 conduit?

12 A No, I do not know.

13 Q Now you said that this was based on your past  
14 experience. What kind of adjustment to this did you make,  
15 this one hundred percent to 97.18%? What adjustment to  
16 that did you make to make it forward-looking?

17 A No adjustment was needed to make it  
18 forward-looking. As I've tried to explain, we don't see  
19 that there are going to be significant opportunities to  
20 share buried plant or conduit systems that would move these  
21 numbers significantly. These are the best numbers that we  
22 can have input into this model.

23 Q At the top of Page 9 of your testimony, there is  
24 a discussion about pole spacing, and I believe you say  
25 there that you, GTE, for purposes of the model, space poles

1 at an interval of 175 feet; is that correct?

2 A That's what the testimony says, yes.

3 Q And am I also correct in understanding that  
4 that's consistent with GTE's actual engineering practices?

5 A Yes, that is correct.

6 Q And is this pole spacing of 175 feet, isn't it  
7 true that GTE uses that same spacing in all density zones  
8 from the highest to lowest density zone?

9 A In the model, that is correct. That input is  
10 there. I'd like to point out that I ran the model adopting  
11 the Hatfield assumptions for spacing poles and anchors and  
12 guy wires. And we are talking about a tempest in a tea  
13 pot. It changed the monthly cost per line by three cents.  
14 It went up.

15 Q Isn't it true that Bell and Sprint vary the  
16 length of their -- the distance between poles in the lower  
17 density areas?

18 A I'll accept that, that that's what they did in  
19 the model.

20 Q Can you explain why it's GTE's actual practice to  
21 not lengthen the distance between the poles in the lower  
22 density areas?

23 A I didn't say that was GTE's practice. I said the  
24 175 feet was consistent with our practice. Pole spacing,  
25 although I have not read the practice in a while, has

1 guidelines; but when you get to a particular job, the  
2 engineer has to look at the situation that presents him at  
3 that point in time. Every pole in GTE's system is not 175  
4 feet apart. For modeling purposes, we put in an average  
5 value of 175 feet. We felt that was appropriate and  
6 consistent with what we actually do in our network, an  
7 average value. As I indicated -- I anticipated this line  
8 of cross -- I took your numbers, put them in the BCPM  
9 model, and it doesn't make a difference in the results that  
10 come out, not a material difference, three cents. That was  
11 the spacing for poles, anchors and guy wires.

12 Q For purposes of the drop wires -- What is a  
13 drop wire?

14 A A drop wire is the part of the network that  
15 connects the NID, the network interface device, to the rest  
16 of the distribution plant, generally a pedestal. So it's  
17 the line that is either buried or aerial from your home to  
18 the telephone plant.

19 Q And would it be true that GTE models all drops as  
20 buried drops?

21 A That is true in this model. Again, I anticipated  
22 that question. I ran the model with aerial drops and  
23 buried drops. I will tell you what the answer is.  
24 I ran it for the smallest standard size drops that we put  
25 in the system. It dropped the cost per line by 17 cents.

1 I ran it with the largest mix of aerial and buried drops.  
2 It dropped the cost by eight cents per line. Again, I  
3 think it's a tempest in a tea pot.

4 COMMISSIONER GARCIA: Run through that again.  
5 What did you say you varied it by and what were the cost  
6 differences?

7 MR. TUCEK: I ran two sensitivity analyses. I  
8 took the largest size drops that we use -- I believe that  
9 is five-pair for buried, six-pair for aerial -- and it  
10 dropped it by eight cents per line. I took the smallest  
11 size drops that we use, aerial and buried drops, it dropped  
12 it by 17 cents per line. If you are trying to decide on  
13 inputs for model choices, these are not changes that are  
14 material in that decision. It's not, in the words of  
15 Mr. Wells, and I hope I'm not putting words in his mouth,  
16 it's not the exorbitant cost of placing a five-pair drop.  
17 BY MR. COKER (Continuing):

18 Q Are you by this testimony modifying your input  
19 values?

20 A No, I'm not.

21 Q Why not?

22 A Because I think the numbers that we've filed are  
23 the best estimate of the forward-looking cost of providing  
24 basic local service out of GTE's network in Florida.

25 Q Are all your drops buried drops in your service



1 area?

2 A No, they are not.

3 Q Then isn't your calculation in error?

4 A Not in a material sense.

5 Q It's in error, but just not in a material sense;  
6 is that what your testimony is?

7 A Well, for me to categorize something as an error,  
8 it has to be significant or material; so given that  
9 definition, there is no error.

10 Q We've talked about the drops and -- I've lost  
11 track of what the other one was.

12 A Spacing poles, anchors and guys.

13 Q Spacing, thank you. Those are two of the  
14 inputs. Are there any others that have small errors in  
15 them that you don't consider to be material?

16 A For there to be others, there would have to be  
17 some, and I have not testified that there are any.

18 Q Excuse me. I'm sorry, I couldn't hear you.

19 A I said for there to be others, there would have  
20 to be some, and I have not testified that there are any.  
21 Now there were errors in our initial filing. We filed a  
22 DGT-1R through DGT-3R to reflect those, but those inputs  
23 are the correct inputs for GTE.

24 Q My question was, I was asking you to testify  
25 right now if you were aware of any other areas, material or

1 otherwise.

2 A I believe that an original filing for the buried  
3 drop we may have used an armored drop. Probably to be more  
4 realistic it should be an unarmored drop. An armored drop  
5 is -- and I'm not sure of the material. It may Kevlar or  
6 something like that, that you put on a buried drop to  
7 prevent damage from rodents.

8 Q Have you determined what the impact of that error  
9 was?

10 A Well, I corrected that input, or changed that  
11 input in the numbers I gave you, so it could not be more  
12 than eight cents.

13 Q Are there any others that you're aware of?

14 A No.

15 Q Does GTE employ the GTD-5 switch in its network  
16 if Florida?

17 A Yes, we do.

18 Q Do you consider that to be forward-looking  
19 technology?

20 A Yes, it is, and I'm happy to tell you why. When  
21 I read Ms. Petzinger's testimony, the witness that brought  
22 this up, the first thing I did was I went to Yahoo on the  
23 Internet and I searched for AGCS. I found their Website.

24 On their Website I found a press release dated  
25 February 19th, 1997. The gist of the press release is that

1 AGCS is to provide British Columbia Tel. 12 million dollars  
2 in telecommunications upgrade, a software load upgrade for  
3 the GTD-5 EX central office switch, some other type of  
4 equipment. Well, those are not exactly switches.

5           There is another press release, April 28th,  
6 1997. British Columbia Tel. signs a 60 million dollars,  
7 with AG Communication Systems for switching and intelligent  
8 network. There is a quote in here I'd like to read. It's  
9 attributed to Jeff Segal, vice -- excuse me, it's  
10 attributed to Don Evans, general manager of BC Tel. and  
11 Supply. "With this agreement, we ensure our customers will  
12 continue to receive the most advanced and cost effective  
13 telecommunications services available." This is a  
14 contract, a 60-million-dollar volume purchase agreement for  
15 British Columbia Tel. to purchase GTD-5, Class 5 central  
16 offices, CO, central office digital switching equipment and  
17 intelligent network progress. For the purpose of the  
18 record, the quote attributed to Mr. Evans stops after the  
19 word "available."

20           I also have a letter written to Ms. Pam Lepic  
21 (phonetics), who is a planning manager in network planning  
22 who is responsible for working with the GTD-5 switches.  
23 It's written to her from Mr. Bill Heim (phonetics) who is  
24 vice president of commercial products support. He says a  
25 lot of good things about the GTD-5 that you might suspect.

1 One of the things that I think is important, he says, and I  
2 will quote him, AGCS continues to place base units in  
3 service to complete the modernization of the network for  
4 GTE and our other major customers.

5 One other thing that he says is that the AGCS  
6 continues to support our customers serving over 13 million  
7 lines in -- 13 million in-service lines across more than  
8 800 GTD-5 EAX, base units and two thousand GTD-5 EAX remote  
9 units.

10 I'll conclude my answer by noting that anybody  
11 can access the World Wide Web these days. It's a simple  
12 matter to search out the Website. I think the only -- the  
13 most recent thing other than a Commission opinion or a  
14 staff opinion cited in Ms. Petzinger's testimony was dated  
15 1995. All of this is 1997. These are market-based  
16 transactions that show that a GTD-5 is a viable switch,  
17 base units are being manufactured and sold.

18 Q Let's talk about GTE in Florida. Has GTE in  
19 Florida purchased one of these switches in the last five  
20 years?

21 A Probably not. I don't know if they've purchased  
22 any digital switches in the last five years other than  
23 remote switching units, which would probably include  
24 GTD-5s.

25 Q Do you know whether they purchased that kind of a

1 switch or any kind of a switch?

2 A No, I do not. They've been a hundred percent  
3 digital for a long time, so any additions to the network  
4 would more than likely be remotes off existing hosts.  
5 Those remotes would include GTD-5s if the base unit was a  
6 GTD-5. It would be a Nortel or a Lucent Technology switch  
7 or the base unit was from the vendor.

8 Q Does GTE have any plans to purchase a GTD-5 in  
9 the future?

10 A Probably not, and for the same reason: We are a  
11 hundred percent digital in our network, so I doubt that we  
12 are going to be placing any base units.

13 Q Other than what you got off the Web, are you  
14 aware of any other major incumbent local exchange company  
15 that has purchased the GTD-5 in the last five years?

16 A No, I'm not.

17 Q I'd like to ask you a couple of questions about  
18 the cost of poles. You have in your summary mentioned the  
19 comparison that Mr. Wells made was not appropriate because  
20 the price of your poles in your -- the value that you have  
21 included includes guys and anchors; is that correct?

22 A What I said was that Mr. Wells's comparison was  
23 inappropriate because he was comparing our response to the  
24 FCC data request with the HAI default value. It is my  
25 understanding, and I believe Mr. Wells testifies that he

1 agrees -- well, let me backup. It is my understanding that  
2 HAI represents that default values as the installed cost of  
3 a pole. And I know that Mr. Wells has testified that that  
4 installed cost of a pole should include anchors and guys,  
5 engineering expense, supply expense, the items I have  
6 listed in my testimony.

7 Q What was --

8 A I would like to finish my answer.

9 Q Excuse me, I'm sorry.

10 A My testimony points out that while the HAI  
11 default value ostensibly includes all of that, our response  
12 to the FCC did not, so it's an apples and oranges  
13 comparison. So when we compare the HAI default and then  
14 also the lower value that they use for a pole in their  
15 filing in Florida, on a comparable basis a 40-foot pole,  
16 with all of the costs that should be in there on an  
17 installed basis, we get a much different conclusion.

18 Q What is the value for the material and  
19 installation that you are proposing for a pole?

20 A The comparable value on a 40-foot pole to compare  
21 to the GTE default?

22 Q Well, what input value are you proposing?

23 A The input value, we put in a weighted average of  
24 a 30- and 40-foot pole because poles that are not shared  
25 don't have to be 40-foot tall. I can look that value up

1 for you.

2 (WITNESS REVIEWED DOCUMENT)

3 A You can find that value on Page 12 of exhibit  
4 DGT-1R. For normal and soft-rock placement installed cost  
5 of the pole, excluding anchors and guys, we have a value of  
6 \$786.81.

7 Q All right. I had down here \$801.11. Does that  
8 number ring a bell with you?

9 A I believe that's a number that Mr. Wells has  
10 developed to include anchors and guys.

11 Q Is that an accurate number?

12 A I believe it is. I checked it this morning, and  
13 if my memory serves, the eight hundred and whatever you  
14 said it was plus 11 cents is the number he used.

15 Q Now that compares with a Sprint number of  
16 \$596.14. I'm talking about the 801.

17 A Is it comparable to the Sprint number? I don't  
18 know. I don't know what Sprint put in their cost.

19 Q Okay. Would you accept that subject to check?

20 A Would I accept that that's the value that Sprint  
21 filed subject to check?

22 Q Yes.

23 A Yes, I would.

24 Q And would you also accept subject to check, that  
25 BellSouth's number is \$406.77?

1           A     I'll accept that that is their input subject to  
2 check.

3           Q     Now the source of this is from Mr. Wells's  
4 rebuttal testimony, that's where I found these numbers.  
5 Why is GTE's number so much higher than BellSouth and  
6 Sprint's?

7           A     As I tried to indicate in my summary, you'd have  
8 to go back behind the development of the pole price, of the  
9 pole price input to make that determination. I don't have  
10 access to Sprint's or BellSouth's numbers other than what  
11 they've filed, so I can't tell you why. Let me finish,  
12 again, I just want to reemphasize, if you make comparisons  
13 like this, you are assuming that like named inputs are  
14 developed on the same basis, and I don't think anybody has  
15 validated the assumption.

16          Q     Didn't GTE report to the FCC a cost of materials  
17 and installation for a pole of \$440?

18          A     I'll accept that that's the number we filed  
19 subject to check. I don't want to have to go to Wells's  
20 testimony to read it. But the more important point is, is  
21 that number is not the number we would use as an input to  
22 BCPM or any cost model because it's not the installed cost  
23 of a pole. The FCC asked what does a pole cost, we gave  
24 them the material price. I don't know that we even put in  
25 freight and sales tax. I'd have to go back and check. I



1 know we didn't put in supply expense, the cost a pole yard,  
2 for example, holding inventory. We did put in engineering  
3 labor, as I indicated when I corrected my rebuttal  
4 testimony.

5 Q Okay. Just so that I'm clear, is the 440 only  
6 the material price?

7 A No, the 440, I think, is labor plus material, but  
8 it's not all the costs that are in the installed cost of a  
9 pole.

10 Q And your input price you told me was \$786?

11 A That's true.

12 Q You reported to the FCC material and labor of  
13 440, but you've included approximately another \$346 for  
14 BCPM for purposes in this proceeding?

15 A There are two reasons for that: One is that there  
16 were costs not reported to the FCC in the cost of a pole  
17 that should be. The other reason is the material price has  
18 changed, I don't know how much, but I know that today we  
19 are using --

20 Q What are the other -- I'm sorry.

21 A Today we are using prices that are current as of  
22 year end 1997. As best we can tell, that was no more  
23 recent than year end 1995 that was provided to the FCC.

24 Q What additional cost did you include for your  
25 BCPM input that you didn't include in your report to the

1 FCC?

2 A Well, that's listed in my rebuttal testimony.

3 (WITNESS REVIEWED DOCUMENTS)

4 A Well, we have included -- in our BCPM input are  
5 the inventory costs and minor material loadings.

6 Q What was the second thing?

7 A Minor material loadings.

8 \ And that would have -- those two additional costs  
9 would have the impact of increasing it from 440 to 786?

10 A Plus the change in the base price that I'm unable  
11 to give you.

12 Q Mr. Tucek, would it be fair to say that in  
13 general that GTE is recommending GTE's costs for input  
14 values regardless of whether they are the most efficient  
15 cost, the most cost effective cost?

16 A No, it wouldn't be fair to say that. I think  
17 I've testified that these are the costs of an efficient  
18 carrier for GTE's serving territory.

19 Q Well, if there were other more cost efficiencies  
20 to be gained, if poles, for example, could be purchased and  
21 installed at a lower price or cost than \$786, would you  
22 recommend that the lower price be used as an input or would  
23 you recommend GTE's cost?

24 A It's a mighty big if, but given that  
25 hypothetical, obviously we would.

1 Q Would what?

2 A If we could buy poles at the lower price, then  
3 that would be our input, but we are unable to buy and  
4 install a pole at prices --

5 Q But if -- Excuse me, go ahead.

6 A -- at prices other than what we've filed in the  
7 testimony.

8 Q If BellSouth came into GTE's territory and  
9 decided to install poles and they could do it cheaper,  
10 should they use the cheaper price -- or would you recommend  
11 that this Commission use the cheaper price as an input or  
12 GTE's?

13 A I would answer that they should use the lower  
14 price, but I would caution you to not infer that I said  
15 they should use the price that they've filed. I don't know  
16 what BellSouth has included in the input number that you  
17 have given me. On an installed basis, it may well be. If  
18 they added up all their costs, it may be higher; it may be  
19 lower.

20 The other important point to remember is that  
21 when you're trying to sort through the input prices is you  
22 have to, as Ms. Caldwell said, look at the whole, the whole  
23 picture not say pixel by pixel. And one way to do that is  
24 to look at the monthly cost per line. I know ours is in  
25 the neighborhood of 31, 32, \$33. I believe BellSouth and

1 Sprint's are the same. They are very comparable numbers.  
2 It tells me that on an aggregate basis the input prices are  
3 probably comparable.

4 MR. COKER: I have no further questions.

5 CHAIRMAN JOHNSON: Mr. Melson.

6 MR. MELSON: Just a couple.

7 CROSS EXAMINATION

8 BY MR MELSON:

9 Q I'm Rick Melson representing MCI. If I've  
10 understood your testimony, it's that you should be careful  
11 about comparing input values because what's given one name  
12 in one model and a similar name in another model might not  
13 represent the same input, is that -- did I hear that  
14 correctly?

15 A It may be presented as the same input, but the  
16 values may not have been developed in the same manner.

17 Q Let me ask, if you are looking solely at a single  
18 model, and let's take BCPM, if you're looking at the same  
19 input item, is it fair to compare the input from one  
20 incumbent LEC to the input from another incumbent LEC?

21 A No, the fact that you're looking at the same  
22 model, and again I'm talking about the material placement,  
23 cost of material for network components has nothing to do  
24 with whether you just compare them without examining  
25 whether the inputs were developed in the same consistent

1 manner.

2 Q Let me ask this: Is the total cost and -- Let's  
3 take poles, for example. The total cost is going to be the  
4 sum of a material cost and a placement cost, is that  
5 correct, to get to a total installed cost?

6 A There is engineering labor. There's supply  
7 expense, provisioning expense, freight, sales tax. There  
8 are minor material cost, and then there is the installment  
9 cost. Also the installment costs vary by condition, we  
10 have been talking about normal and soft rock conditions.  
11 Our contractors charge us an additional amount when they  
12 have to cut through solid rock.

13 Q At the end of the day when you sum up all of the  
14 inputs that relate to poles, don't you get a total  
15 installed cost for a pole?

16 A I do. I don't know if the other carriers have  
17 left costs on the table or if they have included them  
18 someplace else so that when you look at that single input  
19 for a pole. You say, my goodness, there is variance here.  
20 There is a difference. Well, it may not be because they  
21 are better able to get pole at better prices than another  
22 carrier. It may be that they are reporting it differently,  
23 and the costs that we have included and identified with  
24 installed cost of a pole are accounted for somewhere else  
25 in their model.

1 Q Let me ask this: Doesn't the BCPM model expect  
2 that each input as a specific definition and that a company  
3 using the model would craft its input to match what the  
4 model expects?

5 A I don't think the model expects anything.

6 Q So if GTE for total installed cost of a pole  
7 includes some items that another company does not include  
8 in calculating the total installed cost of the pole, isn't  
9 somebody using the model incorrectly?

10 A No, the purpose of the model is to come up with  
11 the cost of providing basic local service on a  
12 forward-looking basis. If I include costs in the cost of a  
13 pole and put that in the model but I do not include them  
14 elsewhere, I've done it correctly. If someone would leave  
15 some of those costs out of the cost of a pole but include  
16 them elsewhere, they have done it correctly. They've  
17 accounted for all of the costs.

18 I also want to point out that the costs I'm  
19 talking about are not costs that are pulled up out of the  
20 air. We do pay freight. We do pay sales tax. We do incur  
21 provisioning expense. When we place a pole, we book these  
22 costs to the capital account, to the balance sheet, just as  
23 we do the material cost of the pole; so I feel we've done  
24 it correctly or more correctly.

25 Q And your number may or may not be comparable to

1 the number that another ILEC puts into the same input slot  
2 in the same model, yes or no?

3 A Those are the only two options, yes. They may or  
4 may not be comparable.

5 Q Okay. You were also asked -- you indicated in  
6 response to a question about pole spacing and another  
7 question about buried drop versus aerial drop, that you  
8 re-ran the model basically on a sensitivity basis to see  
9 what result a particular change in assumptions would  
10 produce; is that correct?

11 A Yes, I did.

12 Q Okay. I believe on the pole spacing you said it  
13 made an immaterial cost difference of three cents; is that  
14 right?

15 A That's correct. The cost went up by three cents.

16 Q And on the buried drop versus aerial drop, I  
17 believe in one of your two scenarios the cost went up by 17  
18 cents; was that correct?

19 A No, they were both -- I want to make sure I've  
20 got my signs right here. They did not go up. They went  
21 down by 17 cents. That was for the smallest size aerial  
22 and buried drops, and they went up by eight cents -- excuse  
23 me, they went down by eight cents with the largest sized  
24 aerial and buried drops. So they both went down in both  
25 cases.

1 Q Okay. Now the numbers that you are giving  
2 us -- and I believe you characterized both of those as  
3 immaterial as well.

4 A For purposes of the decision that we are trying  
5 to make, which is to select a model and a set of inputs.

6 Q And any of these numbers is expressed on a cost  
7 per line per month basis; is that correct?

8 A All of those numbers that I cited were on a cost  
9 per line, per month.

10 Q Okay. So 17 cents per line, per month is going  
11 to be \$2 a year, \$2 per line per year?

12 A Since I see you use a calculator, I'll accept  
13 that subject to check.

14 Q And GTE has got what, about 2.3 million lines in  
15 the model?

16 A Yes.

17 Q So that is roughly 4.6, 4.7 million dollars a  
18 year that that 17 cents translates into?

19 A I'll accept that subject to check.

20 MR. MELSON: That's all I've got. Thank you.

21 CHAIRMAN JOHNSON: Staff.

22 MS. MCKINNEY: June McKinney on behalf of staff.  
23 Madam Chair, staff would ask that the deposition transcript  
24 identified as DGT-4 of David Tucek be marked for  
25 identification please.



1 CHAIRMAN JOHNSON: It will be marked as Exhibit  
2 79.

3 MS. McKINNEY: Thank you.

4 CROSS EXAMINATION

5 BY MS. McKINNEY:

6 Q Mr. Tucek, do you have a copy of GTE's response  
7 to staff's third set of interrogatories?

8 A I'll see.

9 Q Take your time.

10 MS. McKINNEY: Commissioners, for the record that  
11 is Exhibit Number 35, Page 42 and 43.

12 BY MS. McKINNEY (Continuing):

13 Q And, Mr. Tucek, we are specifically looking at  
14 Question Number 73 and the response to that question.

15 (WITNESS REVIEWED DOCUMENTS)

16 A Is this the interrogatory that says that for  
17 purpose of the following request --

18 Q Yes, Mr. Tucek.

19 A -- refer to my direct at Page 9, lines 20 to 24?

20 Q Correct.

21 A Okay.

22 Q If you could please take a minute to look over  
23 that. I'm going to ask you several questions pertaining to  
24 that information.

25 A Go ahead.

1 Q Thank you.

2 I'm going to refer you to the math portion in the  
3 interrogatory response for the investment adjusted by the  
4 C. A. Turner Index. The building factor is 56.90% and the  
5 land factor is 3.31%; is that correct?

6 A That's correct.

7 Q Continuing with the adjusted investment, then  
8 does this mean that for every dollar spent on the digital  
9 switching approximately an additional 57 cents is spent on  
10 buildings and three cents on land for a total of 60 cents?

11 A That's what the model would predict. Those are  
12 not only buildings to house the switch but all the  
13 buildings in the network.

14 Q If unadjusted investment were to be used, the  
15 factors would change; is that correct?

16 A That's correct.

17 Q Using the unadjusted investment then, the  
18 building factor would be calculated by dividing  
19 \$206,745,924 by \$885,304,846, or subject to check  
20 approximately 20%, would you agree?

21 A Yes, I would. I don't think it would be correct  
22 to do that though.

23 Q But you would agree, sir?

24 A I would agree that would be the result.

25 Q Why don't you think that would be correct to do

1 so?

2 A What we are trying to do here is to bring the  
3 building investment to a replacement cost basis, and if we  
4 had to build the network today on a go-forward basis, it  
5 would cost us more than the historical forecast cost of the  
6 building. It would also cost us more for the land. We  
7 didn't adjust the land because there is no index we could  
8 point to to allow us to do that.

9 Q Thank you.

10 The land factor would be \$20,796,224 divided by  
11 \$885,304,846, or subject to check which would be  
12 approximately 2%; would you agree with that?

13 A That's correct.

14 Q Assuming that the 20 and 2 percentages are  
15 approximately correct, then would you agree that using  
16 unadjusted investment means that for every dollar spent on  
17 digital switching an additional 20 cents is spent on  
18 buildings and an additional two cents is spent on land for  
19 an approximate total of 22 cents?

20 A I would agree that if you put those numbers into  
21 our model and input development process that's what the  
22 model would kick out. I wouldn't agree that if I went out  
23 and bought a digital switch today and put it in a new  
24 building that those percentages would result.

25 Q But don't the building and land investment

1 dollars include non-central office buildings and land?

2 A Yes, they do.

3 Q Thank you.

4 So wouldn't that overstate the factor?

5 A I don't know if it overstates the factor or not.  
6 I don't believe it overstates the result of the model.  
7 We've not tried to account for other buildings other than  
8 CO buildings anywhere else in the model. This is where  
9 this is done. It would be possible, I am told, to look at  
10 the investment only for the CO buildings and compute a  
11 factor in the same manner.

12 Q Mr. Tucek, do you know how much that is?

13 A No, I don't know.

14 Q Isn't it correct that when either the BCPM or HAI  
15 calculate costs they do so at a level below the wire center  
16 level?

17 A I believe they design a network below the wire  
18 center level, and I believe they have the ability to  
19 collect costs at that level, at lower levels.

20 Q Isn't it also correct then that the models then  
21 aggregate their costs for reporting purposes by averaging  
22 the costs of lower cost grids or clusters with higher cost  
23 grids or clusters?

24 A Could you repeat the question please?

25 Q Sure, Mr. Tucek.

1           Isn't it also then correct that the models then  
2 aggregate their costs for reporting purposes by averaging  
3 the costs of lower cost grids or clusters with higher cost  
4 grids or clusters?

5           A     I know they report costs at the wire center  
6 level, so unless every grid within a wire center is  
7 identical, that statement is true. I know they report  
8 costs by density zone, so unless, again, costs are the same  
9 across density zones, and that would not be the case, that  
10 statement is true, yes.

11          Q     Thank you.

12                   At what level should the cost results be  
13 reported, Mr. Tucek?

14          A     They should be reported at the level required to  
15 size the fund. I believe Mr. Seaman testified that GTE's  
16 position is that it should be -- the fund should be sized  
17 on geographic areas at less than a wire center level.

18          Q     Mr. Tucek, when Mr. Seaman testified, he said  
19 that it was below the wire center. He didn't specify  
20 whether it was the CBG or the grid. Could you clear that  
21 up for me, please?

22          A     Fortunately I was listening on the conference.  
23 Let me augment my last answer, is that it's Mr. Seaman's  
24 tasks to say what the fund size is and how it should be  
25 sized, so under a hypothesis that we would use the modeled

1 results to size the fund, that's the context and the  
2 assumption that I'm making, but that may or may not be  
3 Mr. Seaman's testimony or GTE's policy.

4 I think what you were asking me is, is there a  
5 break point in the cost that we could look to to try to  
6 decide some definition for an area at less than the wire  
7 center level that on which we might size the fund. In my  
8 mind th break point is driven by loops less than or equal  
9 to 12 kilofeet because that is the level that you can have  
10 an all copper loop on 26-gauge cable without having to go  
11 to a pair gain device or thicker gauge cable. That is the  
12 answer from a cost point of view.

13 From an administrative point of view, that would  
14 probably be hard to identify. I think back to my days with  
15 ConTel when we were, I was managing a group that did  
16 tariffs, we used to have rates that were inside the base  
17 rate -- inside and outside the base rate area. When we  
18 define those base rate areas, we generally tried to define  
19 them with respect to the city limits, ConTel being a very  
20 small rural company. After you left town, there were no  
21 customers except for what you would see in a rural  
22 environment. That was put forth not on the basis of any  
23 study but under the belief that there was a cost  
24 differential there. So administratively, you might look at  
25 a base rate area concept that is defined by the city

1 limits, town limits, and for costing purposes look at grids  
2 that are, or are not served by DLCs.

3 Q Mr. Tucek, does the proxy cost model report a  
4 base rate area as approximately 12 thousand feet?

5 A Could you repeat the question?

6 Q Does it report a cost at the level of  
7 approximately 12 thousand feet, the proxy cost model?

8 A I don't believe BCPM does. I'm quite sure,  
9 although I can't speak for the sponsors, that they would be  
10 willing to try to show you how to extract that information  
11 or make that a feature of the model.

12 Q No further questions.

13 MS. MCKINNEY: Thank you.

14 CHAIRMAN JOHNSON: Commissioners.

15 (NO RESPONSE)

16 CHAIRMAN JOHNSON: Redirect.

17 REDIRECT EXAMINATION

18 BY MR. MITCHELL:

19 Q Mr. Tucek, you were asked about this sensitivity  
20 analysis you did of drops, do you remember that?

21 A Yes.

22 Q The sensitivity test you did, what was the  
23 structure mix of that analysis; that is, the division  
24 between aerial and buried drops?

25 A What I had the team in Dallas do was to go

1 through BCPM and identify by grid how many drops the model  
2 produced and whether they were aerial or buried, and so I  
3 used those. Those percentages to get the placement cost of  
4 the aerial drop. Placement cost for aerial drops are not  
5 expressed on a per foot basis. They are based on a per  
6 span basis. A span being how far it takes to get from the  
7 pole to the house. If you had to have a second pole, that  
8 would be two spans, so I used that mix to get the per foot  
9 placement cost of aerial drops.

10 Q There was also some discussion of this FCC pole  
11 data, do you remember that?

12 A Yes.

13 Q And have you reviewed GTE's responses to the  
14 FCC's request about pole information?

15 A Yes, I have.

16 Q Okay. And did the FCC -- was there an FCC  
17 questionnaire, so to speak, that was sent to GTE?

18 A I believe there was.

19 Q And did that questionnaire tell GTE how to  
20 interpret the question relating to cost of a pole?

21 A No, it did not.

22 Q Did the questionnaire tell GTE how to interpret  
23 the question relating to the cost of installing a pole?

24 A No, it did not.

25 Q Thank you.



1 MR. MITCHELL: That's all I have.

2 CHAIRMAN JOHNSON: Exhibits.

3 MR. MITCHELL: GTE would offer --

4 CHAIRMAN JOHNSON: 78?

5 MR. MITCHELL: Yes, Exhibit 78.

6 CHAIRMAN JOHNSON: Show it admitted.

7 MS. MCKINNEY: Staff would like to move Exhibit  
8 Number 79.

9 CHAIRMAN JOHNSON: Show that admitted.

10 Thank you, sir, you're excused.

11 MR. REHWINKLE: Madam Chairman, Charles Rehwinkle  
12 with Sprint. We think that it probably will be necessary  
13 to ask that Mr. Dickerson go next. I've spoken with the  
14 parties and staff, and I believe there is no problem with  
15 that.

16 CHAIRMAN JOHNSON: Okay.

17 MR. REHWINKLE: That will be fine. Sprint would  
18 like to call Kent Dickerson.

19 CHAIRMAN JOHNSON: Mr. Rehwinkle, where --

20 COMMISSIONER CLARK: Has he already left?

21 MR. REHWINKLE: Mr. Dickerson, were you  
22 previously sworn in?

23 MR. DICKERSON: No, I was not.

24 CHAIRMAN JOHNSON: Oh, he has not.

25 Whereupon,

1 KENTON W. DICKERSON

2 was called as a witness on behalf of Sprint and, after  
3 being duly sworn, testified as follows:

4 DIRECT EXAMINATION

5 BY MR. REHWINKLE:

6 Q Mr. Dickerson, could you please state your full  
7 name for the record?

8 A Kent W. Dickerson.

9 Q Are you the same Kent W. Dickerson who prefiled  
10 direct testimony in this matter consisting of some 19  
11 pages?

12 A Yes.

13 Q Accompanied by an Exhibit BKS-1?

14 A Yes.

15 Q That's not right, KWD-1.

16 A You said BKS.

17 Q I'm sorry, KWD.

18 A KWD.

19 Q One.

20 Mr. Dickerson, do you have any corrections or  
21 changes to make to your prefiled direct testimony?

22 A Yes. On Page 11, Line 7, strike from "Sprint,"  
23 the word "Sprint" through the rest of the sentence and  
24 replace that with, "BCPM default values, period."

25 And then there are two minor input issues I want

1 to explain. They result in a 10% -- or excuse me, a 10  
2 cent reduction from 31.88 to 31.78. That's three tenths of  
3 one percent downward impact.

4           The first change is approximately a 10% increase  
5 in each of the copper feeder fill factors. This increase  
6 will recognize that the model result produces an effective  
7 fill tha is lower than the input that is entered into the  
8 model as a result of having to select from only certain  
9 available cable sizes, so I'm increasing those values  
10 approximately 10% for each of the density zones.

11           The second item is the correction of a keying  
12 error. It's in the digital loop carrier equipment cost  
13 table. The DLC size for the 673 line was entered as  
14 128,568.72. It should have been 148,568.72. Those two  
15 minor changes, again, they had a 10-cent downward impact,  
16 three tenths of one percent.

17           Q     Mr. Dickerson, with those changes if I asked you  
18 the questions contained in your testimony today would your  
19 answers be the same?

20           A     Yes, they would.

21           MR. REHWINKLE: Madam Chairman, at this time I  
22 would ask that Mr. Dickerson's prefiled direct testimony be  
23 entered into the record as though read.

24           CHAIRMAN JOHNSON: It will be entered.  
25

2 DIRECT TESTIMONY OF KENT W. DICKERSON

3 ON BEHALF OF SPRINT-FLORIDA, INCORPORATED

4 DOCKET 980696-TP

5 AUGUST 3, 1998

6  
7 **Q. Please state your name, business address, employer and current position.**

8  
9 **A.** My name is Kent W. Dickerson. My business address is 4200 Shawnee Mission  
10 Parkway, Fairway, Kansas 66205. I am presently employed as Director Cost  
11 Support for Sprint Management Company. I am testifying on behalf of Sprint -  
12 Florida (hereafter also referred to as "Sprint," or the "Company".)

13  
14 **Q. Please describe your educational background and business experience.**

15  
16 **A.** I received a Bachelor of Science degree from the University of Missouri - Kansas  
17 City in 1981 with a major in Accounting. In 1984, I passed the national exam and  
18 am a Certified Public Accountant in the State of Missouri.

19  
20 From 1981 to 1983, I was employed as a Corporate Income Tax Auditor II for the  
21 Missouri Department of Revenue. From 1983 to 1985, I worked for Kansas Power  
22 and Light (now Western Resources) in the Tax and Internal Audit areas. I joined  
23 United Telephone Midwest Group in September, 1985 as a staff accountant in the  
24 Carrier Access Billing area. Thereafter, I moved through a progression of positions  
25 within the Toll Administration and General Accounting areas of the Finance

1  
2  
3 In 1987, I was promoted into the Carrier and Regulatory Services group as a  
4 Separations/Settlement Administrator performing Federal and Intrastate access/toll  
5 pool settlement, reporting and revenue budgeting functions. I was promoted to  
6 Manager - Pricing in June, 1989 where I performed FCC regulatory reporting and  
7 filing functions related to the United Telephone - Midwest Group Interstate Access  
8 revenue streams.

9  
10 In 1991, I was promoted to Senior Manager - Revenue Planning for United  
11 Telephone - Midwest Group. While serving in this position my responsibilities  
12 consisted of numerous FCC regulatory reporting and costing functions. In 1994, I  
13 accepted a position within the Intrastate Regulatory operations of Sprint/United  
14 Telephone Company of Missouri where my responsibilities included regulatory  
15 compliance tariff filings, and earnings analysis for the Missouri company's intrastate  
16 operations.

17  
18 Since December 1994, I have set-up and managed a work group, which performs cost  
19 of service studies for retail and wholesale local network services. Over the last 3  
20 years I have been charged with developing and implementing cost study methods  
21 related to the evolving Total Service Long Run Incremental Cost ("TSLRIC") and  
22 Total Element Long Run Incremental Cost ("TELRIC") methodologies. In addition,  
23 I am responsible for filing written comments, serving on industry work groups, and  
24 participating in technical conferences related to TSLRIC/TELRIC costing  
25 methodology and the filing of studies within the individual 19 states that comprise

1 Sprint's Local Telephone Division. I have testified in Wyoming, Kansas, Florida,  
2 North Carolina, Texas and Florida regarding TSLRIC/TELRIC cost matters.

3  
4 **Q. What is the purpose of your testimony in this proceeding?**

5  
6 **A. The purpose of my testimony is to respond to the portion of the Commission's issues**  
7 **list related to the determination of Florida-specific model inputs. In addition my**  
8 **testimony supports the Benchmark Cost Proxy Model 3.1 ("BCPM 3.1 or "BCPM"),**  
9 **(as sponsored by Dr. Brian K. Staihr and filed in this docket) outputs for Sprint's**  
10 **Florida serving territories as calculated using inputs specific to Sprint's Florida**  
11 **operations. I am sponsoring a summary of the results of the study along with the**  
12 **study inputs. These are provided as part of my testimony in Exhibit KWD-1.**

13  
14 **Q. The Commission's issue 4 requests information on the appropriate input values**  
15 **to the cost proxy model used for determining the cost of basic local services.**  
16 **What are Sprint's recommendations for the appropriate input values for its**  
17 **universal service cost study submitted in this docket?**

18  
19 **A. Sprint's cost study inputs were developed to produce an appraisal of the probable**  
20 **future costs of providing basic local telecommunications services in the individual**  
21 **Florida geographic areas currently served by Sprint. Since the primary purpose of**  
22 **the cost model is to identify the cost of providing basic local service to a specific**  
23 **geographic area, cost inputs were developed from Sprint's operational experience in**  
24 **Florida wherever possible. When this "company specific" information was not**  
25 **available, industry average cost information developed by the BCPM sponsors was**

1 used. This industry average information, "default" inputs, was used only if believed  
2 to be consistent with Sprint's experience in providing local telephone service in  
3 Florida.

4  
5 **Q. How should inputs be developed for conducting a forward looking economic**  
6 **cost study?**

7  
8 **A.** The inputs should reflect the costs that an efficient provider of telecommunications  
9 service would most likely experience in providing basic local services in Florida.

10  
11 **Q. Does Sprint recommend the use of National default inputs in the calculation of**  
12 **the forward looking cost of Basic Local Service in Florida?**

13  
14 **A.** No. Many of the factors that determine the cost of providing basic service are specific  
15 to customer location or service area and the company providing the service.

16 The BCPM estimates cost in a two stage process: The model determines the cost of  
17 constructing the telephone network, and then determines the cost of *operating* it.

18 In constructing the network, the model takes into account natural characteristics of  
19 the area served such as topography, geology and geography. When the model places  
20 buried telephone cable, it considers the specific soil type that is encountered. When  
21 the model places aerial cable, it considers the terrain and slope of the area that is  
22 covered. It takes into account the dispersion of actual customer locations and the  
23 amount of land area that must be covered in order to reach all customers in the  
24 market. These are all geographic factors that are obviously location-specific. In  
25 addition, the BCPM can also accommodate company specific inputs which reflect

1 location-specific factors that can affect plant costs e.g. local zoning codes impacting  
2 construction techniques or use of aerial plant.

3  
4 **Q. You've mentioned the cost of constructing the network. Should the inputs that**  
5 **determine the cost of operating the network be Florida-specific as well?**

6  
7 **A. In many cases, yes. Operating expense data that are directly related to plant**  
8 **investment might certainly vary from location to location because these expenses are**  
9 **often maintenance-related. There may be location-specific factors that affect**  
10 **maintenance costs differently in Florida than, say, in Vermont. For example, average**  
11 **maintenance expenses for aerial plant might be significantly greater in a hurricane-**  
12 **prone state such as Florida, than they would be in a state not known for its tropical**  
13 **storms such as Vermont. Regional wage differences can also create significant**  
14 **differences in operating costs among states.**

15  
16 **Q. Should the model reflect a standard set of inputs for all Florida companies using**  
17 **BCPM 3.1?**

18  
19 **A. No. The primary purpose of the model is to develop deaveraged cost estimates by**  
20 **geographic area. If a standard set of inputs were included for all companies, the**  
21 **model's precision in developing cost by location would be diminished.**

22  
23 **Q. What Model input issues has the Commission identified?**

24  
25 **A. In its issues list (issue 4) for this docket, the Commission identified a series of input**



1 values and asked for information on the appropriate values for these input items. The  
2 remainder of my testimony will provide Sprint's methodology for developing its  
3 input values for each of the items identified by the Commission. The issues  
4 identified in the Commission's issue 4 are as follows:

5 *Depreciation rates.*

6 *Cost of money.*

7 *Tax rates.*

8 *Supporting structures.*

9 *Structure sharing factors.*

10 *Fill factors.*

11 *Manholes.*

12 *Fiber cable costs.*

13 *Copper cable costs.*

14 *Drops.*

15 *Network interface devices.*

16 *Outside plant mix.*

17 *Digital loop carrier costs.*

18 *Terminal costs.*

19 *Switching cost and associated variables.*

20 *Traffic data.*

21 *Signaling system costs.*

22 *Transport system costs and associated variables.*

23 *Expenses.*

24 *Other inputs.*

25

1       **Q.    Please describe why the approach used in developing Sprint-Florida's proposed**  
2       **cost inputs provides the best data for estimating the forward looking cost of**  
3       **basic local service within Sprint - Florida's serving area.**

4  
5       **A.    Sprint - Florida's inputs reflect the realities of providing service within Sprint -**  
6       **Florida's operating territory for the following reasons:**

7  
8       Sprint's inputs reflect the contractor prices currently in effect for 1998 for  
9       constructing plant within Sprint's Florida serving area.

10  
11       Sprint's inputs reflect the actual construction techniques (plow, trench and backfill,  
12       cut and restore asphalt, bore cable etc.) utilized in placing plant in Sprint - Florida's  
13       serving area for the very recent period of 1997. The same terrain, local building  
14       codes, and infrastructure issues (density) encountered in placing these recently  
15       installed facilities in Sprint - Florida's serving area can reasonably be expected to  
16       continue into the future.

17  
18       Sprint's recent experience with actual purchases and installations of telephone plant  
19       equipment provides the best information for predicting the forward looking installed  
20       costs within Sprint - Florida's serving area. These inputs are based on current vendor  
21       prices for material and equipment purchases and current Sprint - Florida specific  
22       contract and company labor costs for engineering and installation.

23  
24       Clearly the recent factual and objective data provides the best basis for predicting the  
25       forward-looking cost of constructing telephone plant in the very same area from

1 which the data was drawn (i.e., Sprint - Florida's serving area).

2

3 **Q. What depreciation rates are reflected in Sprint's study?**

4

5 **A.** Sprint's filing reflects forward looking economic depreciation lives consistent  
6 with the concept of building a network composed of forward looking least cost  
7 technologies. The depreciation lives for the critical network components of  
8 Digital Switching, Digital Circuit Equipment and all Cable & Wire Facilities are  
9 based on a study performed by Technology Futures, Inc.

10

11 **Q. What is the cost of capital reflected in Sprint's study?**

12

13 **A.** As provided in the FCC's Order, the FCC authorized rate of return of 11.25% was  
14 used in Sprint's study.

15

16 **Q. What tax rates are reflected in Sprint's cost study filing?**

17

18 **A.** Actual tax rates for Florida were utilized as inputs including the state tax rate, ad  
19 valorem tax, and Public Service Commission regulatory assessment fee.

20

21 **Q. Which costs fall into the category of "supporting structures"?**

22

23 **A.** Sprint has interpreted the Commission's issue 4a, "supporting structures" to refer  
24 to those inputs associated with the installation costs for placing conduit, the cost  
25 of creating trenches for buried cable, and the installation cost for poles. These

1  
2  
3 **Q. How were Sprint's proposed values for these inputs developed?**

4  
5 **A.** The BCPM inputs for these functions were based on the specific conditions  
6 encountered in the Company's Florida service area. Costs for buried and  
7 underground structures were developed based on the contractor prices currently in  
8 effect for 1998 within Sprint's Florida serving area. The construction activity  
9 percentages, also contained in the structure tables, were based upon an analysis of  
10 the total 1997 actual contractor jobs for construction of feeder and distribution  
11 routes within Sprint's Florida serving area.

12  
13 The use of current 1997 and 1998 data, barring any known reason to change, is  
14 clearly the best predictor of the future construction costs in the very same  
15 geographic market from which the data was gathered.

16  
17 **Q. Would you please describe the structure sharing input?**

18  
19 **A.** Structure sharing, which impacts the percent of costs assigned to telephone, is  
20 based upon an assessment of current and projected opportunities to have other  
21 entities share the cost of the support structure. For example, the percent assigned  
22 to telephone is set at 30 percent for aerial feeder to reflect existing and expected  
23 pole sharing and pole attachment agreements. On the other hand, the percent  
24 assigned to telephone for buried and underground (conduit and manhole) feeder  
25 structures is set at 95 percent for most grids to reflect the fact that sharing with

1 other entities, such as power companies and cable companies, is limited. There  
2 are work coordination, safety, and available space considerations which make  
3 significant sharing of buried and underground construction costs unlikely.

4

5 **Q. Could you please describe the fill factor inputs?**

6

7 **A. Sprint's cost study calculates cable fill factor inputs separately for feeder and**  
8 **distribution cables.**

9

10 feeder routes, as the name implies, feed several distribution routes. Feeder routes  
11 normally are constructed so that capacity can be added at a relatively lower cost at  
12 some future date. Sprint calculated actual feeder fill based upon working pairs  
13 (cable pairs in service) divided by total pairs available as tracked in the Customer  
14 Loop Assignment System, Sprint's internal system for maintaining cable pair  
15 inventory. This data reflects a real world balance between inventory carrying  
16 costs (non-working cable pairs) against the cost of construction for adding  
17 additional cable pairs at a later date. These same economics are expected to  
18 continue into the future, thus these cable fill input factors were used to develop  
19 the Florida specific cost results.

20

21 Distribution cable contrasts with feeder cable in that it serves individual customer  
22 locations. The Company must anticipate individual customer's line demand in  
23 order to provide service when requested and to avoid costly construction to add  
24 cable pairs at a later date. The distribution cable sizing factor input of 100%  
25 works in concert with the related model input assumption of two pairs per

1 household to achieve a reasonable overall distribution cable fill. Generally these  
2 model inputs result in distribution cable fills ranging from approximately 40% to  
3 50%.

4  
5 **Q. How did Sprint develop its input for manhole costs?**

6  
7 **A.** The costs for manholes were based on <sup>BCPM default values.</sup> ~~Sprint's current vendor costs and recent actual~~  
8 ~~installation costs.~~

9  
10 **Q. How were the model's loop cost inputs for the fiber and copper cable material**  
11 **costs developed?**

12  
13 **A.** The inputs for cable costs were developed separately for copper and fiber cable and  
14 include labor and material costs. Copper cable inputs were based on Sprint's current  
15 material prices and Florida specific company and contractor labor costs prices for  
16 engineering and installation. Fiber cable costs were developed in the same manner.

17  
18 **Q. How were the cost inputs for the feeder/distribution cable interface devices and**  
19 **drop cable, terminals, and network interface devices estimated?**

20  
21 **A.** The cost inputs for these items of outside plant are included in the Model's loop cost  
22 input tables and were developed based on Sprint's actual current vendor material  
23 prices and specific estimates for installation.

24  
25 **Q. Please describe the cable plant mix inputs?**

1       A.    The cable plant mix inputs are developed separately for copper feeder and  
2           distribution and fiber feeder. The percentages of cable facilities placed in either  
3           buried, underground or aerial locations were based on an analysis of Sprint's  
4           facilities in Florida adjusted to reflect a forward-looking trend for greater use of  
5           buried copper cable and greater use of underground fiber cable.

6  
7       **Q.    How were the cost inputs associated with digital loop carrier systems**  
8           **determined?**

9  
10      A.    The costs for digital loop carrier systems (DLC) were based on Sprint's current  
11           vendor costs and actual installation costs within its Florida serving area. The DLC  
12           model costs reflect Sprint's use of forward looking Next Generation Digital Loop  
13           Carrier Systems (NGDLCs) which can support a wide range of services from a single  
14           device, as opposed to one device providing Plain Old Telephone Service (POTS), and  
15           a separate device providing non-switched special services. Sprint's NGDLC model  
16           configuration include costs only to support the level of basic service specified by the  
17           FCC, but has the flexibility to support additional services with incremental  
18           investment additions which may be required to meet individual demands for  
19           advanced services. Sprint uses a low density NGDLC for subscriber applications up  
20           to 240 lines, and a high-density NGDLC for applications up to 2016 lines. The  
21           BCPM inputs reflect the appropriate levels of investment for the corresponding line  
22           demand and resulting modeled DLC system size.

23  
24      **Q.    Please identify the inputs necessary to develop central office switching**  
25           **equipment costs?**

1       A.    The inputs included in BCPM related to the development of switching costs are  
2           included in the SW (switching) State Default Inputs Table, the Signaling  
3           Investments Table, the Switching-Coefficient Input Table, the Global Inputs Table,  
4           and the SW Discount Factor Table, the Audited LEC Switching Model (ALSM) and  
5           the Switch User Data File. These tables include data specifying the calling  
6           characteristics of Sprint's customers in Florida and financial information necessary  
7           to determine the cost of switching equipment used in providing local telephone  
8           service in Florida. The information included in these tables is used by the model to  
9           determine the amount of switching investment required to provide the level of local  
10          service specified by the performance parameters in the tables. The model also uses  
11          the information included in these tables to determine that portion switching  
12          equipment costs that are required to provide the basic local service.

13  
14       Q.    How were the forward looking Sprint Specific inputs for the SW State Default  
15           Input table developed?

16  
17       A.    The company specific inputs included in the SW State Default Input Table are the  
18           SESS and DMS share inputs. The remaining inputs in the table are default values  
19           that are believed to be representative of Sprint operations in Florida. Additional  
20           company specific inputs contained in the Audited LEC Switching Model (ALSM)  
21           and the switch user data File include the following:

22           *Minimum Investment per line*

23           *Getting Started Investment*

24           *Line CCS Investment and Trunk CCS Investment*

25           *SS7 Investment*



1            *Umbilical CCS investment*  
2            *Engineered Call per line and CCS per line*  
3            *Line/Trunk Ratio*  
4            *Percent Fill*

5  
6            **Q.    How were the inputs to the Signaling Investment, Switching Coefficient, and**  
7            **Global Input Tables developed?**

8  
9            **A.    The inputs for these tables are default values that are representative of Sprint's**  
10           **operations in Florida.**

11  
12           **Q.    How were the inputs for the SW Discount Factor table developed?**

13  
14           **A.    The company specific inputs included in this table are the current discount rates**  
15           **applicable to new switching equipment purchases for Sprint - Florida and the**  
16           **distribution of access lines by switch equipment type.**

17  
18           **Q.    How were the inputs used for determining the investment in interoffice**  
19           **transport introduced into the Model?**

20  
21           **A.    From input parameters included in the Transport Input Table, the Equipment Price**  
22           **Table and the Ring Size Table, the BCPM 3.1 develops the interoffice transport**  
23           **facilities investment necessary to provide basic local services.**

24  
25           **Q.    How were the inputs developed for the Transport Input Table?**

1       A.     With limited exceptions the inputs for the Transport Input Table were developed  
2             from data relating to Sprint's Florida operations. The inputs for the percentage of  
3             fiber optic cable installed in aerial, buried and underground locations were derived  
4             from data contained in the mechanized plant in place (MPIP) engineering databases,  
5             adjusted to reflect a forward-looking trend of increased underground fiber plant.  
6             The Miscellaneous Equipment and Power Factor was derived based on the very  
7             recent 1997 ARMIS Report data.

8  
9             The air-to-route mile factor was developed by comparing air miles calculated using  
10            V&H coordinates to actual route miles for a sample of routes.. The sample included  
11            over 130 local and EAS routes in all areas of the Company's service territory. The  
12            sheath sharing factor was developed from engineering databases of route-specific  
13            fiber facilities.

14  
15            The EAS% factor was developed from 1997 usage data. Finally the BCPM default  
16            values for Line to Trunk ratio factors were determined to be representative of Sprint -  
17            Florida's forward-looking service quality standards and thus were utilized in Sprint's  
18            filing.

19  
20       **Q.     How were the inputs for the Equipment Price Table developed?**

21  
22       A.     The inputs for the Equipment Price Table specify equipment and installation prices  
23             for circuit equipment used in providing interoffice facilities. The material prices  
24             included in the table reflect vendor discounted prices, Florida sales tax, and Florida  
25             specific engineering and labor costs.

1       **Q.    How were the inputs for the Ring Size Table developed ?**

2

3       **A.    The Ring Size Table specifies the parameters for determining the capacity of the**  
4       **fiber optic ring facilities used to provide interoffice communications. The inputs**  
5       **included in this table are consistent with current engineering standards employed in**  
6       **sizing interoffice fiber optic ring facilities in Florida.**

7

8       **Q.    How were operating expense estimates included in the Model?**

9

10      **A.    Operating expenses are included in the model on a per line basis for administrative**  
11      **and retailing expenses not associated with specific network facilities. Operating**  
12      **expenses associated with network facilities were included as a percentage of**  
13      **investment in network facilities. Both of these estimates were derived from the**  
14      **actual operating expenses Sprint experienced in Florida during 1997. These**  
15      **operating expense ratios, when applied against the BCPM forward looking**  
16      **investment levels, provide a reasonable estimate of the forward looking expenses**  
17      **associated with basic local service.**

18

19      **Q.    What other inputs not specified in the Commission's Issue 4 were included in**  
20      **Sprint's universal service cost study?**

21

22      **A.    Other significant inputs to Sprint's universal service cost study were pole costs, pole**  
23      **and manhole spacing and Sprint's actual wire center line counts.**

24

25      **Q.    What is the basis for Sprint's pole cost inputs?**

1       A.     The input for pole material cost was calculated as the sum of the bare material cost  
2             for a standard pole from Sprint's invoiced pole cost, plus material and overhead  
3             loadings. Labor associated with placing the pole consists of the contract unit cost.  
4             These assumptions reflect Sprint's actual experience in Florida. Again these recent  
5             experiences provide the best basis for estimating the forward looking costs of poles  
6             under these same market conditions.

7

8             Costs for related anchors and guys, including material, labor and overheads, were  
9             based on Sprint's actual experience in the Florida market.

10

11       **Q.     How did Sprint develop its inputs for pole and manhole spacing?**

12

13       A.     The inputs for both pole and manhole spacing reflect Sprint's current engineering  
14             design and placement practices for the different density zones. The design for  
15             manhole installation reflects the use of manholes to provide fiber feeder as well as  
16             copper distribution requiring access points for drop installations.

17

18       **Q.     Do Sprint's BCPM wire center line count inputs reflect the actual wire center  
19             line counts for Sprint's local service operations in Florida?**

20

21       A.     Yes, actual wire center line counts for each Sprint company were included in the  
22             model.

23

24       **Q.     Are the inputs used by Sprint reasonable and do they reflect "real-world"  
25             telecommunications engineering?**

1       A.    Yes, the inputs are reasonable and represent "real-world" telecommunications  
2            engineering. Since most of the inputs are based on Sprint's current real world  
3            experience in providing local service in Florida, the inputs reflect practical  
4            experience, and the reality based forward-looking cost characteristics of the  
5            geographic territory that must be served.

6

7       **Q.    Has Sprint conducted a cost study using BCPM 3.1 to determine the forward**  
8            **looking economic cost of basic local service that should be supported by a**  
9            **u. versal service funding mechanism?**

10

11      A.    Yes, Sprint conducted a forward looking economic cost study using the BCPM  
12            3.1 and the Sprint - Florida specific inputs described in my testimony.

13

14      **Q.    Does this conclude your testimony?**

15

16      A.    Yes.

1           MR. REHWINKLE: And that his Exhibit KWD-1 be  
2 identified.

3           CHAIRMAN JOHNSON: It will be identified as  
4 Exhibit 80.

5 BY MR. REHWINKLE (Continuing):

6           Q     Mr. Dickerson, did you also prefile rebuttal  
7 testimony in this matter consisting of some 14 pages?

8           A     Yes, I did.

9           Q     And accompanied by an exhibit on rebuttal, KWD-1?

10          A     Yes.

11          Q     Do you have any corrections or changes to make to  
12 your prefiled rebuttal testimony?

13          A     No.

14          Q     If I asked you the questions contained in your  
15 prefiled rebuttal testimony today, would your answers be  
16 the same?

17          A     Yes.

18                MR. REHWINKLE: Madam Chairman, at this time I  
19 would ask that Mr. Dickerson's prefiled rebuttal testimony  
20 be entered into the record as though read.

21                CHAIRMAN JOHNSON: It will be entered.  
22  
23  
24  
25

1                                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**2   **REBUTTAL TESTIMONY OF**3   **KENT W. DICKERSON**4   **ON BEHALF OF SPRINT-FLORIDA, INCORPORATED**5   **DOCKET NO. 980696-TP**6   **SEPTEMBER 2, 1998**

7

8           **Q.**     Please state your name, business address, employer and current position.9           **A.**     My name is Kent W. Dickerson. My business address is 4220 Shawnee Mission Parkway,  
10                   Fairway Kansas 66205. I am presently employed as Director Cost Support for Sprint/United  
11                   Management Company. I am testifying on behalf of Sprint - Florida (hereafter collectively  
12                   referred to as "Sprint" or "Company").

13

14           **Q.**     Are you the same Kent Dickerson who filed Direct Testimony in this proceeding on  
15                   August 3, 1998?16           **A.**     Yes.

17

18           **Q.**     What is the purpose of your Rebuttal Testimony?19           **A.**     I am responding to the Direct Testimonies of AT&T Communications and MCI witnesses  
20                   Don J. Wood, and MCI witness James W. Wells, Jr. with respect to the validity of the HAI  
21                   Model Version 5.0a ("HAI Model" or "HAI") default inputs to model forward looking costs;  
22                   specifically, for Sprint's serving territories in Florida.

23

1 I am also responding to the Direct Testimony of Richard T. Guepe of AT&T  
2 Communications of the Southern States, Inc and Joseph Gillan of The Florida Competitive  
3 Carriers Association with respect to USF costs being equal to UNE costs.

4

5 Q. Are the HAI model national default inputs referenced in Mr. Wood's testimony  
6 specific to Sprint's serving area within Florida or even to the state of Florida?

7 A. No. The HAI national default inputs are the same inputs promoted by MCI and AT&T for  
8 all companies across all states.

9

10 Q. Why are Sprint's company specific inputs sponsored in your direct testimony  
11 superior to the HAI national default inputs for calculating a reasonable forward  
12 looking estimate of the cost of UNEs in Sprint's Florida serving area?

13 A. Because Sprint's inputs are based on the most objective and verifiable data available. In  
14 many cases Sprint's inputs are based on the most recent actual material and labor cost  
15 information available and are specific to Sprint's Florida operation. The use of actual  
16 current cost information reflects the impacts of geography and regional labor costs within  
17 the specific Florida serving areas.

18

19 Q. Does the use of inputs based on Sprint's most recent and actual experience with the  
20 construction and maintenance of UNEs within Florida, constitute a use of embedded  
21 cost and thereby violate the forward looking principle of TELRIC?

22 A. No it does not. Economic theory does not preclude the consideration of historic costs in a  
23 forward looking economic cost study. Whether or not historic or current costs are a good  
24 approximation of forward looking costs is an empirical issue. To argue otherwise (i.e., to  
25 exclude any consideration of current costs in a forward looking study) leads to the absurd



1 conclusion that available empirical data should not be given any weight in a forward looking  
2 cost study. This would preclude not only use of existing data, but all forecasts based on  
3 historic data; in essence reducing forward looking cost studies to pure guesswork.

4 The term embedded costs implies the total historic book cost of a company. In contrast to  
5 this, Sprint's inputs use the most currently available information as the best predictor of  
6 forward looking costs and in most cases are based on 1997 and 1998 information. As I will  
7 discuss in a moment there are clear deficiencies with the HAI inputs. However, at a high  
8 level the approach described by Mr. Wells in his direct testimony and Exhibit JWW3  
9 indicates that some portion of the Outside Plant (OSP) inputs were developed based on a  
10 limited sample of contractor and vendor costs. Although inferior to Sprint's approach for  
11 several reasons, the HAI inputs also use current vendor and contractor costs (i.e., current  
12 cost data) to predict future costs. If the inputs selected are to have real world application, as  
13 well as to allow an acceptable level of verification and objectivity, an approach that uses  
14 current actual information is the only reasonable alternative.

15  
16 **Q.** If the HAI national default inputs for OSP are based in part on some degree of  
17 sampling of contractor prices, why then are they not acceptable for use in predicting  
18 the forward looking costs of Sprint's Florida serving areas?

19 **A.** There are several reasons why the HAI national default inputs are not the best available  
20 information for predicting the cost of constructing OSP within Florida. The most obvious  
21 reason is that the inputs are the same national inputs promoted by the AT&T and MCI in  
22 every state and are not specific to Florida, much less to Sprint's serving areas within the  
23 state.

24

1 Exhibit JWW3 of Mr. Wells direct testimony contains the limited sampling information that  
2 is purported to support the HAI national defaults for OSP construction costs. Page 1 of  
3 JWW3 shows 16 data points for the cost of Bury Service Wire. Page 2 of 5 indicates 6 data  
4 points for the labor costs associated with setting poles. Page 4 of 5 indicates a range of 13  
5 to 21 data points for trench and backfill and trench and pavement restoral construction  
6 activities. Finally page 5 of 5 indicates a range of 8 to 15 data points for the construction  
7 activity of plowing cable.

8  
9 As these inputs are national in scale and are promoted for use in all fifty states, the limited  
10 data points equate to range of 58% to 84% probability that a given state is not even  
11 represented in the sample. This assumes a best case scenario that each data point is a  
12 unique state, which may not be the case.

13  
14 The range of values for the limited data points shown in exhibit JWW3 suggests a high  
15 degree of variability in the construction costs for OSP facilities. For example, Page 5 of 5 of  
16 JWW3 shows a range of costs for plowing cable at 24 inches in rural areas from \$.40 to  
17 \$1.50 per foot. The range of costs for 36 inch plowing depth ranges from \$.50 to \$2.00 in  
18 rural areas. The same construction activity shows even greater variability for suburban areas  
19 with ranges from \$.85 to \$3.50 for 24 inch depth and from \$.90 to \$4.00 for 36 inch depth.  
20 Clearly contractors bidding on the same job can not compete with one another with bids  
21 ranging from \$.40 to \$1.50 per foot. Rather the range of contractor prices likely reflect real  
22 differences in regional labor costs, terrain conditions, local government restrictions on  
23 blocking traffic flows and quality of construction issues such as trench width, depth and fill  
24 material.

25

1 This is why the best predictor of the forward looking costs within a specific geographic area  
2 is the market rate for that specific geographic area. Only Sprint's inputs reflect these local  
3 market conditions.

4

5 Q. Starting on Page 19 of his direct testimony Mr. Wells' maintains the HAI model  
6 national defaults are not based on the lowest default input value. Do you agree with his  
7 discussion?

8 A. No I do not. While it is mathematically correct that the HAI national defaults are not based  
9 on the absolute lowest value, they contain a definite and unexplained bias towards the lowest  
10 value in each range. For example, on page 5 of 5 of exhibit JWW3, the default value for  
11 plowing cable in rural areas to a 24 inch depth, is lower than 4 of 8 of the cost estimates  
12 presented with the degree of understatement as ranging from 6% to 188%. The same input  
13 for a 36 inch depth is lower than 12 of 15 of the cost estimates with the degree of  
14 understatement ranging from 12.5% to 250%. The actual cost of plowing cable in Sprint's  
15 Florida serving area in 1997 was \$1.90, which is 138% greater than the HAI national default  
16 value. This example illustrates the unsubstantiated downward bias contained in the HAI  
17 national default inputs. Clearly in this example, Sprint's verifiable and actual cost of  
18 plowing cable within Florida is the best available information for predicting forward looking  
19 costs.

20

21 Q. The HAI Inputs Portfolio contained in Exhibit DJW-3 of Mr. Wood's direct testimony  
22 describes numerous alleged "forward looking adjustments" to the 1996 ARMIS  
23 expense data. Do these HAI national default adjustments and assumptions result in  
24 reasonable estimates for forward looking expenses?

1       A.     No they do not. Many areas of the HAI national default assumptions and expense inputs  
2             result in unreasonable estimates for these necessary expenses. A simple comparison of the  
3             HAI 5.0a results to Sprint's 1997 actual expenses demonstrates the grossly understated  
4             nature of the cost estimates resulting from HAI 5.0a model and national default inputs.

5  
6             Before describing several of the more serious areas of grossly understated expenses, I first  
7             want to clarify that Sprint is not advocating that embedded book costs of operating expense  
8             levels are automatically appropriate forward looking cost estimates. In fact Sprint's forward  
9             looking cost estimates contain very material reductions to actual booked cost. Rather, as I  
10            will now illustrate, the actual costs serve as useful, factual and objective information in order  
11            to test the reasonableness of the results sponsored by Mr. Wood.

12            Exhibit KWD-1 demonstrates the unreasonably low levels of investments and expenses  
13            resulting from HAI 5.0a and national default inputs. For example:

14            1. HAI 5.0a estimates general support expenses approximately 58% less than actual for  
15            Sprint. This understatement is tied to an erroneous assumption which attributes  
16            approximately 60% and 54% (HAI filed one cost study for Sprint-United and one for Sprint-  
17            Central), of Motor Vehicles, Garage Work Equipment and Other Work Equipment to  
18            corporate overheads. HAI then excludes this portion of those assets. Motor Vehicles,  
19            Garage Work Equipment and Other Work Equipment is almost entirely utilized for the  
20            construction and maintenance of outside plant facilities. The HAI model national default  
21            assumption is unrealistic and dramatically understates the cost of these necessary assets.

22  
23            2. HAI 5.0a estimates Plant Non-Specific expenses approximately 54% less than actual  
24            for combined United and Central companies. Again this reduction is based on an  
25            erroneous national default assumption that treats all companies in all states with the same

1 broad brush of alleged inefficiencies. This arbitrary and excessive reduction is not  
2 supported by any data specific to Florida or to Sprint.

3

4 3. HAI 5.0a estimates digital switch maintenance expenses approximately 70% less than  
5 actual for combined United and Central companies. The justification for this excessive  
6 reduction comes from a 1993 New England Telephone incremental cost study. The AT&T  
7 and MCI witnesses provide no support for the association of the outdated cost study to a  
8 company the size of Sprint serving predominately rural territories in Florida.

9

10 4. HAI 5.0a estimates customer and corporate operations expenses approximately 80% less  
11 than actual for combined United and Central companies.

12

13 Clearly the magnitude of expense reductions for alleged forward looking assumptions within  
14 the HAI 5.0a model and national default inputs are unreasonable and must be rejected.

15

16 Q. The HAI Inputs Portfolio contained in Exhibit DJW-3 of Mr. Wood's direct testimony  
17 describes the national default assumptions for the level of structure sharing with other  
18 companies. Do these HAI national default assumptions reflect a reasonable estimate  
19 of the forward looking level of cost sharing within Sprint's Florida serving area?

20 A. No. The HAI national default inputs dramatically overstate Sprint's cost sharing  
21 opportunities associated with poles and trenching costs for buried cable and conduit. For  
22 example, an analysis of Sprint's pole sharing arrangements within Florida indicates 31% of  
23 the cost of poles is borne by Sprint. Based on this reality Sprint assumed a pole sharing  
24 factor of 30% in the study filed in this docket. This contrasts with the HAI national default

1 assumption of 25%. This equates to 17% understatement of the cost of poles within the  
2 HAI study.

3  
4 Even more dramatic is the level of understatement associated with trenching buried cable  
5 and conduit. The HAI inputs generally assume *noway* 67% of the costs for trenching  
6 buried cable and conduit. Sprint's actual experience indicates a much different reality,  
7 where the real world issues of work coordination with other companies, safety concerns with  
8 power cables and available space considerations make significant sharing of buried and  
9 underground construction costs unlikely. Sprint's witness, Mr. Laemmli, discusses the real  
10 world issues constraining structure sharing opportunities at length in his rebuttal testimony.

11  
12 **Q. Are the HAI national default cable sizing factors supported by Mr. Wood's and Mr.**  
13 **Wells' reflective of a functioning real world telecommunications network?**

14  
15 **A.** No. The HAI national default inputs fail to recognize that fill factors within actual working  
16 networks are reflective of some cables that are completely full and other new cables that are  
17 only partially full. At any given point in time, the un-utilized cable pairs provide the  
18 inventory necessary to meet customer demand for new services within three working days  
19 and to resolve 95% of trouble reports within twenty-four hours. This service standard within  
20 Florida is likely continue into the future, thereby requiring maintenance of the necessary  
21 cable pair inventory which enables Sprint to meet these service standards for both retail and  
22 wholesale customers.

23  
24 The concept of a firm requiring inventory in order to run its business is not unique to  
25 telecommunications nor is it a principle that can be ignored. Further any suggestion that it is

1 improper to include this cost in the ultimate price to current customers is totally contrary to  
2 common business practices. The local hardware store must maintain inventory to satisfy  
3 customer demand for products. A hardware store which is consistently out of nails will soon  
4 drive its customers to shop elsewhere. The carry cost of an inventory of nails is most  
5 certainly reflected in the current cost of nails to current customers. The practice of charging  
6 current customers for the cost of inventory is an everyday occurrence across nearly all  
7 business segments including telecommunications. This basic business reality is ignored in  
8 the unrealistically high levels of distribution and feeder cable fill factors sponsored by Mr.  
9 Wood's testimony. For this reason, the unrealistically low HAI default cable fill inputs must  
10 be rejected in favor of the real world inputs sponsored in my direct testimony.

11

12 **Q.** In his testimony, Mr. Wells uses the ILEC pole cost data gathered from the FCC to  
13 justify the proposed HAI default pole cost inputs. Do you agree?

14 **A.** No. The values for Sprint, as reported to the FCC, did not reflect all of the costs related to  
15 the cost of pole materials and installation. For instance, the FCC reported material cost of  
16 \$170 was a bare material cost and did not include related material overheads for items such  
17 as shipping, taxes, and warehousing. The USF filed input of \$255 does include those  
18 material overheads. Additionally, the FCC installation cost of \$100 as reported was simply  
19 incorrect, since it was estimated instead of based on actual experience in placing poles in  
20 Sprint's territory in Florida. The correct USF filed installation cost of \$294.00 was based on  
21 an analysis of Sprint's recent experience placing a total of 526 poles in the state of Florida.

22

23 **Q.** The HAI Inputs Portfolio contained in Exhibit DJW-3 of Mr. Wood's direct testimony  
24 describes the national default assumptions for Placement Fractions for both

1           **Distribution and Feeder Cable. Do these HAI national default assumptions reflect a**  
2           **reasonable estimate of Placement Fractions within Sprint's Florida serving area?**

3           A.   No. The HAI Input Portfolio is trying to fit a National square peg into a Florida specific  
4           round hole. Sprint places buried or underground cable in approximately 88% of its  
5           distribution cable, 97% of its feeder copper cable and 98% of its fiber feeder because it is  
6           inexpensive to dig trenches and less expensive than aerial to maintain.

7  
8           The surface structure of the Florida service territory consists of 76% of fine sand and 10% of  
9           sandy loam. These terrain types allow for relatively inexpensive placement of buried cable.  
10          The HAI maintenance factors show that the cost of maintaining aerial cable is 68% greater  
11          (13.7% aerial vs. 8.2% buried) for the Central Telephone territory and 46% greater (6.3%  
12          aerial vs. 4.3% buried) for the United Telephone territory than buried cable. The same cost  
13          savings can be seen with the use of underground plant. The cost of maintaining aerial cable  
14          is 244% greater (13.7% aerial vs. 4.0% underground) than underground for Central  
15          Telephone and 291% greater (6.3% aerial vs. 1.6% underground) for United Telephone.

16  
17          Greater aerial cable maintenance costs are attributable to the severe thunderstorms and  
18          hurricanes that plague the area. For example, in 1985 Tallahassee was hit by hurricane  
19          Kate causing power to be out for an extended period due to the power services reliance on  
20          aerial plant, whereas telephone service remained almost entirely operational due to the  
21          greater percentage of buried and underground cable.

22  
23          HAI, however, has an extreme bias towards aerial cable. For example, the density zone of  
24          201 - 650 (which contains the largest number of Sprint customers), the HAI input for aerial  
25          distribution cable is 30% vs. Sprint's input of 12.4%. The HAI input for aerial copper feeder



1 is 40% vs. Sprint's input of 2.8%, and the HAI input for aerial fiber feeder is 30% vs. 2%  
2 filed by Sprint. The HAI percent aerial plant input is subject to further overstatement due to  
3 the HAI model "Buried Available for Shift" input. This input claims to look at a least cost  
4 approach for build Buried or Aerial plant. Sprint's analysis has shown that this algorithm  
5 does not switch plant from aerial to buried but only shifts from buried to aerial. Therefore  
6 HAI will not model the overall least cost network in hurricane prone areas such as Florida

7

8 HAI also does not consider the building codes of the Florida service area. Building codes  
9 commonly require below ground telephone plant when building to new areas. For example,  
10 Destin and Almonte Springs have issued ordinances prohibiting the use of aerial plant. This  
11 forward looking trend will further reduce the need for aerial plant in the future.

12

13 HAI's bias towards aerial is not forward looking and is certainly not least cost. Sprint's  
14 placement percentages represent a forward looking least cost method by reducing the amount  
15 aerial cable being installed in the Florida service area. As discussed in Mr. Lammli's  
16 rebuttal testimony, Sprint's BCPM plant mix inputs reflect real world engineering decisions  
17 resulting in the least cost network design consistent with real world issues such as terrain,  
18 density and local building codes.

19

#### 20 Switching Costs

21

22 Q. Are the HAI switch cost results reasonable?

23 A. No. As shown in Exhibit KWD - 1, the HAI switch investment results are only  
24 approximately one half of that of the forward looking BCPM results using Sprint - Florida  
25 specific inputs. It should be noted that this difference exists even though the forward looking

1 BCPM results are already 53% below Sprint's book cost for digital switching equipment.  
2 The HAI results combine switches from several vendors and companies, and in effect creates  
3 a cost function that is averaged nationally. Further, as the HAI national default switch cost  
4 curve is based on a Northern Business Information study which focuses principally on the bell  
5 companies and G.T.E., it is not at all reflective of switching costs for an independent  
6 telephone company operation the size of Sprint's Local Telephone Division.

7  
8 In contrast to the HAI national default inputs, Sprint's data, combined with the input options  
9 reflected in BCPM, reflects the actual and current contractual arrangements between Sprint  
10 and the switch vendor. Effective discounts received by LECs for switching equipment vary  
11 significantly depending on the switch vendor, LEC size and the dollar amount of purchasing  
12 commitments. To the extent the Northern Business Information study results include switch  
13 purchases by RBOCs many times larger than Sprint they can not reasonably be applied to  
14 Sprint - Florida.

15  
16 The BCPM, by contrast, reflects Sprint's specific purchase arrangements. Sprint-specific  
17 vendor discounts can be input, ensuring that actual LEC price levels are reflected. Sprint's  
18 BCPM results provide reasonable forward looking estimates of Basic Local Service switch  
19 costs which are reflective of real world contracts, transactions, traffic patterns and costs.

20  
21 Universal Service versus Unbundled Network Elements

22  
23 Q. On Page nine of Mr. Guepe's testimony and on Page four of Mr. Gillan's  
24 testimony they state that USF modeling should parallel UNE modeling. Do you agree  
25 with this statement?

- 1           A.    Yes, with some limited exceptions. For the most part the cost of loop, switch and transport  
2           network elements that comprise basic local service are the same as when those network  
3           elements are sold on an unbundled basis. Some necessary differences between USF and UNE  
4           costs are:
- 5           1.    UNE unbundled loop costs must reflect the cost of additional equipment necessary  
6           to breakdown a common fiber path between the switch and the next generation  
7           digital loop carrier device (NGDLC) so as to deliver single unbundled loops to a  
8           new entrant competitor. This equipment is un-necessary for USF as a common path  
9           can be used between the switch and NGDLC in that case.
  - 10          2.    UNE costs must reflect the removal of retail costs avoided when selling UNEs at a  
11          wholesale level.
  - 12          3.    The usage cost of switching included in USF reflects only Local and EAS calling,  
13          whereas UNE switch ports properly reflects the usage for all jurisdictions of calls.
- 14
- 15          Q.    Does this conclude your testimony?
- 16          A.    Yes.

1 MR. REHWINKLE: And this his Exhibit KWD-1 on  
2 rebuttal be given an exhibit number.

3 CHAIRMAN JOHNSON: KWD-1 rebuttal will be  
4 identified as 81.

5 BY MR. REHWINKLE (Continuing):

6 Q Mr. Dickerson, do you have a summary of your  
7 direct and rebuttal testimony to give?

8 A Yes, I do.

9 Good afternoon, commissioners, I'm Kent  
10 Dickerson. I'm here representing -- I'm employed by Sprint  
11 as the director of cost support. In that position, I have  
12 responsibility for cost information for all of Sprint's 19  
13 state local telephone divisions, including Sprint of  
14 Florida.

15 The purpose of my testimony that I filed in this  
16 docket was to respond to the Commission's issue list as it  
17 related to the determination of Florida-specific model  
18 inputs. I support Sprint of Florida's BCPM results and the  
19 associated Sprint of Florida specific inputs used to  
20 generate those results. I'd like to highlight for you my  
21 approach to numerous major BCPM inputs and how I went about  
22 making those forward-looking and specific to Sprint of  
23 Florida.

24 All the material costs, material costs for poles,  
25 for cable, for switches, for digital loop carrier devices,

1 reflect the current as-we-speak vendor cost specific to  
2 Sprint for the purchase of those items. The labor cost  
3 associated with the installation of those equipment items  
4 are specific to Sprint of Florida in terms of its company  
5 labor and in terms of its contract labor.

6           Looking to construction costs, for example, the  
7 costs that we pay contractors to plow cable, to cut and  
8 restore asphalt, cut and restore concrete, trench, the  
9 prices reflected in this filing reflect the prices that are  
10 in a contract currently being charged for work as we sit  
11 here and speak today.

12           The construction activity, this is a major input  
13 into the model. It predicts, if I put in a thousand feet  
14 of cable, what -- will a hundred feet be plow? Will two  
15 hundred feet be trench? Will three hundred feet be backhoe  
16 trench, cut and restore asphalt and so on? I have  
17 satisfied those inputs based on an analysis of Sprint of  
18 Florida's actual percentages of those construction  
19 techniques for the most recent period of 1997.

20           The plant mix, the percent aerial, underground  
21 and buried has been made specific to Sprint of Florida's  
22 serving area. In addition, we did a forward-looking  
23 analysis to ascertain whether there were any significant  
24 changes and we made some slight modifications of the  
25 current plant mix to ensure a forward-looking perspective.

1           Network design, you've heard a lot about the 12  
2 thousand kilofoot fiber copper break point. I used a 12  
3 thousand kilofoot fiber copper break point. That is, in  
4 fact, what is being deployed in Sprint of Florida's network  
5 as we sit here today. It's also the same network design  
6 that is being deployed in all of Sprint's 19 states, and  
7 it's being deployed for the reason you've heard several  
8 times because it is the least cost approach to building a  
9 network that will also support advanced services.

10           Cable fill factors, I'm sure that having sat  
11 through some UNE dockets, you've heard a world of  
12 discussion on cable fill factors. On the distribution side  
13 of the network, I've reflected current realities. Again,  
14 this is what's being deployed in our constituents' serving  
15 territories in Florida. We are putting two pair in the  
16 distribution cable, and that is the correct least-cost  
17 approach because one simple reality. If you've got between  
18 a 15 and 20% second line penetration in Florida, if you  
19 envision here is a new housing development, how are you to  
20 predict out of a hundred houses which are the 20 that are  
21 going to request the second line? You can't predict them  
22 is the answer to that.

23           So what you have is you have two alternatives,  
24 you have an alternative to say, I can incur a slight  
25 increase of the material cost at the point of initial

1 construction. I can increase my cable size for some  
2 additional cable pair. This doesn't have any impact on the  
3 cost of creating the trench which is the largest part of  
4 the cost. It has some effect on splicing costs upward.

5           If you don't choose to make that decision at that  
6 point, your alternative is to come back through residential  
7 neighborhoods, through streets, through sidewalks, through  
8 driveways, through yards, through landscaping and place  
9 additional cable pair. I've filed analyses in other states  
10 which clearly demonstrate the least-cost approach to this  
11 is to put -- anticipate this and put the cable pair in at  
12 the point of initial installation.

13           The structure sharing inputs that I've filed are  
14 reflective of real-world opportunities for structure  
15 sharing. Where significant opportunities for structure  
16 sharing exist, i.e., aerial plant, I've reflected that. My  
17 input reflects only 30% of the cost of aerial structure  
18 being poles, being assigned to the telephone. Conversely,  
19 below ground construction, the real world is there is  
20 limited opportunities to share those structure costs. I  
21 have used inputs that exceed what our real-world  
22 opportunities are as we sit here today in Florida.  
23 Conversations with our engineering and construction  
24 personnel in Florida indicate minimal. I have used inputs  
25 that vary from 10% to a 5% opportunity.

1           The expense inputs, they've been -- again, they  
2 are specific to Florida. They are based on recent  
3 relationships of plant maintenance to plant investments.  
4 Those relationships then get applied in the model to  
5 forward-looking investments, and as I'll show in a minute,  
6 they result in substantial forward-looking reductions in  
7 plant maintenance costs.

8           There are other expense categories which are more  
9 logically assigned based on a per line basis. These would  
10 be items such as general overheads, customer service  
11 expense. Those have been applied in the model on a per  
12 line basis as opposed to a percent of investment. A  
13 high-cost customer in a rural area who requires more  
14 investment to serve doesn't necessarily drive any greater  
15 proportion of general support, general headquarters,  
16 customer support type expenses, so that relationship has  
17 been reflected in my study.

18           Now I'd like to talk a little bit about what I  
19 believe to be the sharp contrast to my approach that you  
20 will see in AT&T and MCI's cost study. One, they come at  
21 the majority of their inputs with a national level  
22 approach. Yes, they claim to make some small modification  
23 for labor costs. It's completely inadequate in predicting  
24 local labor rates.

25           They assume national level construction



1 techniques, their plow, their trench, their cut and  
2 restore. It's the same assumption you'll see -- I've seen  
3 in Texas, Nevada, North Carolina, South Carolina,  
4 Tennessee. It's the same everywhere you go.

5           Here is the quantum assumption that they base,  
6 they share away 67% of below-ground construction cost based  
7 on an assumption that we are not only trying to reconstruct  
8 a telephone network but somehow simultaneously we're  
9 reconstructing the entire power and cable network. Every  
10 inch of every trench is assumed to be shared. In part due  
11 to vendor costs, which are far lower than what I know to  
12 factually be Sprint's opportunity for vendor purchases,  
13 their switching costs generally are half of my  
14 forward-looking switching costs which are already half of  
15 my embedded book cost, so effectively their switching  
16 investment is one fourth of the digital switching  
17 investment that is on Sprint's books.

18           Their next-generation digital loop carrier  
19 devices, their input is approximately a third of what I  
20 know to factually be Sprint's installations, very recent  
21 installations for these forward-looking equipment devices.

22           Looking to expenses, they have unfounded national  
23 default expense reduction assumptions. They assume away  
24 50% of network operations. They use a 1993 New England  
25 telephone digital switching maintenance factor with no

1 analysis as to why this would apply in Florida, why would  
2 it apply to Sprint of Florida.

3           They assume a national default plant mix. It  
4 predicts completely unrealistic levels of aerial plant in a  
5 hurricane prone state such as Florida. They completely  
6 ignore the realities of cable fills by failing to place  
7 enough real-world pairs in the distribution cable to  
8 achieve a least-cost approach to second-line demand.

9           Mr. Wood did not disappoint me. I expected to  
10 hear that my real-world, most-recent and current and  
11 market-specific data, I expected to hear that characterized  
12 as embedded costs, and I believe that's what Mr. Wood  
13 stated; and that's not at all the case. And in my rebuttal  
14 testimony, I provided an analysis, which I'm going to show  
15 you briefly which shows that clearly that's not the case.

16           If I could refer you to Exhibit KWD-1 in my  
17 rebuttal testimony, this is real brief. Looking at the  
18 total investment levels resulting from this approach and  
19 comparing it to the most recent 1997 ARMIS date, the total  
20 investment without attempting to index it, and generally if  
21 you index cable and wire investments the factor that you  
22 would apply would be two to three times what your book cost  
23 is, it would increase your book cost. Without even taking  
24 that into account, my investment levels are 27% below what  
25 is on Sprint's books today. Dramatically in contrast to

1 this, the HAI model results suggest a 52% reduction from  
2 Sprint's book cost.

3           Looking at the associated expenses, my study  
4 reflects a 37% expense decrease, so clearly my recent  
5 fact-based approach does not duplicate my embedded costs in  
6 any fashion whatsoever. Again, in sharp contrast, the HAI  
7 model suggests a 62% reduction in our operating expenses  
8 possible to continue to serve our two million Florida  
9 customers as based against the most recent period of 1997.

10           I would welcome additional questions in this  
11 area. It wasn't in my direct testimony, but I certainly  
12 can respond to some of the assumptions that the HAI  
13 components make in regard to why these expense reductions  
14 would be possible. The fact of the matter is most of what  
15 you've heard them say are already implemented in Sprint's  
16 operation. They've already been reflected in the 1997  
17 expense levels. That concludes my summary.

18           MR. REHWINKLE: Mr. Dickerson is available for  
19 cross examination.

20                           CROSS EXAMINATION

21 BY MR. HENRY:

22           Q     Mr. Dickerson, my name is Mickey Henry. I  
23 represent MCI. I have one very small area I want to ask  
24 you about.

25           A     Okay.

1 Q In your summary you indicated that your modeling  
2 assumption is to put two cable pair to all the households  
3 because of Sprint's experience of a 15 to 20% second line  
4 penetration rate in Florida; is that correct?

5 A Yes, I was talking in general terms. I don't  
6 know the exact penetration rate for Florida, but, yes. And  
7 I was specifically talking about in the distribution side  
8 of the network.

9 Q Okay. So, in effect, with that assumption in the  
10 model, when the model would build a cable out to every  
11 household -- or actually I think housing unit, but that's  
12 not the point -- would build a two-cable pair to each  
13 household, correct?

14 A That's correct.

15 Q Okay. So that if someone, in fact, did -- under  
16 that assumption then, the incremental cost to provide a  
17 second line to a household would be zero, correct?

18 A No, that's not correct. What is done in both of  
19 these models --

20 Q Or -- Okay.

21 A What is done in both of these models is, you  
22 provision whatever level of cable pair you believe  
23 appropriate to each household or housing unit. You then  
24 load in the demand you deem appropriate and you develop the  
25 unit cost.

1           What has been reflected in my cost study, for  
2 example, is a true, grounded-in-reality, forward-looking  
3 assumption of two distribution pair to each household.  
4 Then to the extent that there is already second-line demand  
5 at a 15% penetration level that is reflected in my working  
6 line count, the total of that cable plant has been spread  
7 over the total of the demand, including whatever second  
8 line demand is included in that working line demand to  
9 develop the unit cost. So the unit cost -- in both models  
10 the unit cost of the second line is the same cost as the  
11 unit cost of the first line. They share in all the  
12 economies of scale that exist in the network.

13           Q     Okay. So the incremental expense though then to  
14 actually activate a second line would be minimal, correct?

15           A     It would be the same expense to activate the  
16 first line. It would be whatever is necessary to establish  
17 connections at cross connects and so on as well as to enter  
18 the order data in the system.

19           Q     Okay.

20           A     So it's the same cost in both instances.

21           Q     The investment is already there. There would be  
22 no investment expense in activation of the second line?

23           A     Well, I explained, I think, quite thoroughly for  
24 you how these models approach it; and the cost of the  
25 second line is the same as the cost of the first line. The

1 only opportunity that I see whatsoever here -- and again  
2 this has been spread in the model, but even in the real  
3 world, the only opportunity you have is to the extent that  
4 your drop cable included additional cable pair as it  
5 properly would in a least-cost -- you know, it would be an  
6 absolute disaster to have to go out and install new drops  
7 every time you get a second-line request. So you don't go  
8 out and install a new NID. You don't go out and install a  
9 new drop, but all those have been -- in both models have  
10 been reflected. The total demand has been divided into  
11 those costs, so to the extent that you put a NID in there  
12 and some portion of NID serves greater than one line, that  
13 has been reflected in the unit cost calculation.

14 Q Okay.

15 MR. HENRY: That's all I have. Thanks.

16 CROSS EXAMINATION

17 BY MR. RUSCUS:

18 Q Good afternoon, Mr. Dickerson. Stephen Ruscus  
19 representing AT&T.

20 A The last name was Ruscus?

21 Q Ruscus.

22 A Thank you.

23 Q You are advocating that this Commission adopt  
24 Florida-specific, and in particular Sprint territory  
25 Florida-specific values for Sprint's territory; isn't that

1 correct?

2 A Yes, I believe that represents the most factual  
3 approach to estimating the forward-looking costs in those  
4 same serving areas.

5 Q And isn't it true that what I've just said means  
6 that there is a first concept which is you provide  
7 Florida-specific values which would be those appropriate  
8 for the State of Florida, correct? But the second part of  
9 that is that within the State of Florida you're advocating  
10 separate inputs for Sprint territories; is that correct?

11 A Yes, that's what I filed. I have reflected the  
12 current and expected forward-looking realities in Sprint of  
13 Florida's serving area.

14 Q And in your mind you contrast that with what  
15 you've characterized as national default values, correct?

16 A Yes.

17 Q Okay. Can you tell the Commission how many  
18 values you've utilized in your run of the BCPM that are  
19 national default values?

20 A No, I can't, but I can provide some related  
21 information. If you would like to -- Let me refer you to  
22 my testimony. We can go through this. On Page 6 of my  
23 direct testimony, starting on Line 5, depreciation rates,  
24 those have been made specific to Sprint. Cost of money is  
25 specific to Sprint. Supporting structure, specific to

1 Sprint of Florida. Structure sharing factors, specific to  
2 Sprint of Florida. Fill factors, fiber cable costs, copper  
3 cable costs, drops, NIDs, outside plant mix, digital loop  
4 carrier costs, terminal costs, switching costs, traffic  
5 data, signaling costs, transport costs, expenses, all  
6 specific of Sprint of Florida. I believe that the vast  
7 majority of the material inputs to the BCPM have been made  
8 to be specific to Sprint of Florida.

9 Q But you have no idea in which instances you've  
10 used default values; is that your testimony?

11 A No, that's not my testimony.

12 Q Well, that was my question.

13 A And my answer was, no, and what I provided to you  
14 is quite a comprehensive list of all the substantial model  
15 inputs that are specific to Sprint of Florida.

16 Q Okay. Now --

17 A We can go through the rather menial left-over  
18 model inputs which would be default, if you think that's of  
19 value, but I assure you these are all the material drivers  
20 of cost, and they've all been made Sprint of Florida  
21 specific.

22 Q Whether or not you consider them to be Florida  
23 specific, were any of them adopted from the BCPM default  
24 input groups?

25 A Yes, some of them were.



1 Q Which ones?

2 A Manhole costs were default values. Certain  
3 switching -- The switching algorithm was utilized;  
4 however, the Sprint's actual and current vendor discount is  
5 still utilized in that calculation. So in that fashion,  
6 even that calculation is still specific to Sprint of  
7 Florida. The terrain data that underlies the model is  
8 specific to Sprint of Florida, although I didn't have to  
9 manipulate the data. It comes from U.S. geological  
10 census. Again, far and away, I would state I'm confident  
11 that all the material inputs are Sprint of Florida  
12 specific.

13 Q Okay. But in answer to my question, the manholes  
14 costs, although you view them as specific, are the default  
15 values set out in the BCPM, correct?

16 A That's correct. It's difficult -- the  
17 underground conduit system, as evidenced by all the parties  
18 inputs in this docket, they last a long time; and it was  
19 more difficult for me to gather recent factual information  
20 in that area. I did, was able to gather that in other  
21 states, and I do have that as a basis for judgment on the  
22 appropriateness of the default values for BCPM. I used the  
23 default values for that.

24 Q So you found a value that the BCPM modelers  
25 thought would be applicable to California and Nevada,

1 Wyoming, New York, South Carolina to be applicable to  
2 Sprint-Florida as well; is that correct?

3 A Well, let me explain again. I didn't have any  
4 recent real-world information, which is far and away the  
5 best approach; and far and away the majority of the inputs  
6 that I've filed, that's how they were developed. Again, in  
7 the absence of the best data available, which I've used in  
8 almost all other cases, I used the default values. Again,  
9 I had as a benchmark of reasonableness, I had some recent  
10 manhole installations in our Nevada serving area which I  
11 could use as a basis for judgment. They were, in fact,  
12 higher than the default values, so I judged the default  
13 values and the use of them to be conservative.

14 Q I need to reask my question. Isn't it true that  
15 you have just now in your testimony characterized the  
16 manhole default values which the makers thought applicable  
17 on the national level as being representative of Florida --  
18 of Sprint's Florida experience, yes or no?

19 A I have accepted those in absence of better  
20 information.

21 Q Now isn't it true that with -- Would you agree  
22 that next to the loop the switch is the biggest cost driver  
23 in the BCPM?

24 A I would agree that next to the loop it is the  
25 biggest cost driver; however, it's 12% of the total, so

1 that's a pretty big step when you go from loop to switch.

2 Q But you're not representing that you'd be willing  
3 to reduce your suggested universal service prices by 12%,  
4 are you? I mean this is a significant cost factor, would  
5 you agree?

6 A Of course.

7 Q Okay.

8 A I was just pointing out it's far -- the loop far  
9 and away is where the costs are in this calculation.

10 Q A: with regard to the switching inputs which you  
11 utilize in the BCPM, all of the switch investment  
12 information for the actual cost of that equipment, save for  
13 the discount value, is default value which the BCPM makers  
14 found applicable nationwide; is that correct?

15 A No, that's not correct.

16 Q Okay. Well --

17 A Over half of the switches in this cost study are  
18 a direct result of SCIS, switching cost information,  
19 BellCore. You can utilize BCPM in several different  
20 fashions. It's quite flexible in the area of switching  
21 costs. To the extent that you have SCIS investment  
22 results, you can enter that into the model and for  
23 approximately half of the wire centers in my cost study  
24 that is what I have. So right off the bat, over half of  
25 them are entirely specific to Sprint of Florida.

1           Second of all, even when using the switching  
2 algorithm, there are inputs which are utilized in that  
3 process which are specific to Sprint of Florida, and I'll  
4 run you through several of those. One I mentioned, the  
5 actual vendor discount. Two being the share of 5E  
6 switches, versus DMS switches.

7           Q     Can you show me where you are in your cost study  
8 as we go through.

9           MR. REHWINKLE: I'm not sure he was finished with  
10 his answer.

11          MR. RUSCUS: Well, I'm asking him to go back to  
12 the beginning of that list and help us understand where he  
13 is.

14          MR. REHWINKLE: Well, let's let him finish the  
15 list first. I think, Madam Chairman, that would be  
16 appropriate. If Mr. Dickerson was making a list, he ought  
17 to be able to finish it, and then counsel can go back  
18 through the list if he'd like.

19          CHAIRMAN JOHNSON: I'm going to allow the witness  
20 to finish his response, and then if it needs to be  
21 clarified, it can be clarified.

22          A     On Page 2 of the switching global inputs is where  
23 the discounts -- and these are proprietary. I don't know  
24 if you've got a proprietary or nonproprietary. This is  
25 where the Sprint-specific discounts are entered. On that

1 same page you then utilize that same Sprint-specific  
2 information to develop the switching discount adjustment  
3 factor which takes into account the discount factor times  
4 the percent of this equipment item that is material versus  
5 labor, because the discount factor only applies to the  
6 material portion. That's Sprint specific. The stand-alone  
7 host and remote percentages are Sprint specific. I think  
8 those would be some examples, Mr. Riskus (phonetics).

9 Ruscus.

10 A Ruscus, pardon me.

11 Q So turning to Page 1 of 51 of your inputs list,  
12 it looks like the first page of the global inputs chart,  
13 it's entitled "Manual Inputs," tell me which of the, it  
14 looks like, approximately 15 values in that chart were  
15 default inputs in which you specified?

16 A There is no need for the bulk of these to be --  
17 Most of these are default values. I think perhaps all of  
18 them are. That doesn't mean, however, though, that I did  
19 not review them to ascertain whether I would expect them to  
20 be different had I put company specific because we did, in  
21 fact. For example, the MDF protection assignment to USF,  
22 that is an FCC mandate. They've already ruled on it. They  
23 say it's a hundred percent assigned to port. That is not  
24 an issue that should vary company to company so, therefore,  
25 the input does not.

1           At the top of the page, the basic investment  
2 levels for SE and DMS switches, those won't vary. What  
3 will vary is the company's discounts on that. So in other  
4 words, there is no need to vary that input because you have  
5 an input that is applied to it that achieves the  
6 company-specific result, so there is no need to do that.

7           Looking at excess line CCS option, it was a  
8 cognizant decision. We assign excess CCS investment to the  
9 message versus to the port. So you can view it however you  
10 like. We viewed -- we've reviewed these and determined  
11 whether we needed to change them or not and determined we  
12 didn't.

13           Q     And you would agree that the values you thought  
14 you did not need to change to a Florida-specific value were  
15 the national inputs captured in this chart, correct?

16           A     Yes, which would only, you know, be related to  
17 fractional portions of the overall switching investment  
18 since we've already determined and we understand that half  
19 of the switching investment is already completely specific,  
20 and the major parts of the calculation for the remaining  
21 half are company specific by virtue of using the  
22 company-specific inputs I've just stepped you through.

23           Q     Now let's move two pages further on to what, I  
24 believe, is called "SW State Defaults." Do you see that  
25 chart there?

1 A Could you tell me the page number at the bottom?

2 Q It looks like 3 of 51. There are no Bates  
3 numbers?

4 A Yes, I am on that.

5 Q Reading across that page, I believe one, two,  
6 three, four, five, six columns, how many of those columns  
7 are national default values?

8 A These are all national default values.

9 Q Okay.

10 A However -- well, on Page 3 of 51, these are all  
11 national defaults.

12 Q And you thought those were representative to  
13 Sprint's Florida specific values, correct?

14 A Let me check something because I think that we  
15 provide some additional information that replaces part of  
16 this.

17 (WITNESS REVIEWED DOCUMENTS)

18 A Okay. No, what I was thinking of relates to the  
19 approximately half switches which we provide the  
20 Sprint-specific SCIS investment.

21 Q Flipping to the next page which is Page 4 of 51,  
22 with the exception of the SEES share and DMS share, how  
23 many of those inputs are default inputs?

24 A I believe those are all defaults. Again, these  
25 get used in the calculation which applies those additional

1 Sprint-specific values that I spoke of.

2 Q That would be the mix of switches and the  
3 discount?

4 A Yes.

5 Q So we can agree then that a substantial number of  
6 the inputs used to generate Sprint's BCPM switch cost was  
7 in an instance where you entered data separately are  
8 national default values, correct?

9 A No, I'm not going to agree with substantial. I  
10 could agree that what we went through, there are some use  
11 of defaults. And I would emphasize, again, that I believe  
12 that the material, the ones that have the biggest impact  
13 are Sprint of Florida specific.

14 Q Let's talk about the discount for a moment. You  
15 indicated that you believe the discount was an important  
16 determinant of switch price; is that correct?

17 A Yes.

18 Q When was the contract executed from which the  
19 discount was derived?

20 (WITNESS REVIEWED DOCUMENTS)

21 A Well, I'm not sure about your term "execute."  
22 What I was looking for was Late-filed Deposition Exhibit  
23 Number 7.

24 MR. REHWINKLE: Yeah, I'm not certain, and I  
25 don't have it with me. We provided the contract in



1 discovery, but I don't know if we claimed -- I believe we  
2 claimed the entire thing confidential, and that would  
3 include the date.

4 MR. RUSCUS: Okay.

5 A I can say this. It's the contract that's  
6 currently in effect. It reflects our current contract.

7 BY MR. RUSCUS (Continuing):

8 Q If it were the case that the contract from  
9 which -- And by the way, in discovery you provided a  
10 contract stating a discount for only one of the two  
11 companies you say you use; is that correct?

12 A I guess my attorney could verify that.

13 MR. REHWINKLE: I believe that's the case.

14 A There was such tremendous amounts of discovery.

15 MR. RUSCUS: For the Nortel but not the 5EES,  
16 correct?

17 MR. REHWINKLE: Yes.

18 BY MR. RUSCUS (Continuing):

19 Q So on the representation of your counsel that  
20 that is the discovery provided, is your test -- and the  
21 question was, upon what do you base your discount? Is it  
22 your testimony that the discount for the Nortel switches  
23 was the basis of your discount for all switches in Florida?

24 MR. REHWINKLE: I'm further informed, and I  
25 believe our discovery may have reflected so, that we do not

1 have a contract with Lucent.

2 WITNESS DICKERSON: What was that?

3 MR. REHWINKLE: That we do not have a contract  
4 with Lucent.

5 WITNESS DICKERSON: I don't think that's correct.

6 MR. REHWINKLE: That's why attorneys should keep  
7 their mouths shut.

8 WITNESS DICKERSON: I don't think that's correct.

9 MR. REHWINKLE: I'll let the witness testify.

10 A If we look at Page 2 of the switching global  
11 inputs you'll see discounts specific to 5E and specific to  
12 DMS, and each of those are reflective -- my understanding  
13 is that each of those are reflective of our contracts with  
14 each of those switch vendors.

15 BY MR. RUSCUS (Continuing):

16 Q So when we asked you in discovery to provide the  
17 duration of those contracts, did you identify a duration  
18 for a 5E?

19 A Yes, we identified a duration of a contract for  
20 Lucent Technologies in Exhibit Number 7. I'm looking at it  
21 right here.

22 Q Okay. To the extent that the contract you  
23 provided for Nortel on its face indicated that it would  
24 have expired by the present time, do you still think that  
25 the discount called out in that contract is appropriate for

1 use in the BCPM model for a forward-looking model?

2 A Well, your question has no basis. I'm looking at  
3 Deposition Exhibit 7, and the contract still is in effect  
4 according to this response.

5 Q Actually it does have a basis. If that document  
6 is examined, it will confirm my statement. There may have  
7 been a further extension reflected in your answer, but I'm  
8 talking about the document that's the executed contract by  
9 th parties, use of that discount, would you consider it  
10 appropriate if -- and you can take this as a  
11 hypothetical -- the duration of the contract was such that  
12 it had expired by this time?

13 A It may or may not be. I don't think I would know  
14 for certain. My understanding is what I have filed  
15 reflects a current contract that is still in effect.

16 Q But you don't know one way or the other whether  
17 you would consider the discount appropriate were it the  
18 case that the contract had expired?

19 A I wouldn't know for certain. I'd have to do --  
20 you know, I would have to understand whether there is  
21 reason to believe that the contract discount would change.

22 Q Are you familiar with the Turner Plant Index?

23 A Yes.

24 Q What does the Turner Plant Index say about the  
25 general trend in switch prices?

1           A     I believe it says they've come down and, you  
2 know, that's why I filed the forward-looking cost study  
3 which reflects switching investment.

4           Q     So if the cost --

5           A     Which is approximately 53% below my book cost.  
6 My study reflects switching investment of 365 million.  
7 There is 776 digital switching investment on Sprint of  
8 Florida's books. That's a 53% reduction.

9           Q     Let me ask you a question. Are you aware whether  
10 or not the face cost, the list price of the DMS-100 switch,  
11 in fact, has gone up slightly over the same period of time  
12 that switch prices in the aggregate have declined?

13          A     I don't know.

14          Q     If that were true, wouldn't that suggest that the  
15 discount rate upon which you believe the switch price  
16 depends has been increasing such that discounts available  
17 to companies are getting better?

18          A     I didn't understand your question.

19          Q     If the list price of a switch over time is  
20 staying the same or increasing but the Turner Index  
21 indicates that the aggregate switch prices are decreasing,  
22 that decrease has to be accounted for in the discount rate  
23 applied to the list price; is that correct?

24          A     I don't know. It seems as though I'm getting  
25 into a hypothetical since I answered. I don't know that

1 it's factual that list prices are going up.

2 Q Okay.

3 A Supposing a hypothetical, I think your math would  
4 be correct.

5 Q Okay.

6 A Again, I want us to have a clear understanding  
7 here. My study reflects our current discount price, so I  
8 don't see how this question or hypothetical you are posing  
9 has any applicability to my study.

10 Q Hypothetically, if you had a discount from an  
11 earlier period, for instance from a contract executed five  
12 years ago, and switch prices have declined since that time  
13 and that decline is captured in the discount, under that  
14 hypothetical, wouldn't you agree that use of a discount  
15 from that period of time might overstate switch costs?

16 A Well, I don't have any basis in the real world to  
17 agree with your statement. If your -- your math is  
18 correct, if all the conditions --

19 Q That's fine. The documents are in the record.

20 A If all the conditions in your hypothetical are  
21 correct, I think your math is correct. Again, not to be  
22 confused with whether I've used our current discount or not  
23 because I have.

24 Q Okay. And you contradict the representation of  
25 counsel that you even have a current SEES contract?

1           A     I'm looking at our Late-filed Exhibit Number 7  
2 response.

3           Q     That's a yes or no question.  If you could just  
4 answer yes or no.

5           A     Yes, because I'm looking at Deposition Exhibit  
6 Number 7 which identifies a contract term with Lucent  
7 Technology.

8           Q     Okay.  Now earlier you read to the Commission an  
9 impressive, or at least a lengthy list of values which  
10 weren't the inputs for which you use default values.  Do  
11 you remember that recitation?

12          A     Yes.

13          Q     And you indicated that all of those values were  
14 Florida-specific, correct?

15          A     Yes.

16          Q     And you did that with the intention of  
17 distinguishing them from national values, correct?

18          A     I'll accept that.

19          Q     Okay.  The depreciation rates that Sprint used in  
20 this case, are those the same ones that it uses at a  
21 corporate level in other proceedings in other states?

22          A     Yes.  If you want to read the record back, I was  
23 very careful.  What I represented was the depreciation  
24 rates were specific to Sprint.  I did not say Sprint of  
25 Florida.

1 Q Okay. So those are national rates that are  
2 attached to Sprint the corporation but not to any  
3 particular condition in Florida, correct?

4 A Yes, I think that you have to understand that  
5 some inputs are more specific to a specific company's  
6 market purchasing power. Some of them are specific to  
7 regional labor costs, to regional zoning issues, to terrain  
8 issues that drive construction techniques. Others are not  
9 necessarily region specific. We've used a national but  
10 Sprint-specific depreciation.

11 Q Is that also the case for cost of capital?

12 A The capital structure is specific to Sprint of  
13 Florida. The overall result, the 11.25 is the same 11.25  
14 I've used in other filings.

15 Q Okay.

16 A It's the 11.25 that the FCC recommended in their  
17 universal service fund order.

18 Q Okay. So that's not specific to any condition in  
19 Florida, but it is what you've taken from the FCC  
20 recommendation?

21 A Well, again, the capital structure is specific to  
22 Sprint of Florida.

23 Q And manholes we've said on that list are, while  
24 they are representative of Florida, are actually default  
25 values, correct?

1           A     That's correct.

2           Q     And the fiber cable costs are representative  
3 contracts that switch is obtained on a national level,  
4 correct?

5           A     Well, the material cost portion would be.

6           Q     Correct.

7           A     But the material cost portion is far overshadowed  
8 by the labor costs. Labor costs comprise about 60% in  
9 general of installed cable costs, and that's excluding the  
10 cost to create the trench or lay the conduit which would  
11 drive that percentage even much higher.

12          Q     Are you asking this Commission to adopt that  
13 portion of your fiber input which is pertinent to the  
14 material price?

15          A     Yes, I am, and I'll explain why. It's just a  
16 reality of the business world that we've got differing size  
17 LECs out there, and it's a reality of the business world  
18 that they -- due to their differing sizes are going to have  
19 differing abilities to negotiate prices. It happens  
20 everyday. All people cannot buy from wholesalers at the  
21 same price. And what we are trying to do here is set up a  
22 high-cost support fund to specific customers who reside in  
23 Sprint of Florida's serving area.

24          Q     And if someone like BellSouth procured fiber in a  
25 national contract or AT&T or MCI or anybody else and were



1 going to provide service in Sprint-Florida, isn't it true  
2 that if those fiber prices could be validated they would be  
3 appropriately considered by this Commission?

4       A     Well, I guess so. I guess I would also offer  
5 that to the extent the Commission gathers real-world  
6 information, and I think in general the ILECs have provided  
7 some real-world information, we are buying a lot of fiber  
8 cable. We are placing it. It's clearly the best  
9 information available on the price of fiber cable. If the  
10 material costs of that shows some similarity between the  
11 ILECs, I would not be opposed for administrative purposes  
12 in looking at some melding of those; but what I've done is  
13 provide the best information possible to predict the cost  
14 in my serving area. Where we go from there, you know I'm  
15 not certain. I don't -- had not had an opportunity to look  
16 at MCI or AT&T's fiber cost.

17       Q     So when you say that Sprint's Florida-specific  
18 costs are the best predictor of the forward-looking cost of  
19 building a fiber network in Florida, you nevertheless are  
20 willing to concede that national validated contract amounts  
21 for the procurement of fiber may be appropriately  
22 considered by this Commission, correct?

23       A     Well, we were just talking about material prices.

24       Q     Correct.

25       A     And what I said was, if you were to gather

1 similar real-world information based on a real company  
2 purchasing and installing substantial amounts of fiber and  
3 there is some similarity in that, I'm saying the Holy Grail  
4 here is not just to be company specific. The reason why I  
5 provided that level of information is because it's real  
6 world. It's accurate. It's the best predictor of  
7 forward-looking costs.

8           If there is some opportunity to ease the  
9 administration of this, once it's implemented, by saying,  
10 okay, Sprint's real-world fiber costs are within 95% of GTE  
11 and BellSouth's, I'm not a foolish man, you know, we could  
12 meld those together if there is some opportunity to do  
13 that. But the first step is to make sure you've got good  
14 information before you take that leap.

15           Q     Continuing down your list, isn't it true that the  
16 copper cable costs you cited next, the drops, the digital  
17 loop carrier costs, are all costs which are procured  
18 through national contracts?

19           A     Again, we are talking just the material portion.

20           Q     Correct.

21           A     Yes, that's correct, and let's go through that.  
22 Copper, you know, I think the same discussion we just had  
23 would apply. Over 60% of the costs here are labor costs,  
24 which are very specific to markets served. I do -- you  
25 know, I'm responsible for 19 states. I've testified in

1 four proceedings in the last three weeks. I've been  
2 involved in USF and UNE proceedings across 19 states. It  
3 does vary. Digital loop carrier devices most certainly  
4 varies. I've seen representations of proprietary  
5 information by other companies that evidently have  
6 different prices for the purchase of digital loop carrier  
7 than what I know for a fact to be Sprint's purchase price.

8 Q And those also are national values that with  
9 validation are properly considered by this Commission,  
10 correct?

11 A The material portion, and I guess let's -- you  
12 know, since you seem to be interested in that, to the  
13 extent that it's -- Sprint runs its operation as  
14 efficiently as possible, and to the extent that you can get  
15 the best material price possible by taking advantage of  
16 your entire corporation's operation, that's certainly what  
17 we do. So when we purchase material, to the extent it can  
18 be done on a national basis to get the lowest price  
19 possible, that's what we do.

20 That's not to be confused with the -- one, with  
21 an assertion that Sprint buys DLCs or cable for the same  
22 price as GTE or AT&T or BellSouth or any other company,  
23 which is the suggestion of the HAI input. Completely two  
24 different things. Second of all, as I've said several  
25 times, the labor costs are specific to Sprint of Florida,

1 and they are the more material portion of costs.

2 Q Is it a fair assessment of your testimony that  
3 while you believe that the labor costs are more than half,  
4 you have indicated approximately that 40% of the cost is  
5 the material cost?

6 A For cable.

7 Q Okay. Now if Bell --

8 A And I also, to review that, pointed out that is  
9 just . r that portion of BCPM input related to installed  
10 cable. The cost of creating the trench, the cost of  
11 putting the conduit in, the cost of the poles is almost  
12 entirely labor costs; and that's all Sprint of Florida  
13 specific. Where you'd add that in, that 40% would become  
14 dramatically lower. So far and away, the material costs we  
15 are talking about here are labor costs which are specific  
16 to markets served.

17 Q And by that you are considering something over  
18 half or over two thirds to be far and away material?

19 A Well, I already know from my own analysis of just  
20 the install, if you understand the BCPM, there is per foot  
21 costs of aerial, buried and underground copper cable.  
22 There is per foot cost of fiber. At that input, 60% of  
23 that approximately is labor. Then all the structure costs  
24 that we are talking about are almost entirely labor with  
25 exception of pole material costs and anchors and guys

1 material costs.  
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1 material costs.

2 (Transcript continues in Sequence in Volume 21)

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