

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

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

VOLUME 22

Pages 2569 through 2634

PROCEEDINGS:

HEARING

BEFORE:

CHAIRMAN JULIA L. JOHNSON
 COMMISSIONER J. TERRY DEASON
 COMMISSIONER SUSAN F. CLARK
 COMMISSIONER JOE GARCIA
 COMMISSIONER E. LEON JACOBS, JR.

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:

CATHY H. WEBSTER, RPR

APPEARANCES:

(As heretofore noted.)

BUREAU OF REPORTING

RECEIVED 10-16-98

DOCUMENT NUMBER - DATE

11570 OCT 16 98

FPSC-RECORDS/REPORTING

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P R O C E E D I N G S

(Transcript follows in proper sequence from
Volume 21.)

MR. HENRY: And, Madam Chairman, could I have, I
guess it would be composite -- the next exhibit number,
which would be I believe No. 85, and have that as the
exhibits to Mr. Wells' direct testimony consisting of four
exhibits; could I use Composite Exhibit No. 85?

CHAIRMAN JOHNSON: We'll mark it. And what was
the title?

MR. HENRY: That would be Well's direct testimony
exhibits.

CHAIRMAN JOHNSON: Okay.

(Exhibit 85 marked for identification.)

MR. HENRY: And, similarly, for his rebuttal
testimony, if I could have Exhibit No. 86 be marked as a
composite exhibit of Well's rebuttal testimony exhibits
consisting of three exhibits.

CHAIRMAN JOHNSON: Okay.

(Exhibit 86 marked for identification.)

JAMES W. WELLS

continues his testimony under oath from Volume 21

CONTINUED DIRECT EXAMINATION

BY MR. HENRY (Continuing):

Q Mr. Wells, do you have a summary of your

1 testimony you could give us?

2 A Yes, I do.

3 Q Would you give that to us now?

4 A Thank you.

5 Good afternoon, Commissioners. I'm here to talk
6 about outside plant. And that's the portion of the local
7 loop that goes from the wire center out to the customer's
8 premise. So I'm going to be talking about the engineering
9 and the costing of such elements as poles, conduit, trench,
10 cables, drops and new indoor network interface devices.

11 And I have 25 years of experience with the former
12 Bell system and with AT&T, mostly in the outside plant
13 assignments. And I have actually planned, engineered,
14 costed, and built local loop networks.

15 I believe that I have two meaningful purposes to
16 serve in this proceeding. The first is to, of course, to
17 recommend and to defend the HAI Model released 5.0a as the
18 most appropriate model for determining local loop costs.
19 And the second is to offer my critical assessment of the
20 Benchmark Cost Proxy Model and the outside plant input
21 values of BellSouth, Sprint and GTE in this proceeding.

22 Now of all the models that I have seen, the HAI
23 Model most closely conforms to the guidelines for a narrow
24 band local access network that is least cost, most
25 efficient, and based on currently available technology.

1 Furthermore, the HAI Model 5.0a outside plant
2 input values have been repeatedly shown to be more
3 reasonable than those of the ILECs. Now you might ask,
4 well, how could that be.

5 It is certainly true that the ILECs have volumes
6 of cost data on their embedded networks. And, of course,
7 they have familiarity with the Florida environment.
8 However, they have three major problems in deriving
9 reasonable input values for cost proxy models from the data
10 that they have.

11 The first is that the cost data of their existing
12 embedded networks are not least cost and most efficient
13 based on currently available technology. Now that's not to
14 imply that they're lazy or whatever. It says that the
15 embedded network is not the most efficient. That's all
16 it's saying there.

17 Secondly is a top down cost data that they have,
18 an example being loading factors, are extremely difficult
19 to translate into input values for a bottoms up cost model.
20 This is not what they've traditionally been used to doing
21 with their cost data.

22 The third point is that the development of the
23 ILEC input values frequently show an appalling lack of
24 outside plant engineering judgment, either in their
25 determination or their review.

1 Now on the other hand, a team of experienced
2 outside plant engineers, which I describe in Exhibit 1 of
3 my direct testimony, develop the HAI input values. There
4 are hundreds of examples of outside plant engineering
5 judgment that went into the HAI Model methodology and its
6 input values. And these are well documented in the HAI
7 Model description and, more importantly, from an outside
8 plant standpoint, in the Inputs Portfolio.

9 Also, the HAI input values are user adjustable as
10 needed to reflect differing local conditions.

11 Now as further evidence of the reasonableness of
12 the HAI Model outside plant input values for Florida, my
13 rebuttal testimony contains an extensive comparative
14 analysis with the input values of the ILECs, side by side
15 comparisons. And based on that analysis I draw six
16 observations.

17 One is that there are significant differences
18 among the input values of the ILECs for the same item. I
19 think there has been a lot of discussion about pole costs
20 today as an example of that.

21 Number two is the ILECs have adopted the BCPM
22 national default input values for several items rather than
23 determining or utilizing their own Florida specific input
24 values. An example is GTE, which uses local contractors to
25 bury cable and build underground conduit, has used the BCPM

1 national input values, which they're on record as saying
2 they really don't know how they were derived.

3 Point number three is that in many areas there is
4 a great deal of consistency between the input values of the
5 ILECs and AT&T and MCI.

6 Number four is in several instances the input
7 values of the HAI Model clearly reflect real world outside
8 plant engineering judgment and are significantly more
9 costly than the same input values for the ILECs to the BCPM
10 3.1.

11 I'll give you a couple of examples. In the
12 buried and underground costs in urban areas, we use \$45 per
13 foot for buried. The ILECs use less than 10. And we know
14 that it costs more in the urban area. For conduit we use
15 \$75 a foot; all the ILECs are under 15. So we've actually
16 added judgment where we felt it was appropriate; in some
17 cases it drives higher costs.

18 Point number five is that in some areas there are
19 differing modeling assumptions. And you'll hear a lot more
20 probably about different opinions on buried structure
21 sharing as an example of that.

22 And then number six is there are numerous
23 examples of incorrect and illogical input values derived by
24 the ILECs employing top down accounting methodology without
25 really having a direction or review by outside plant

1 engineers. And I cite an example of that being that
2 BellSouth costs outside plant engineering for underground
3 cable at 22 times greater for a 2400-pair of cable than for
4 a 100-pair cable. And in reality the cost is actually
5 quite the same.

6 Even though developed and used on a nationwide
7 basis, the HAI input values do work within the HAI Model to
8 produce outputs that are very specific to Florida. The
9 reason being that, one, is that the salary portion of the
10 labor content of outside plant costs are reduced from the
11 national input value level by a Florida-specific factor of
12 68%.

13 Number two is that the placing costs are
14 increasingly -- are increased as appropriate for difficult
15 terrain, surface texture, rock depth, rock hardness, and
16 water depth statistics that are all Florida-specific at a
17 census block group level.

18 The HAI Model also employs, at least in the
19 latest release, a dynamic shifting of the plant mix between
20 buried and aerial based on Florida-specific cost factors.

21 Also, the customer and wire center locations are
22 very Florida specific at the individual location level.

23 And the fifth point is that material costs for a
24 cost model representing a large ILEC -- and despite the
25 fact that Sprint may not be considered to be large enough

1 to get these values -- but, anyway, for the purpose of
2 determining USF funding, material costs should represent
3 what a large ILEC such as BellSouth or GTE would be able to
4 get and they should not vary significantly from nationwide
5 outside plant material costs.

6 Now the outside plant modeling assumptions and
7 the input values of the HAI Model are certainly not -- and
8 I repeat -- not intended to replicate the cost of the ILECs
9 to build their embedded local loop networks; nor do they
10 provide for any significant amounts of growth.

11 We have modeled the local loop network and cost
12 of an efficient narrow band carrier in a competitive
13 environment based on total long run cost principles.

14 Accordingly, the HAI Model is designed to most
15 efficiently utilize the capability of currently available
16 technology, which includes digital loop carrier remote
17 terminal sites of up to 1800 lines with distribution cable
18 lengths out to 18,000 feet and even longer with the use of
19 T1 carrier extensions.

20 The result of this methodology and use of the
21 technology is a reasonable least cost and most efficient
22 network because it requires fewer remote terminal
23 locations. And each of these has a significant fixed cost
24 per location.

25 My rebuttal also addresses numerous shortcomings

1 of the BCPM 3.1 local loop modeling methodology. And it
2 compares them, of course, to the HAI release 5.0a.

3 Some of the BCPM's deficiencies in this area
4 include, one, the BCPM basically locates roads and then
5 assumes that the customers are uniformly distributed along
6 those roads; whereas the HAI Model locates customers and
7 assumes that the roads are there to get the cable to the
8 customers.

9 Number two is that the BCPM arbitrarily segments
10 customers by using a fixed grid overlay based on latitude
11 and longitude lines. In contrast, the customer clustering
12 methodology of the HAI Model is really like what an outside
13 plant engineer would do in planning and designing a real
14 world local loop network.

15 The BCPM models customer locations as square
16 lots. Now this is unrealistic and very inefficient
17 compared to the rectangular lot modeling assumption of the
18 HAI Model.

19 The BCPM models an excessive number of costly DLC
20 remote terminal locations because it tries to constrain
21 most distribution -- it tries to constrain most
22 distribution cable lengths to 12,000 feet instead of the
23 18,000 feet that the systems are capable of supporting.

24 And, just to be clear here, both models do have
25 18,000 foot limits and do model out to 18,000 feet from the

1 DLCRT.

2 The BCPM also subdivides its carrier serving
3 areas, which have about a thousand lines, although the
4 digital loop carrier systems are quite capable of
5 supporting 1800 lines.

6 And the last point I want to make here is that
7 BCPM over sizes distribution cables. The way they do it is
8 they first size for the ultimate demand based on two copper
9 pairs to all the houses. Then they increase that amount by
10 a cable sizing factor to allow for administrative purposes.
11 And once they do that, then they finally round up that
12 amount to the next available cable size. So there's a
13 tremendous amount of spare capacity.

14 And to put this in perspective in round numbers
15 because it varies by density zone, but, for example, their
16 utilization is about 40% of copper distribution cables.
17 That means for every 40 lines they've got about 60 spare
18 lines.

19 Now if you go through the fill factors in the HAI
20 Model and translate that into utilization, you'll find that
21 we have about a 60% utilization. That means for every 60
22 customers, we've still got 40 spare lines. My contention
23 is that is more than sufficient.

24 Furthermore, with currently available technology
25 known as two-channel digital subscriber carrier, if a

1 customer did need a second or third or fourth line, there's
2 enough capacity in this HAI Model solution in terms of
3 cable and in terms of 2-pair or 3-pair drops to provide
4 that amount of service with what's out there initially.

5 So the idea of putting in enormous amounts of
6 spare capacity, because that's what they've always done,
7 and it's time tested, is not a least cost most efficient
8 solution based on currently available technology.

9 These are just but a few of the examples of how
10 the BCPM 3.1 combined with the ILECs' input values
11 overstate the cost of an efficient narrow band carrier that
12 would be incurred in a competitive environment.

13 And in conclusion I recommend that the Florida
14 PSC, first of all, adopt the HAI Model release 5.0a as the
15 most appropriate model for determining local loop costs for
16 the purpose of establishing the universal service fund in
17 Florida. And then, secondly, that the HAI Model outside
18 plant input values, with any justifiable user adjustments,
19 be utilized to run the model.

20 Thank you very much.

21 MR. HENRY: Mr. Wells is available for cross.

22 CHAIRMAN JOHNSON: Mr. Carver.

23 MR. CARVER: Thank you, Madam Chairman.

24 CROSS-EXAMINATION

25 BY MR. CARVER:

1 Q Good afternoon, Mr. Wells.

2 A Mr. Carver.

3 Q My name is Phil Carver and I represent
4 BellSouth.

5 You probably covered this in your summary, but
6 just to confirm, you are a member of the Hatfield
7 engineering team that develops the default inputs; is that
8 correct?

9 A Yes, that's correct.

10 Q And all together there are six members of that
11 team; correct?

12 A Yes, that's correct.

13 Q And how many of the default inputs -- I believe
14 Mr. Wood told us there were 1578. How many of those are
15 the responsibility of your team?

16 A We do not keep tally sheets of those, but the
17 estimate is around 1400, our outside plant inputs.

18 Q Fourteen hundred. Okay. When did the team first
19 come into existence?

20 A Well, it started with Mr. Donovan. And that was
21 before my time. But I believe we would be talking in the
22 '96, late part of '96 when Mr. Donovan began to be
23 associated with Hatfield Associates.

24 And then John added several members to the team.
25 I personally became involved in February of '97.

1 Q Of the 1400 or so inputs, how many of these were
2 in place before you became a member of the team?

3 A Well, as I said, I don't keep a tally sheet of
4 these things, but for purposes of being responsive, I would
5 say most of them. There have been some additions as we go
6 through each release where we have some new input values.
7 But, for the most part, the input values were established
8 back in -- When I came on board, I think it was release
9 2.2.2.

10 Q Okay. And if you can't give me a specific
11 number, that's fine. But if you could just sort of
12 ballpark it out of the 1400 -- I don't know -- were 1200
13 there when you came aboard already?

14 A I can only say again, I do not keep a tally
15 sheet. I mean, I know the input values; I know the values
16 themselves, but as far as keeping tabs on how many and what
17 percentage, I don't do that.

18 Q Okay. That's fine. I just wondered if you could
19 give me an estimate, but if you can't, that's fine.

20 Is it fair to say that these inputs that were
21 there before you joined the team, that you would not be
22 able to tell me the specifics of how they were arrived at,
23 who suggested them, or the process with any degree of
24 specificity that was gone through; is that correct?

25 A That's not totally correct. Now I can't bear

1 witness that I was there and witnessed it or participated
2 in it. That's obvious. But as far as knowing who he was
3 there and knowing the process that they used and
4 subsequently having reviewed the values and questioned
5 them, then I can say that I can understand what they did,
6 but I can't bear witness that I saw it happen.

7 Q I just want to make sure we're on the same page.
8 Do you remember testifying in North Carolina on February
9 4th, 1998?

10 A I'll accept that that was the date.

11 Q Let me read you a question and answer from that
12 hearing. And I'm reading from page 14, line 21 through 24.

13 "Question:" --

14 A Could you just hold up just a second?

15 Q Sure.

16 A And give me the reference again.

17 Q Page 14. This is the North Carolina transcript.
18 Lines 21 through 24.

19 And do you want me to wait for you to get there?

20 A I'm there. Thank you.

21 Q "Question: Now you wouldn't be able to tell us
22 where those inputs that were in place before you arrived
23 came from necessarily; would you?"

24 And you say, "In general, I could, but not
25 specifically. I mean, it's a process of the members of the

1 team at that time using their collective outside plant
2 expertise and experience to develop the values that were
3 needed for, you know, to run the model."

4 And then the next question and answer: "And if I
5 were to go through them individually and ask who developed
6 or say who developed this, what did they look at, and what
7 did they do, you wouldn't necessarily be able to give me
8 that information; would you?"

9 "Answer: Probably not to your satisfaction,
10 no."

11 Now is that the testimony you gave in February?

12 A That's accurate from the transcript --

13 Q Okay.

14 A -- but it's consistent with what I just said. I
15 was not --

16 Q Well, that's what I'm trying to find out.

17 A May I finish my answer?

18 Q No; I'm sorry. Go ahead. Sure.

19 A As I said in my previous, to answer your previous
20 question, I was not there, so I can't bear witness.
21 However, I know how the process worked. I know the
22 individuals involved and I've had subsequent opportunity to
23 ask questions and understand how it was done.

24 I don't see the inconsistency between what I just
25 said then and what I said back in North Carolina on

1 February the -- whatever -- 4th.

2 Q Well, I didn't suggest it was necessarily
3 inconsistent. I just thought we could save a little bit of
4 time by going back to that answer and seeing if that's
5 still your position.

6 So we're on the same page. Generally, you know
7 how it worked; specifically you can't tell me exactly what
8 they did for each input; correct?

9 A That is correct --

10 Q Okay.

11 A -- because, as I said, I didn't become a member
12 of the team until late February of '97.

13 Q I understand.

14 Now let's talk about the process in general, just
15 how it works. Would it be fair to say that the team
16 members collectively form an opinion as to what a given
17 input should be?

18 A That's pretty fair assessment. The term that I
19 generally use, it's a consensus process.

20 Q Okay. And in some instances, at least, the
21 members may reach a consensus as to what an input should be
22 without doing any specific research; correct?

23 A Would you repeat that, please?

24 Q Yeah. In at least in some instances the team
25 members would get together and they would form an opinion

1 as to what the value would be without doing any specific
2 research; correct?

3 A That would be correct, but in a sense that based
4 on our -- I forget the number -- many years of experience,
5 we are able to formulate assumptions and methodologies and
6 input values without doing research. In fact, all of the
7 input values are based on our body of knowledge, if you
8 will, of outside plant. And any research that's done is
9 typically done afterwards to validate that the numbers are
10 indeed reasonable.

11 Q So then the process is one where principally you
12 rely on your opinions and your judgments based on your
13 experience? You don't really tend to look at specific
14 documents until after the fact; correct?

15 A Well, now I didn't say we don't look at
16 documents. We certainly look at technical references that
17 are generally available, but we don't go out and do what,
18 if the previous question was do research; if that means we
19 go out and get a quote or a bid, we don't do that, but we
20 do look at technical references and we do draw upon our
21 experience and background and knowledge.

22 Q Well, let's approach this a little bit
23 differently. I think you've told me before that typically
24 one team member proposes the input and then the other team
25 members have some sort of a discussion and then the process

1 goes from there; is that pretty much the way it begins?

2 A Yes; that's fairly typical.

3 Q Okay. And there's not really a standard as to
4 what someone has to have when they propose an input? In
5 other words, they don't have to have a survey, empirical
6 evidence? I mean, it's possible in some instances that
7 someone can just come along and say based on my judgment as
8 an engineer this is what the input should be and that would
9 be enough to start the process; correct?

10 A I won't disagree with that. I wouldn't say it
11 always happens that way, but it could in some instances.

12 Q Okay. Once again, let me make sure we're on the
13 same page. Well, let me make sure first I understood your
14 answer. Are you saying there are not instances where
15 people come forward and say this is simply an opinion and
16 start the process that way; that doesn't happen?

17 . Well, give you an example.

18 Q Could I have a yes or no, please? I want to know
19 are there instances where the team member who proposes the
20 value simply proposes it because that's their opinion?

21 A I said that that does happen --

22 Q Okay.

23 A -- but I said that that's not the only way that
24 things happen. I'm trying to understand the second
25 question. You asked me to give you an example where it

1 and in some cases a changing of the methodology, the
2 assumption or the value, until everybody is satisfied that
3 it's something they can support. That's the way the
4 process works.

5 Q So basically one person has an opinion and the
6 other people discuss it until you come to a common opinion
7 and then that's the value; correct?

8 A Yes, but let me -- Your use of the word "opinion"
9 is perhaps not the best use of it.

10 We frequently get identified things that we need
11 to look into from various criticisms of the model or
12 suggestions from the FCC or just our own review of the
13 model. We look at ways to enhance it to try to meet the
14 guidelines.

15 So the fact that somebody comes in off the cuff
16 and has an opinion is not a real good characterization of
17 what we actually do.

18 Someone comes in with an idea or a feedback and
19 says these are areas where we can or should or need to
20 improve the model and based on that we then proceed with
21 somebody generally proposing a remedy and a value and so
22 forth and then we try to reach consensus. So that's a
23 better description of what happens.

24 Q Okay. And let me ask one more question on this
25 area, just to see if we're on the same place.

1 Would you agree generally that this process is
2 one of sort of getting a consensus opinion as opposed to a
3 process of empirically researching what the inputs should
4 be?

5 A Yes; I would agree with that.

6 Q Okay. Now how many of the inputs were changed by
7 the engineering team from 4.0 version of the model to the
8 5.0 version?

9 A I don't know. I think that came up in
10 deposition. I thought we furnished you a response on that,
11 but I didn't do it.

12 Q Do you know if that's been filed?

13 A I do not know.

14 Q I haven't seen it. I just wondered.

15 A As I've said three times, I don't keep a tally of
16 numbers of input values. I do the values themselves, but I
17 don't keep a tally sheet.

18 Q You participated, though, in the changes from 4.0
19 to 5.0; didn't you?

20 A Yes, I did.

21 Q Now in your testimony you discuss various types
22 of what you refer to as validations; correct?

23 A Yes, I do.

24 Q Now there is currently no formal process by which
25 every input in the model is routinely validated; correct?

1 A Correct.

2 Q Has any effort been made to validate the new
3 inputs in 5.0?

4 A There have been no specific efforts commissioned
5 by a member of the team. However, in every docket that we
6 go to now, we validate in essence our assumptions and input
7 values relative to various models; in this case, the BCPM
8 and all the input values of three ILECs.

9 So we consider that to be validation in today's
10 time, is to look at actual ILEC input values and compare
11 them to what we have. And we think that it does indeed
12 validate what we do as the most reasonable approach.

13 Q Well, just to clarify: I'm not talking about
14 hearings. In your testimony you talk about some
15 validation exercises that were done with former versions of
16 the model.

17 A Yes, there has been.

18 Q So my question is has anything like that been
19 done for the 5.0?

20 A No.

21 Q Now has any effort been made to follow-up to see
22 if the older inputs from previous models are still valid?
23 In other words, if the information is still current or if
24 it's stale now?

25 A No. As I said, the validation of today consists

1 of going to dockets and getting input values from the ILECs
2 and looking at methodology of BCPM and ICM and others. And
3 based on those, we then validate that the HAI Model, how it
4 compares.

5 Q Now on page 24 of your testimony you talk about a
6 validation study that you did that relates to distribution
7 plant. And I think you said you did that for 3.1 and 4.0;
8 is that correct?

9 A That's page 24 of my direct?

10 Q Yes. This is the Georgia census block group.

11 A Yes.

12 Q Okay. And I think you also -- Well, I'm not sure
13 if you did, so let me just ask. That validation
14 wouldn't -- That would not be a validation of 5.0; would
15 it?

16 . No. It says right here it's 3.1 and 4.0.

17 Q Okay. And on page 21 of your testimony you talk
18 about a different validation. And that relates to I
19 believe 30 specific inputs or portions of inputs; is that
20 correct?

21 A What was that page again?

22 Q It's page 21; it's the chart there.

23 A Twenty-one?

24 Q Uh-huh; direct.

25 A I think you -- Did you use the term "validation?"

1 This is -- What this is is a summary of the
2 validation information that was gathered by Dean Fassett.

3 Q Well, my question was just the number of inputs
4 that that relate to. As I understand it, this deals with
5 30 inputs or pieces of inputs; correct?

6 A Yes. This was prepared by Mr. Donovan. He
7 selected 30 items out of the so-called Fassett
8 documentation. I believe that's covered in Exhibit JWW-3
9 to my direct. So this is a summary of those. And the
10 purpose of this was to address the accusation that we had
11 low-balled the numbers. And this was merely to show that
12 we had gathered information that in essence bracketed the
13 value that we had used on 28 of the 30 items and on two of
14 the 30 items we had indeed taken the lowest number.

15 And all this is consistent with a least cost
16 model.

17 As to the number, though, this relates to 30 of
18 about 1400 inputs; correct?

19 A No. In fact, all of these are not input values.
20 Some of these are sub sets of input values. And of the
21 1400 -- Let's be a little bit more clear here -- six to
22 eight hundred of those are values having to do with various
23 types of excavation and four to five hundred are terrain
24 factors and so forth.

25 So they're not -- All input values are not of

1 equal importance, I guess is what I'm trying to say.

2 Q Okay. Thank you for that.

3 Let's go back to my question, though. This chart
4 represents 30 either input values or pieces of input
5 values; in other words, an element of an input value?

6 A That's correct.

7 Q But only 30; right?

8 A This particular chart, yes.

9 Q Okay. And you told us earlier that there were
10 about 1400 all together; correct?

11 A Total inputs, yes.

12 Q Yes.

13 A Outside plant.

14 Q Well, total inputs that are the responsibility of
15 the engineering team?

16 A Yes; you are correct.

17 Q Okay. And I think you answered this question
18 already, but just to confirm: This information was
19 developed by a man named Dean Fassett?

20 A The source document was developed or gathered by
21 Mr. Fassett. This particular summary was prepared by
22 Mr. Donovan.

23 Q Right. And Mr. Fassett actually looked at a
24 number of inputs beyond just these 30; correct?

25 A Yes. They're documented in the attachment I

1 referred to as well as I think in response to a late
2 discovery; we provided the entire Fassett package.

3 Q And you don't know why Mr. Donovan chose to put
4 in these 30 in the chart as opposed to some others; do you?

5 A My guess is that these are the ones that are
6 reflected in bar charts in the inputs portfolio.

7 Q Well, and that's a guess?

8 A The fact that I haven't verified that, I would
9 have to say yes, that's a guess.

10 Q Okay. Well, the reason I ask is because in your
11 deposition last week you told me that you didn't know. Is
12 this new information you're giving me now?

13 A I guess I'm making a guess. I have reason to
14 believe that that may be the explanation.

15 Q Okay. But that's --

16 A My answer is still correct: I don't know for
17 sure.

18 Q Thank you. And you don't know who Mr. Fassett
19 talked to to get the underlying information that
20 Mr. Donovan used to make this chart; do you?

21 A I do not know the specific vendors that he talked
22 to, no.

23 Q And you haven't gone behind him and tried to talk
24 to those same people to make sure that his information is
25 correct?

1 A No, I haven't. Neither has he driven the 2,000
2 miles that I drove in Georgia to determine that the
3 validation I did was correct.

4 Q So basically what this is, just so we're clear,
5 is that this is something that Mr. Donovan put together
6 based on information from Mr. Fassett and you haven't --
7 you don't know why Mr. Donovan picked these inputs and you
8 don't know what Mr. Fassett did to get the underlying
9 information?

10 MR. HENRY: Madam Chairman, I'm going to object
11 to the form of that question. I counted at least four of
12 them in there.

13 MR. CARVER: Well, yeah, I'm just trying to find
14 out -- Yeah, I think he's answered all four of those
15 individually and I just want to confirm that --

16 MR. HENRY: Well, then I would object that it's
17 been asked and answered.

18 CHAIRMAN JOHNSON: Mr. Carver.

19 MR. CARVER: I have not asked and answered that
20 question in that way. I have asked him a number of
21 questions individually. He has given me rather long
22 answers and in some instances it's been difficult to make
23 sure that I understand his answer. So I just want to make
24 sure if what I told him represents the total process. It's
25 one question, and I think he can answer that question.

1 CHAIRMAN JOHNSON: If you can answer it, I'll
2 allow you to answer it. If not, you're going to have to
3 start over and ask it in a different way.

4 MR. CARVER: Okay.

5 BY MR. CARVER (Continuing):

6 Q Would you like for me to repeat it again?

7 A Sure.

8 Q Okay. This process is one in which Mr. Fassett
9 looked at underlying facts, Mr. Donovan turned them into an
10 exhibit, and you're testifying about it, but you don't know
11 why Mr. Donovan picked these inputs, and you don't know
12 what Mr. Fassett looked at to develop the underlying
13 information; is all of that correct?

14 A That's not a proper characterization. First of
15 all, I know that --

16 Q Well, let me just ask you what part of that is
17 wrong?

18 A That's what I was getting to.

19 Q Thank you.

20 A First of all, I know that Dean went out and
21 talked to a number of vendors and I've got the
22 documentation that shows the information that he got. All
23 I don't know is the name of the vendors. That's been
24 redacted.

25 Okay. So to say that I don't know what Dean did

1 is a mischaracterization. It's all there. I know that he
2 talked to a number of vendors. I know the numbers he got.
3 I know that they went into the spreadsheet that's in my
4 exhibit.

5 And then from all of that information, Donovan
6 prepared this particular exhibit to show that we didn't low
7 ball the numbers.

8 Now your question is the fact that I don't know
9 the basis on which he selected all 30 of these, I don't
10 understand what he did and why he did it, or do I agree
11 with it; that's not correct.

12 I do understand what he did. I just don't know
13 the basis upon which he selected these particular 30 items,
14 although I think it was because they're the ones that are
15 in the Inputs Portfolio.

16 So while your statement may be correct, it's
17 certainly a mischaracterization.

18 Q Now you didn't go behind -- I think you said you
19 didn't go behind Mr. Fassett, though, and check his work to
20 make sure it was accurate?

21 A That is not a reasonable assumption for me to
22 have done. If you look at the Fassett documents, like
23 three inches of paperwork. And he talked to numbers of
24 vendors, of which I do not know who the vendors are because
25 that information is highly proprietary.

1 So the answer is no, I didn't, but that's not a
2 reasonable expectation.

3 Q Okay. Let's move to a different area. I'd like
4 to talk to you a little bit about loop lengths.

5 A Say again.

6 Q Loop lengths.

7 A Okay.

8 Q Okay. And, specifically, what I'm talking about
9 is the length of copper loops running from the DLC.

10 A Okay.

11 Q Now, in general, just as a starting point, can we
12 agree that AT&T's Outside Plant Engineering Handbook states
13 that copper loops on DLC should not exceed 12,000 feet?

14 A That statement is in there. It's a part of the
15 serving area concept that was formulated in the '70's. And
16 our position is that currently available technology has
17 superseded those limits, as many things that are in the
18 handbook get superseded.

19 I mean, you could go back to open wire technology
20 and say it's been superseded. So the fact that it's in an
21 old document doesn't mean it's currently the practice that
22 should be used, particularly in a model with the guidelines
23 we're talking about here of least cost most efficient
24 currently available technology.

25 Q Okay. I understood your explanation. Was your

1 answer that that's what the AT&T handbook says, that you
2 shouldn't exceed 12,000 feet?

3 MR. HENRY: Madam Chairman, I'm going to object
4 again. The witness says, yes, those words are in that
5 book, and then provided his explanation. Mr. Carver
6 apparently doesn't like it when Mr. Wells doesn't agree
7 with his characterization, but he has answered that
8 question. So I'm going to object to the basis that it's
9 been asked and answered.

10 MR. CARVER: The question is, you know, is it --
11 The question is does it conform with that standard. He
12 said the words are in the book, which I don't think is
13 really answering it. And then he goes off on an
14 explanation.

15 And the question is real simple. There's a
16 standard. It's in the AT&T handbook. Does it conform to
17 it or not? And I think when he says "the words are in
18 book" and then talks for a while, it's not a clear answer.

19 And what I'm trying to find out is does the AT&T
20 handbook establish that standard. And I think he can
21 answer that yes or no.

22 MR. HENRY: And he did answer that yes or no and
23 then he gave you his explanation, which you apparently
24 didn't like.

25 Madam Chairman, I would let my objection stand.

1 CHAIRMAN JOHNSON: Okay. I'm going to allow you
2 to answer the question. And, if you could, start off with
3 a yes or no.

4 A Okay. Yes, Mr. Carver, you're correct; that is
5 in the handbook. It's the serving area concept that was
6 developed in the '70's. It has been superseded by
7 currently available technology.

8 MR. CARVER: I'm sorry; Madam Chairman. My -- He
9 answered my question. Now he's going on and repeating
10 everything he repeated before. This is going to take
11 forever, I mean, if he does a five-minute, you know,
12 explanation over and over and over again.

13 The question was just is that in the book and he
14 said yes. So I'd like to go on to my next question. I
15 mean, I don't mean to cut him off but, I mean, I'd like for
16 him to be responsive.

17 CHAIRMAN JOHNSON: Generally we allow you to
18 elaborate, but you did; you explained it the last time.
19 The only reason I asked you to answer it again is because I
20 didn't remember if you said yes or no at the beginning
21 either. But if you do need to continue to -- If you need
22 to clarify your yes, I'll allow it.

23 A Thank you, Madam Chairman. I would like to, to
24 put this in proper context.

25 CHAIRMAN JOHNSON: Okay.

1 A As opposed to a simple yes or no, which I don't
2 think is the whole truth in this matter.

3 It is a design standard that's in the handbook.
4 It has been superseded by currently available technology.

5 And I might also point out that the BCPM pays lip
6 service to that standard but violates it in two ways: One
7 is that for 26-gauge cable, the serving area concept is
8 9,000 feet limit. BCPM goes out to 11,100 feet. They
9 violate the standard.

10 The secondly is the 12,000 feet that Mr. Carver
11 points out, but BCPM models out to 18,000 feet from the
12 DLCRT, just as the HAI Model does.

13 All I'm saying is that that standard has been
14 superseded in both the HAI Model and the BCPM have gone
15 beyond that standard. And I'm not saying that BCPM is
16 wrong. I'm thinking they're in the right direction. We've
17 just done it to the capability of the equipment today to
18 produce a least cost model.

19 The whole point of this is that that standard has
20 been superseded.

21 COMMISSIONER DEASON: Why hasn't the handbook
22 been changed?

23 A That's a good question. First of all, the
24 handbook is now property of Lucent Technologies. It's not
25 an AT&T book any more. It was published in '94. And for

1 whatever reason -- and I suspect because Lucent is no
2 longer in the outside plant services business, of which I
3 was a part of that organization back then, it no longer has
4 a compelling need to keep that book updated.

5 BY MR. CARVER (Continuing):

6 Q In the most current -- I'm sorry; Commissioner
7 Deason.

8 COMMISSIONER DEASON: I did have a follow-up
9 question.

10 A Yes, sir.

11 COMMISSIONER DEASON: Well, then if they're no
12 longer in that business and no longer have a need to update
13 it, why do they include it in their handbook?

14 A Well, sir, the handbook exist from that time it
15 was published. And they aren't reissuing it. They just
16 issue the old version. And for the most part it's still
17 applicable to outside plant. It's still a good book. It's
18 jus' that particularly in terms of these models you've got
19 to take the currently available technology and apply it in
20 a least cost solution. In the case of the serving area
21 concept, it's been superseded. And both models know it and
22 both models supersede it.

23 COMMISSIONER DEASON: Do they have any kind of
24 disclaimer to that effect, that they haven't updated it and
25 so some things may be superseded?

1 A In the AT&T handbook of '94?

2 Yes, sir; that's correct.

3 COMMISSIONER DEASON: There is a disclaimer that
4 says that?

5 A No, sir; there's no disclaimer. They have not
6 reissued a revised version, to the best of my knowledge.

7 BY MR. CARVER (Continuing):

8 Q The last time it was issued by Lucent, which was
9 picking up on the AT&T standard, was in the '96 handbook;
10 correct?

11 A I'm not aware of that, but I won't disagree. If
12 you could show me one, I'd certainly agree with you.

13 Q Well, I'm asking if you are aware of that.

14 A I'm not aware of it.

15 Q Okay. So as far as you know, '94 was when that
16 standard was current?

17 A To the best of my knowledge the handbook was
18 '94. The standard goes back to the '70's.

19 Q Okay. Well, in '94 you were working for AT&T as
20 an engineer; weren't you?

21 A Yes, I was.

22 Q Did you follow that standard in '94?

23 A I'm trying to think if we proposed anything that
24 would have included that. I can't remember specifically,
25 but I won't disagree that in '94, had we deployed digital

1 loop carrier, we mostly would have followed that particular
2 standard in '94.

3 Q Okay. Now have you worked as an engineer for
4 AT&T since then?

5 A I have worked as a manager over engineers up
6 through about February '97 when I went on to -- gave up the
7 real world of building these things and went into the
8 witnessing world.

9 Q Does AT&T currently follow that standard or did
10 they follow it when you left the company recently?

11 A Well, first of all, AT&T, to the best of my
12 knowledge, is not building local loops in terms of feeder
13 and distribution, digital loop carrier. So the answer to
14 that is that AT&T is not doing it.

15 However, I would say that if AT&T were building
16 local loop to serve areas beyond 9,000 feet of feeder,
17 which is what the HAI Model, or 12,000-foot loops as BCPM
18 mode , that they would do so with currently available
19 technology. And to the extent that currently available
20 technology exceeds the serving area concept, then I'm sure
21 AT&T would use that technology to its full capability,
22 which is what the HAI Model does, and, to a certain extent,
23 what BCPM does, also.

24 Q Mr. Wells, I have a copy of the Lucent
25 Technologies update from October 1996. If I bring that

1 down and show that to you, will you accept that the
2 standard was reissued in 1996?

3 A I said I would.

4 Q Okay. Do you want me to bring this to you?

5 A Mr. Carver, I trust you. I see the Lucent logo
6 on it. So I'll go along with that.

7 Q Okay. Well, rather than take any more time with
8 that, just so we're on the same page, '96 --

9 A Subject to check, I'll agree with you.

10 Q Do you know of any local exchange company that
11 exceeds the 12,000 foot on DLC standard that's set forth in
12 this handbook?

13 A Sure. In reviewing BellSouth's UNE filings, I
14 saw a number of their loops laid out. And in many cases
15 they've got loops from DLC that go out well beyond 18,000
16 feet with load coils on them. There are design standards
17 that allow for that, a range extension, and even loaded
18 loops.

19 So the answer to your question is yes; in fact,
20 for the most part. What we're talking about here is a
21 network to standards that would far exceed what the
22 embedded network is in terms of quality and performance.

23 Q When did you make this review of the BellSouth
24 information that you're telling us about?

25 A I've been in several UNE dockets where BellSouth

1 typically files a sample of 300 loops and I've gone through
2 extensive review of those loops and have -- You know, and
3 they say that this is a sample of what's out there.

4 Well, based on that sample I tell you that
5 there's a lot of loops out there that are a lot longer than
6 18,000 feet from the DLCRT and a heck of a lot longer than
7 12,000 feet from the DLCRT and have load coils on them.

8 Q Okay. Well, I'm not talking about load coils.
9 Let's see if we can focus the discussion here. I'm not
10 talking about load coils and I'm not talking about what
11 happened in the past and I'm not talking about old
12 technology. What I'm talking about is the standard right
13 now.

14 Do you know of any local exchange company right
15 now that builds copper loops longer than 12,000 feet from
16 the DLC to the customer?

17 A You say builds right now as opposed to embedded
18 network?

19 Q Designs right now or builds right now, current
20 practice; do you know of any local company?

21 A I don't have enough knowledge of what they're
22 currently deploying to answer that definitively. Based on
23 the fact that BCPM does model beyond 12,000 feet and that
24 there's three ILECs here that support that, and knowing
25 that the technology will go that far beyond that, I would

1 be surprised if they weren't doing that, but I don't have
2 firsthand knowledge.

3 Q Thank you. Now when you say that this has been
4 superseded, is there any sort of a handbook like the Lucent
5 handbook that's followed in the industry that has reset the
6 industry to what Hatfield follows?

7 A Well, first of all, the answer --

8 MR. CARVER: I'm sorry. Madam Chairman, could I
9 have a yes or no? I think that was a very straightforward
10 question.

11 A Yes. I apologize.

12 The answer is yes, and let me explain. First of
13 all, the standards to which the HAI designs to, and to some
14 extent the BCPM, is first of all 18,000 feet is established
15 as the distance of which a copper pair can transmit without
16 load coils. And that's in the outside plant engineering
17 handbook and several other sources, the BOC notes on the
18 network -- BOC notes on the network and others. That's a
19 well-established standard.

20 So that is the one that's used to determine the
21 upper limit of going from the DLCRT.

22 The other standard is that the loss in terms of
23 decibels on a loop cannot exceed eight and a half,
24 including the central office. And for next general digital
25 loop carrier, the channel unit card becomes an extension of

1 the CO. So you've got eight and a half db loss budget and
2 then you go to loss charts and so forth and you can
3 determine the distance that you can go from the DLCRT on
4 certain gauges of copper and whether or not it's aerial
5 buried, so forth and so on, to get so far out.

6 And that's what we've done. That's what we've
7 designed to. And I think BCPM has done a similar exercise
8 to determine their limits of 11 -- of 13,600, where they
9 start range extension, and 11,100 feet of 26-gauge cable,
10 both of which exceed the serving area concept.

11 MR. CARVER: Madam Chairman, my question was is
12 there a published guideline today that has superseded the
13 Lucent Guideline. And I don't think there was an answer
14 anywhere in there. I'm really doing my best to move this
15 along, but these answers are not responsive.

16 MR. HENRY: Madam Chairman, I believe if we read
17 the record back, Mr. Wells initially started into an answer
18 and then he specifically said, "I'm sorry, the answer to
19 your question is yes. Now let me explain."

20 So Mr. Carver got a yes or no answer to his
21 question.

22 A And I did reference the outside plant engineering
23 book; I referenced the BOC notes on the network; I
24 referenced charts, which are, by the way, attached to my
25 testimony; there is a chart in there.

1 So the answer is yes, there are standards. We
2 have complied with them and so does BC -- BCPM uses similar
3 standards.

4 BY MR. CARVER (Continuing):

5 Q So you reference the BellCore notes on the
6 network?

7 A Yes.

8 Q Okay.

9 A For 18,000 feet and also I think 8 and a half db;
10 they're both referenced in there; BOC notes on the network.

11 Q Yes. And on section 12, page 5 of that under
12 12.1.4, Carrier Serving Area, doesn't it say the maximum
13 loop length in a CSC is 12 kilofeet for 19-, 22-, or
14 24-gauge cables and 9 kilofeet for 26-gauge cables? Isn't
15 that the 12,000 foot standard right there in the BellCore
16 notes that I just read you?

17 A The answer is that, yes, you've quoted the
18 serving area concept, but there are other standards in
19 there that apply to loop loss and there's standards in
20 there on distance you can go without load coils. And in a
21 least cost most efficient model based on currently
22 available technology, those are the ruling or guidelines
23 and standards. And the serving area concept has been
24 superseded. And both the HAI Model and the BCPM know that
25 and have modeled it appropriately because it's the least

1 cost most efficient way to model.

2 Q And we're going to get to that comparison in a
3 moment, but the question is you admit that in the BellCore
4 notes from December 1997, it sets as the standard for the
5 CSA 12,000 feet; correct?

6 A It quotes the CSA standard. It also probably
7 quotes a standard on open wire. It doesn't mean that
8 that's currently available technology.

9 Q And the standard it quotes is 12,000 feet; right?

10 A The CSA standard is 12,000 feet.

11 Q Thank you.

12 A It also, as you pointed out, is 9,000 feet of
13 26-gauge cable. And both models exceed that because the
14 technology allows them to do so.

15 Q We're going to get to the comparison now in just
16 a moment.

17 How many loops in the Hatfield Model exceed
18 12,000 feet?

19 A Mr. Pitkin would have had that answer. I don't
20 know.

21 Q Actually in his deposition Mr. Pitkin did answer
22 that. He told us on page 99, line 8, that 84,838 loops
23 exceed 12,000 feet. Will you accept that?

24 A If Mr. Pitkin said so, yes.

25 Q How many of BCPM exceed 12,000 feet?

1 A I don't know.

2 Q Well, Mr. Pitkin also told us on page 100, line
3 12 of his deposition, he said 4,291; will you accept that?

4 A Makes sense because they have got so many more
5 DLCRTs; so they wouldn't have any.

6 Q So assuming that Mr. Pitkin's numbers are
7 accurate, that means that the Hatfield Model has loops in
8 excess of 12,000 feet twenty times as frequently as BCPM;
9 correct?

10 A Well, I'll accept your math, but I would
11 point out that you don't -- a design would not have anybody
12 with service that does not meet standards.

13 So my answer is that both those 4,000 customers
14 in BCPM and the whatever thousand, 80,000, if you said in
15 HAI, are both receiving a telephone service that's within
16 the standards and requirements of the universal service
17 fund in the model, which would be a POTS line or a modem
18 use.

19 Q Well, let's go back to what you said at the
20 beginning of that answer where you said that the design
21 criteria should insure that everyone or that every loop
22 meets it. And, just to clarify, it's your position that if
23 there is a -- say a model is trying to design to 12,000
24 feet and there is a single loop beyond 12,000 feet, that in
25 your view the model is not designing to 12,000 feet;

1 correct?

2 A Engineers are not allowed to deploy --

3 Q Could I have a yes or no? Is that your position,
4 that a single loop means that it is not designing to 12,000
5 feet if there is a single loop in excess of 12,000?

6 A The answer is yes.

7 Q Thank you.

8 A Engineers are not going to deploy a design that
9 gives poor quality service to any customer. And so if
10 you're trying to draw a comparison that BCPM only gives
11 poor quality service to 2% and HAI gives poor quality
12 service, in this hypothetical, to 10 or 12%, and,
13 therefore, BCPM -- That's not right. You don't draw up a
14 design to give poor quality service to anyone and neither
15 model does.

16 Q So then based on your judgement as an engineer,
17 what you're telling us is if BCPM exceeds the standard 20
18 times as frequently -- I'm sorry. If Hatfield exceeds the
19 standard 20 times as frequently as BCPM, then you wouldn't
20 say one model performs better than the other? You'd say
21 they both breached the standard because they both exceeded
22 it to some extent; correct?

23 A No, that's not correct. I've said the standard
24 is 18,000 feet and that both models are within that
25 standard and all customers in both models receive the type

1 of quality of service that's required of these models.

2 Q You are changing my question a little bit. I
3 know you think 18,000 feet is the correct standard. The
4 BCPM proponents say 12,000 is the correct standard. So for
5 purposes of my question I want you to accept as a
6 hypothetical that 12,000 feet is the correct standard. I
7 just want to be clear on your position.

8 Your position is that if BCPM exceeds it one time
9 for every twenty times Hatfield exceeds it, then there is
10 really no significant difference between their performance
11 as to that standard?

12 A The answer to your question is, yes, because if
13 hypothetically the limit is 12 and either model exceeds it,
14 then either model is unacceptable.

15 And to go to some rationale that says that this
16 one is less incorrect and, therefore, better is not the way
17 that this Commission should reach a conclusion and not the
18 way an outside plant engineer would design a network.

19 Q And you have that opinion even though BCPM would
20 only breach that standard if we accept it as a standard one
21 time for every 20 times that Hatfield does? The number is
22 simply irrelevant to your analysis; correct?

23 A If I've said before, if it was one customer, it
24 would be unacceptable, not one 20 times more; one customer
25 would be unacceptable. You don't design a network to

1 provide inferior service to any customer.

2 Q Okay. Let's move to a different area. I'd like
3 to talk to you a little bit about the sharing factor. And,
4 specifically, I'm talking about the sharing factor as it
5 applies to buried distribution plant.

6 Now just to be clear, what this factor does is it
7 would assume that -- well, first of all, the factor for
8 distribution plant is 33 -- correct -- buried?

9 A Yes.

10 Q So what that means is that the Hatfield model
11 assumes that only 33% of the support costs or the costs for
12 support structures of this plant will be borne by the
13 builder of the network and 67% will be borne by someone
14 else; correct?

15 A Yes.

16 Q And today this sharing factor cannot be achieved
17 on a statewide or a company basis; can it?

18 A Under current conditions, that's correct.

19 Q Okay. Now you would agree, wouldn't you, that
20 this is a big ticket item? I mean, there's a lot of money
21 involved in how this sharing factor is applied; would you
22 not?

23 A I can't quantify it, but I won't -- I would agree
24 that it's a significant factor.

25 Q Okay. Actually, we've made an attempt to

1 quantify it. And I'd like to see if you agree with this
2 analysis.

3 What we did was we went into the Hatfield Model.
4 And this is the CD-ROM that's Exhibit 6 to Mr. Wood's
5 testimony. And went to the particular spreadsheets for
6 buried distribution placement costs and looked at the costs
7 that the Hatfield Model generates for the three largest
8 companies in the state. And actually it breaks Centel and
9 United out. So I'll just read you these figures.

10 There will be a little bit of arithmetic
11 involved. You can write them down if you want; if not,
12 that's fine.

13 For BellSouth it's 526.9 million; for GTE, 201
14 million; for United, 191.9 million; and for Centel, 58.3
15 million.

16 So all together, this particular type -- The
17 investment for this particular of plant is 978.1 million
18 dollars.

19 Okay?

20 A You're talking about buried distribution cable or
21 what?

22 Q Yes. Will you accept that subject to check?

23 A I'm not familiar with the outputs of the model,
24 so I have no expert opinion. I'm not disagreeing; I just
25 don't know.

1 Q Okay. Well, they're taken from numbers that are
2 in evidence. So if you would accept them hypothetically.

3 A Okay.

4 Q Because I just want to see what the Hatfield
5 Model would do with that. Now according to the spreadsheet
6 that we looked at, it applied a factor so that it assigned
7 33% of that to the telephone company building the network.
8 So, in other words, the 978.1 million dollar item was
9 reduced to 322.8 million, meaning that 655.3 million was
10 simply taken out as an investment. It was no longer there.

11 Now applying those numbers, that's the way the
12 sharing factor works; isn't it?

13 A Yes; that's the way the sharing factor works.
14 And if you assume that the sharing factor is 100% or 98%,
15 then there is, in your example, \$600,000 worth of costs
16 that are not being taken out in a most efficient
17 environment.

18 And our position is that in a competitive
19 environment, that buried structure sharing will take place
20 far in excess of what exists today for the reasons that
21 there will be incentive for utilities to want to share the
22 cost of a trench that haven't existed in the past because
23 utilities have been rate base regulated and had an
24 incentive to do their own trench.

25 There will also be regulatory pressure to

1 minimize the number of trenches that are dug. There will
2 also be many more utilities out there in a competitive
3 environment, once again driving toward single trenches.

4 And so we see that there will be incentive as
5 well as additional opportunity that will result in
6 significantly more sharing of both buried and underground
7 structure in the future.

8 So the ILEC position in this matter is that they
9 haven't done -- They haven't shared trenches in the past.
10 They don't share trenches today. And they shouldn't have
11 to share trenches in the future. And that's kind of the
12 way they've modeled it.

13 Our position is they haven't shared trenches in
14 the past. They could share trenches today. And they
15 should share trenches in the future.

16 Q Okay. So -- I'm sorry.

17 COMMISSIONER CLARK: Let me ask you a question:
18 How do you share a trench?

19 A You coordinate with another utility. And you --

20 COMMISSIONER CLARK: What other utility would you
21 coordinate with?

22 A The power company, the cable company. And it's
23 not inconceivable that other utilities might also be
24 looking to share the cost.

25 COMMISSIONER CLARK: What other utilities?

1 You've just named the ones I think would trench.

2 A Well, in a competitive environment there might be
3 more than one carrier or there might be more than one power
4 company, there might be more than one cable company, might
5 be several telecommunications companies and so forth. So
6 we see increased opportunities as well as incentive. And
7 sharing trenches is a matter of you dig the trench and you
8 dig it at a sufficient depth to accommodate all the parties
9 and you share the cost.

10 COMMISSIONER CLARK: But you have to do it all at
11 the same time; right?

12 A In terms of buried trenching, where you've got
13 just no conduit, that is correct. Everybody has to get in
14 the trench at the same time.

15 In the case of underground structure where you're
16 placing conduit, then people could in essence, say, well, I
17 want a duct and pay for that duct.

18 Also, we have numerous examples of builders in
19 subdivisions who will open up trenches for all the
20 utilities to get into, rather than have them all come in
21 and dig their own and cut each other up. It's pretty
22 common practice today for, you know, builders and
23 developers to open the trench for the utilities, in which
24 case the cost really goes down because they don't have to
25 dig the trench themselves.

1 BY MR. CARVER (Continuing):

2 Q And this is a theory about what's going to happen
3 in a future competitive environment; correct?

4 A Yes.

5 Q This does not happen and cannot happen today on a
6 company-wide or statewide basis; correct?

7 A Well, it does not happen. Whether it could
8 happen is a matter of difference of opinion.

9 Q Well, let me -- Let's go to the opinion you gave
10 me last week in your deposition. Page 92, lines 3 through
11 13: "Let me ask you today, right now, do you believe a
12 local exchange company could achieve a 33% sharing factor
13 for support structures for buried cable?"

14 "Answer: As I have said on a company-wide or
15 statewide basis, they cannot because the environment which
16 would be conducive to that being, one, the incentive to be"
17 -- and then you go on to give an explanation.

18 A week ago you told me that cannot be done today.
19 Have you changed your testimony?

20 A No, I've not. As you read the testimony, I said
21 under the current environment; the environment being one of
22 competition and one of where you have the incentive to do
23 so. In the past, and apparently in the present you have
24 insufficient incentive to want to do that.

25 COMMISSIONER GARCIA: What is incentive? What?

1 They're going to dig up the cable and rebury it for the
2 competition?

3 A No, sir. That's a very good question. And I can
4 see that you've been misled in that area.

5 COMMISSIONER GARCIA: I'm glad.

6 A If you're familiar with the scorch node concept,
7 okay, it says that for purposes of determining the cost
8 basis for universal service fund, we go to a scorch node
9 concept. Now I'm not qualified to give you all the
10 economic reasons for that, but if you will accept that as
11 the basis for it, then it says that in essence the
12 facilities of the telecommunications carrier are eliminated
13 or scorched, is the term that's used. And you rebuild an
14 entire telecommunications network based on large scale
15 projects and new technology, new equipment.

16 So it's a hypothetical to get at the cost
17 basis, the appropriate cost basis.

18 And any misleading that you're going to go out
19 and dig up cables and rebury them and the power company is
20 going to get scorched is misleading; it's not correct.

21 COMMISSIONER GARCIA: But to assume contributions
22 is quite a different thing than to assume an efficient
23 network? One thing is to assume, you know, that the
24 straightest distance between two points is a straight line.
25 It's quite another to assume that not only are you going to

1 create a new network, an efficient network, but now you're
2 going to assume contribution from other players for that
3 network, like cable companies, like power companies, like
4 non existent facilities-based telecommunications firm.

5 A Yes, sir; that's an assumption. And then in the
6 case of pole lines and aerial, there's no dispute. There
7 is sharing. It's physically possible to do so and there is
8 no dispute. So that's one where there is not a big
9 debate.

10 In terms of conduit, I think that it's entirely
11 possible with coordination with other utilities that they
12 would be willing to pay for additional ducts for their use
13 in the future. It doesn't mean they have to go out and put
14 in the cable right now, but the idea is you could either
15 acquire at the time the trench is being dug or in the
16 future you could lease ducts.

17 Okay. The phone company has got a lot of ducts
18 now that were based on large course gauge cables in the
19 past technology that are being replaced by fiber cables.
20 So they're going to have spare ducts to lease. So the
21 example is that you are going to lease a duct as opposed to
22 building.

23 All these factors have been, for modeling
24 purposes, have been rolled into the percent telco that we
25 use in our structure sharing. And, like I said, there

1 really is not a big debate on aerial. There's not a huge
2 debate on conduit. The big debate comes on buried.

3 Our position is 33; their position is virtually
4 zero or 100%.

5 And I'll admit for the record that our number is
6 aggressive. I'll also say for the record their number is
7 not very forward looking, and ask the Commission to take
8 all that into consideration.

9 COMMISSIONER CLARK: I'd like to ask that, the
10 question a different way: Does your model of 33% assume
11 that for all the buried plant that would be put in, buried
12 cable that would be put in, every foot of it, at least two
13 other utilities will share that trench?

14 A That would be one interpretation, but that's not
15 the modeling premise. Okay. You take into account various
16 combinations of multiple utilities, cases where you can
17 lease or cases where somebody is opening the trench.

18 COMMISSIONER CLARK: Let me stop you a minute.

19 A Yes, ma'am.

20 COMMISSIONER CLARK: I get lost in some of your
21 explanations.

22 A Okay. I'm sorry.

23 COMMISSIONER CLARK: You answered yes, in terms
24 of the total investment --

25 A Yes, ma'am.

1 COMMISSIONER CLARK: -- in buried cable, it
2 assumes that for every foot of buried cable there are at
3 least two other utilities in that trench, or wherever it
4 is, sharing the costs of putting it there?

5 A For purposes of the bottom line costs, that is an
6 example of how one would achieve the 33; there would be two
7 others that would share. But your characterization that
8 every inch has two other utilities and must have two other
9 utilities is not totally accurate. There are other ways of
10 getting costs down without every inch of every trench being
11 shared by two other utilities. That's all I was trying to
12 say.

13 COMMISSIONER CLARK: What other ways?

14 A In the case where somebody else opens the trench,
15 a developer, then the cost goes down considerably versus
16 that. So that would be one example where you wouldn't
17 necessarily have to have two other utilities in order to
18 get --

19 COMMISSIONER GARCIA: I think in Florida, I don't
20 even think developers do that. I mean, in Florida I think,
21 if I'm not mistaken, the Bell companies do it directly.

22 Secondly, I know developers who have called me to
23 protest about joint trenching projects by BellSouth and
24 others because they hate them because they create an
25 underground wall for them that makes it difficult for them

1 to provide other services to the property like sewer and
2 water.

3 So those assumptions aren't pretty aggressive;
4 they're outrageous because if one assumed your concept,
5 then we would assume that hence forward everything was
6 joint trenching and that isn't true. I happen to know it's
7 not true in Florida.

8 A Once again, the criteria is least cost most
9 efficient. And we feel like that if the proper incentives
10 and opportunities were there to achieve least cost most
11 efficient, that there would be significant amounts of
12 sharing in the trenches.

13 And I can assure you I have seen developments
14 where this does take place. And there are some -- There
15 are some municipal requirements and other areas that
16 require utilities to coordinate digging up the street.

17 MR. CARVER: Should I proceed?

18 B) MR. CARVER (Continuing):

19 Q Just one or two clarifying questions on this
20 point. This assumption, this 33% sharing assumption, which
21 you've told us can't be done today, Hatfield removes from
22 network investment as a result of this assumption 655
23 million dollars, that's million dollars; correct?

24 A Based on the numbers you quoted previously, it
25 would be two-thirds of that amount.

1 MR. CARVER: Thank you. That's all I have.

2 CHAIRMAN JOHNSON: Mr. Fons.

3 CROSS-EXAMINATION

4 BY MR. FONTS:

5 Q Mr. Wells, my name is John Fons. I represent
6 Sprint-Florida.

7 A Good afternoon.

8 Q I have a few questions concerning the cost of
9 excavation that the Hatfield Model uses as default values.
10 Would you agree that the excavation costs are a large
11 driver of the costs of providing local service?

12 A Given that we model a majority of buried plant, I
13 would say yes.

14 Q Would you turn to page 4 of 5 of your Exhibit
15 JWW-3, which was attached to your direct testimony, which
16 is I believe titled the "Fassett Validation Data."

17 A Okay.

18 Q And I believe that on, actually on page 3 of 5,
19 is the beginning of what I would describe as being the
20 excavation values, beginning with rock/saw trenching ratio;
21 do you see that on page 3 of 5?

22 A Yes.

23 Q And the next one is manhole material and then we
24 have manhole excavation, et cetera?

25 A Okay.

1 Q Turn to 4 of 5 and I want to ask you some
2 questions more as a surrogate for asking questions about
3 each and every one of these other values that are included
4 on this exhibit.

5 I'd like you to turn your attention to the value
6 titled "Normal Trenching in Dirt with Backfill Rural Feet"
7 -- "Per Foot," I guess that is -- "/Feet, 36-Inch Depth."
8 Do you see that?

9 A That's the second column of numbers?

10 Q Right. And immediately under that there is a
11 bracketed number, \$2.81 to \$2.97; what does that mean?

12 A Bear with me a second. I want to verify
13 something.

14 I believe what that represents is the range
15 that's applicable to the several density zones that might
16 be considered rural. And so the 2.81 would be probably the
17 most or the least dense zone and the 2.97 would represent
18 the most dense zone.

19 Q And what are you reading from to obtain that
20 information?

21 A I'm not. I'm trying to recall what Mr. Donovan
22 told me. And that's the best of my recollection as to what
23 that bracket represents.

24 Q Just so we put this in context, you did not
25 prepare this exhibit; did you?

1 A That is correct. As I said earlier, Mr. Donovan
2 prepared this exhibit from Mr. Fassett's data.

3 Q And are you prepared to answer questions
4 concerning this document which you are sponsoring in this
5 proceeding?

6 A To the best of my ability, yes.

7 Q Let me ask you then: Would you agree with me
8 that under this column that we are looking at, there are 21
9 values?

10 A Without counting them, I'll agree with that.

11 Q And immediately adjacent to each one of those
12 values is an alphabetical letter?

13 A Yes.

14 Q And they're not in alphabetical order; are they?

15 A No. They're arranged in order of the cost and
16 then the letters of the alphabet are keyed to different
17 vendors and contractors.

18 Q And that is what the alphabetical letter means, a
19 particular vendor or contractor?

20 A Yes.

21 Q And do you have some kind of a list somewhere
22 that translates the name of that contractor or vendor from
23 an alphabetical letter?

24 A I don't. I suspect Mr. Fassett does because,
25 once again, it was very important that we redact the names

1 of these vendors. And so these letters were substituted to
2 keep track of the information.

3 Q What do you know about these vendors and
4 contractors?

5 A That they were contacted by Mr. Fassett either on
6 the phone personally or via mail; that they represented
7 various areas of the country; and that's, you know, the
8 ones that responded is the data we have that was used for
9 the purpose of validating the input values that the
10 engineering team had come up with.

11 Q Do you know where each one of these contractors
12 is located in the United States?

13 A I do not.

14 Q Does Mr. Fassett know?

15 A I'm sure he does.

16 Q And we'd have to ask Mr. Fassett?

17 A Mr. Fassett would say that that's proprietary.
18 You could ask him, but that's the answer.

19 Q Even where they are located in the country is
20 proprietary?

21 A I would ask -- Mr. Fassett would answer the
22 question.

23 Q Do you know whether any of these contractors are
24 located in the state of Florida?

25 A I do not know.

1 Q Can you tell me what criteria Mr. Fassett used to
2 select or to solicit bids from these contractors?

3 A No, I do not.

4 Q So you don't know whether the -- for each --
5 Well, let me ask you this. Were each one -- Was there one
6 criteria sent out to all contractors and were they asked to
7 bid upon a common job?

8 A Yeah. Let me -- The answer is yes. I think in
9 the documents that were furnished, Fassett documents,
10 there's kind of a form letter and it basically describes
11 what we're trying to do.

12 Q Where was that furnished?

13 A I was handed a copy of this yesterday, but it's
14 called "AT&T Supplemental Response to Staff's Second
15 Request for Production No. 3." This is the infamous
16 Fassett data.

17 Within this are letters that went out. And, if I
18 may correct my earlier statement, there was a description
19 of what to bid on. I mean, it wasn't grabbed out of the
20 air. And it basically said could you provide us costs for
21 large-scale projects to do certain things. And they came
22 back with costs.

23 It was not a bid or a quote in the sense that we
24 put out a job and got bids on. It was getting vendors to
25 provide us quotes for what they typically do work for on

1 large-scale projects for this type of activity, such as, in
2 this case, trenching 36-inches deep.

3 MR. FONS: Since I have not been furnished a copy
4 of that, I'm working a little bit in the dark. If I may
5 have a moment to see if -- It was filed confidentially
6 Monday morning?

7 MR. HATCH: Madam Chairman, the original
8 discovery response that prompted this production was a
9 production request from GTE. There was a me, too, request
10 from the Staff and also from BellSouth. It has been
11 provided to them, but it has been provided on a proprietary
12 basis.

13 MR. FONS: I mean, I don't have it. I have not
14 asked for it apparently. And so, therefore, I'm not
15 entitled to it, but perhaps one of the other counsel can
16 pick up and ask questions concerning this.

17 BY MR. FONS (Continuing):

18 Q But let's go on. And since you have the document
19 in front of you -- And I will trust you to tell me exactly
20 what's in there if I don't ask the question that will
21 violate some confidentiality. Let's see if we can proceed
22 at least half-heartedly here and quickly. I know that
23 we're not trying to delay this.

24 Let me just, to summarize, in this particular
25 column, the values that you have range from \$1.50 to \$6; is

1 that correct?

2 A Yes, you're correct.

3 Q And were the vendors on this particular column,
4 were they the same vendors that were used on any of the
5 other columns?

6 A If there is a match in the letter, then you could
7 assume its the same vendor.

8 Q And the only way we would know if they were the
9 same vendors on any of these other columns would be to look
10 at the letters; is that correct?

11 A The letters substitute for the names. So the
12 answer is yes.

13 Q And do you know whether or not all of these
14 vendors, these 20 vendors, were asked to bid on the same
15 job?

16 A As I've said earlier, it was not a bid on the
17 job. It was a request in the form of a letter that says
18 we're an engineering team; we're putting together a model;
19 we need some cost data for large-scale projects for
20 activities that you do; could you furnish us your costs for
21 doing such activities.

22 (Whereupon, the transcript continued in Volume 23
23 without omission.)
24
25