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: service, pursuant to : Section 364.025, : Florida Statutes :

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VOLUME 23

Pages 2635 through 2683

PROCEEDINGS:

BEFORE:

DATE:

TIN":

LOCATION:

HEARING

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

Thursday, October 15, 1998

Concluded at 6:45 p.m.

Betty Easley Conference Center Box 148 4075 Esplanade Way Tallahassee, Florida

REPORTED BY:

JANE FAUROT, RPR

(APPEARANCES: As heretofore noted.)

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1	PROCEEDINGS
2	(Transcript follows in sequences from Volume 22.)
3	JAMES WELLS
4	continues his testimony under oath from Volume 22:
5	CONTINUED CROSS EXAMINATION
6	BY MR. FONS:
7	Q Were these contractors contractors that typically
8	do work for telephone companies?
9	A As far as I know, without knowing the names of
10	the contractors. But given the items that they responded
11	to, one could readily conclude that they do work for phone
12	companies.
13	Q And could you define for me what you mean by
14	large scale jobs?
15	A Sure. The criteria of the model is the scorched
16	node concept, therefore you would be rebuilding the entire
17	network. You would get economies of scale. So what you
18	dor't want is somebody is to give you a cost to set one
19	pole, because it would be higher. You don't want the cost
20	to bury 50 feet of cable; you want the cost
21	Q I didn't ask you what you would not ask for, I
22	asked you what do you how do you define a large scale
23	job?
24	A I'm just trying to describe it. It's where the
25	contractor has enough quantity of work to where they get

economies of scales that they give you lower costs. For 1 instance, the cost from a contractor to bury 5,000 feet of 2 cable is less than the contractor is going to quote you to 3 bury 50 feet of cable. And under a scorched node concept, 4 you are going to be getting the economies of scale. That's 5 why it is very important that for purposes of developing 6 contractor costs that the ILECs not use their master 7 contracts for doing onesies and twosies and small jobs. You 8 want to get to large scale projects, because that's the cost 9 efficiencies that would be obtained from a scorched node 10 concept. And that's what we asked for in this request. 11 Was the contractor that responded with the \$6 per 0 12 foot bid, was that for a large scale contract? 13 He should have been given the same request as 14 A anyone else. 15 And so was the 4.93, the 4.50, et cetera, isn't 16 0 . correct? 17 th They should have been all given the same request. 18 A So they were all bidding on a large scale 19 0 contract, right? 20 Let me be clear. It was not a project, it was 21 A not a quote, it was not a real job, it was a request for 22 their cost for doing things. And it was done for the 23 purpose of validation of input values that had already been 24 developed. 25

And the \$6 quote, or the \$6 price that was 1 0 reported by a contractor, that was not for a small job, that 2 was for a large scale job? 3 Okay. No disagreement. 4 A And the number that you were validating, that is 5 0 set forth on Page 21 of 25 of your direct testimony, isn't б 7 it? Is there a particular line number? 8 A Well, that's what I'm trying to find out. Where 0 9 on this list on Page 21 of 25 is normal touching and dirt 10 11 with backfill, rural? Look at Line 22. 12 A All right. And the number that -- the default 13 0 number that is used in the Hatfield is \$2.89? 14 Yes. And the range of Fassett data was the \$1.50 15 A to \$6, and the 45 percent says that the default value of 16 2.89 was 45 percent lower than the lowball number. The 17 whole purpose of this document is to show that we didn't. 18 lowball a number, and that 2.89 is a reasonably attainable 19 number. 20 But wouldn't you also agree that 15 of the 21 21 0 responses are higher than the default number? 22 Oh, I will agree with your math, but the point is А 23 this is a least cost model. If you are going to do 24 something on least cost, you are going to get a bunch of 25

bids and you are going to take what is a reasonable number that is the least cost. You are not going to take the average. You're certainly not going to take the highest one. And all we did was say that -- in this case, 2.89 is a reasonable number, because Dean was able to get five or six quotes here that were less than 2.89.

Q But there were 15 quotes that were above 2.89?
A So what?

- Q Well --

9

10 A It doesn't mean the 2.89 is not an invalid 11 number; in fact, it validates the number. It says it's a --12 this is a least cost model. You would take the low bid. 13 All we proved was we didn't always take the lowball bid. We 14 took a reasonable number that could be obtained.

15 Q Is the \$1.50 a lowball bid?

16 A In this case, when you had 21 quotes, and a 17 \$1.50, which is substantially lower than the second lowest, 18 that would have been a lowball number, and we didn't take 19 it. We took 2.89.

20 Q There is no 2.89 on this list, is there?

A Because the input value was developed before this data was gathered. All this does is validate that 2.89 is a good number.

24 Q That's your opinion.

25 A Yes, it is.

1		MR. FONS: I have no further questions.
2		CROSS EXAMINATION
3	BY MR. MI	TCHELL:
4	Q	Good afternoon, Mr. Wells. Tom Mitchell
5	represent	ing MCI.
6	А	I'm sorry, I didn't catch your name.
7	٥	Tom Mitchell.
8	A	Tom?
9	Q	Yes.
10	A	Thank you.
11	Q	I want to just clarify a few points that have
12	already b	een made by my colleagues. I promise I won't plow
13	ground ov	er again.
14		It is my understanding that when you joined the
15	or whe	n this outside plant engineering team was formed,
16	that ther	e was already an existing set of inputs into the
17	Hatfield	model, is that right?
18	A	The answer is yes, but let me add some clarity to
19	that, and	this is before my time. This model evolved out of
20	something	else, okay. So something else existed that had
21	input val	ues. It was pretty quickly realized in the
22	regulator	y environment under criticism that there was a lot
23	of room f	or improvement, and so the need to bring in outside
24	plant exp	ertise was pretty quickly realized, and, therefore,
25	the HAI -	- Hatfield Associates went out and brought in Mr.

Donovan as an outside plant expert to work on the model on the input values for outside plant. Mr. Donovan then brought in some additional colleagues, and out of that grew the engineering team of which I am a member. If that puts it in perspective.

6 Q And Mr. Donovan was a member of the team as far 7 as you understand it, that came up with the original input 8 values, right?

9 A No, to the best of my knowledge whatever preceded 10 Hatfield, and it's in the model description, it came out of 11 something else. It came out of something else, okay. That 12 there existed a model and there existed input values before 13 Donovan came on the scene. But they were not developed by 14 outside plant experienced people.

15 Q And my understanding is that you were an employee 16 of AT&T when you joined the team, right?

17 A Yes.

18 Q And has there always been an AT&T employee on the 19 team?

20 A Not before I joined it.

21 Q But while you were on the team you were an AT&T 22 employee, right?

23 A Up until I took retirement at the end of June.

24 Q And when was that?

25 A The end of June.

1	Q Excuse me?
2	A I'm sorry. I took retirement at the end of June.
3	Q End of June this year?
4	A Yes. The end of June this year, yes. June the
5	30th, 1998.
6	Q Now, I want to cover something that was discussed
7	with Mr. Wood yesterday. Mr. Wood let me ask it this
8	way. Would you agree that it would be inappropriate for you
9	as an outside plant engineer to arrive at a conclusion about
10	an input value and then try to find empirical support for
11	that value after you have already reached your conclusion?
12	A No.
13	Q You think that is appropriate?
14	A Well, I think it's appropriate because the
15	engineering team would not have had access to all the data
16	that was needed, so the engineering team would have to come
17	up with the values based on its experience and so forth,
18	which we id. The validation was done to show that the
19	numbers were reasonable.
20	Now, would it have been more appropriate if we
21	had access to all the ILEC data and could use it in a public
22	forum to develop a model, which I have signed agreements
23	that we can't do, that would have been more appropriate.
24	That was not reasonably attainable. So what we did was
25	appropriate, and it's the best that could have been done by

1 the group that we had.

2 Q But you will agree with me, Mr. Wells, that you 3 could have done the process the other way around, couldn't 4 you?

A No.

5

Q That is you could have gathered your validation
7 data first, and then based on that data reached a
8 conclusion about the input values?

Not in the time frames that were required to roll 9 A out this model, no. There wasn't enough resources nor time 10 to do what you suggested, nor could we as a group of --11 well, at that time a group of contractors working for AT&T 12 and MCI, go to a supplier of copper cable or fiber cable and 13 say, uh, we are working on a model that we are going to use 14 in public forums to testify against BellSouth and GTE and so 15 forth and so on, would you help us by giving us the price 16 data that you would give them so we can have 17 apples-to-apples comparisons? That ain't going to happen. 18

So I agree conceptually that it would have been more appropriate to do what you are suggesting. What I'm telling you is it was not possible to do because there were no resources to do it, there was no time to do it, and you just can't walk into a vendor and get a BellSouth price. As Mr. Dickerson testified, even Sprint can't get a BellSouth price. Q So if I understand you right, if you did have sufficient time to gather that kind of data you would have gone about the process differently, is that right?

A Time, resources, and it's not feasible. No independent contractor is going to go into Lucent Technologies and say, by the way, I would like the BellSouth price, because that's what I need to go before the Florida Public Service Commission and input to my model. It's not going to happen.

Now, we can get in this forum and based on the 10 fact that we have nondisclosure, I can see the BellSouth 11 price. I can compare it to what the engineering team came 12 up with, and say, you know, our numbers are reasonable. But 13 to have done that prior to that, it wasn't feasible. Even 14 if we had had the time and resources, you couldn't go into 15 Lucent and get a BellSouth price. It's not going to happen. 16 Would you agree with me, Mr. Wells, that a 17 0 reasonable starting point for all of this input analysis 18 would be the current costs that the ILECs are paying for 19 current technology? 20

21

A Yes.

Q Now, there has been some discussion about this AT&T handbook. You mentioned that in developing the input values, you and other members of the team referenced or looked at technical references, do you remember saying that? A Yes, that is correct.

To what are you referring when you say that? 2 0 I don't know in this particular docket, but we 3 A have provided under discovery a list of about 30 or 40 4 documents that we have looked at. There are a number of 5 them referenced in the inputs portfolio. Examples that have 6 come up today would be the outside plant engineering 7 handbook, the BOC notes on the network, in discussion the 8 other day about labor, RS Means and so forth. So those are 9 the types of documents I'm talking about. 10 Would you agree, then, since you have referred to 11 0 the AT&T handbook in this preliminary work that you did, 12 that it is an authoritative source with respect to the 13 construction of outside plant? 14 Only to the extent that it has not been 15 A superseded by technology since it was published. 16 And it's my understanding that you and the team 17 0 are maling these decisions about what parts of the handbook 18 have been superseded, is that fair to say? 19 Well, that's fair to say, but I also point out 20 A that BCPM modelers know this stuff, too. 21 I didn't ask you about BCPM. 22 0 Well, I'm trying to say is it wasn't just us in a A 23 24 vacuum. My question had nothing to do with BCPM, Mr. 25 0

Wells. It had to do with who determines that portions of 1 AT&T handbook had been superseded. And it's my 2 understanding from your testimony that you and members of 3 the team made those decisions, is that right or wrong? 4 That is right. And it wasn't just us that did 5 A Anybody that was doing a least cost most efficient б it. based on currently available technology would look at any 7 reference as a starting point, but would then apply the 8 guidelines for these models and the currently available 9 technology. For instance, if you are trying to get least 10 cost, you wouldn't build the plant exactly like the handbook 11 says for an ILEC to do it. 12 I will use growth as an example, okay. The old 13 standards would say put in two pair per living unit. It was 14 discussed earlier today. That's in the handbook. I'm 15 telling you that in terms of a least cost most efficient 16 model on current technology you wouldn't do it that way, 17 because you don't need all of that spare capacity out there. 18 In terms of trying to get at the efficient cost -- the cost 19 of an efficient carrier, that is the wrong standard to use. 20

21 But it's in the book. I agree it's in the book.

Q Is it your opinion that in this field of outside plant construction that the carrier serving area standard referenced in the AT&T handbook has been superseded? A Yes, I've said that several times, and both BCPM

and HAI superseded, but do not violate the standards for
 local limitations or dB loss.

Q Is it your understanding that the ILECs have concluded that that carrier serving area standard in the handbook has been superseded?

Yes, based on the fact that three ILECs are 6 A sponsoring BCPM in this docket. If they disagree, why would 7 they be sponsoring BCPM? Because BCPM clearly exceeds the 8 carrier serving area criteria for 9,000 feet on 26-gauge 9 cable and for 12,000 feet limitations. I mean, they put 10 range extensions out there, they've got 11,100 feet of 11 26-gauge cable. Both of those exceed the standards. I'm 12 not saying it's wrong, because we do, too. I'm just saying 13 we do it by design to be more efficient, they do it as an 14 exception because of the way they put grids together. 15

16 Q Now, in developing and in validating -- well, 17 let's focus on developing the inputs. Was there any 18 sperific effort made by the engineering team to make the 19 inputs that they were using their judgment to determine, any 20 effort to make them specific to Florida?

A Not the outside plant numbers. As I have said, they are national values and they work within the model to produce Florida-specific outputs. And to the extent that the Commission determines that they should be adjusted, as I said, the first step is to get the right model and then we 1 will work out the right inputs.

Q Now, we have touched on this validation effort, would you please tell me why there was a validation effort at all?

5 A Sure. So that we can -- in these types of forums 6 we get a lot of criticism, and if you have nothing, then 7 it's our opinion, the opinion of the engineering team versus 8 all the king's horses and all the king's men over here in 9 terms of, in this case, three ILECs. There are ten people 10 that filed rebuttal testimony, okay.

Now, subsequent to that, where we now have docket 11 after docket, ILEC information that we can compare to and 12 validate against, there is no longer the need to go out and 13 gather information. We don't do it anymore in terms of 14 validation because we can validate against the ILEC data. 15 But early on we didn't have that data. And so the challenge 16 was made, well, it's just your opinion versus the LEC, and, 17 you know, . . just didn't -- it was difficult in any state to 18 come in and say, the LECs are all wrong, the folks from New 19 York have got this all figured out and so forth. So we had 20 to get some validation data to show that our numbers are 21 reasonable. 22

Q Would it be fair to say that you didn't feel comfortable going to proceedings like this and sponsoring 1400 or so inputs based solely on the engineering judgment

1 of the outside plant engineering team?

A No, that's not correct. I felt comfortable, but I have to convince other folks. And my opinion only carries so much weight up against, as I characterize, all the king's horses and all the king's men over there. It is a formidable task. And so the more that you can show that what we are doing is indeed reasonable, the better case you can present.

9 Q So you would feel comfortable proposing these
 10 input values without having done any validation effort?

A The answer is yes, but I'm more comfortable the more data we have. And particularly when I can compare nowadays with the actual values that the ILECs say they use, and indeed conclude, as I have in my analysis and so forth, that our numbers are indeed reasonable. In fact, in some cases are more reasonable.

Now, I read in the Hatfield Inputs Portfolio, a 17 0 section in the beginning talking about the difficulty that 18 the engineering team had in getting information from third 19 party vendors. Do you recall that section of the portfolio? 20 Yes, it's up front. It's not only the -- yes, 21 A the difficulty and the need to protect the sources. 22 Q Now, when you came onto the team, it's my 23 understanding that prior to that point you had had personal 24 experience as an AT&T employee costing out the cost of 25

building a local network for AT&T, am I right about that? 1 Yes, you are right, but let me be specific. The 2 networks we were looking at would have been point-to-point 3 or ring fiber connecting businesses, not wire center to 4 subscriber local loop, okay. So, in my assignment with AT&T 5 at the time we never did sit down and cost out a local loop, 6 a full-blown local loop. 7 Why were you only looking at that kind of outside Q 8 plant construction? 9 A At that time that was what we would have deployed 10 for market entry. 11 That's how AT&T was planning to get into the 12 0 local market? 13 At that point in time. 14 A It wasn't build local service everywhere, it was 15 0 just these fiber rings as you call them? 16 A At that point in time -- I'm no longer an 17 employee, and I was never in a policymaking decision, so 18 take this for what it's worth. But at that point in time 19 the idea was that through unbundled network elements we 20 would be able to serve consumers, if you will. But that for 21 large businesses around the AT&T wire center, we could 22 bypass the LECs with fiber. 23 Q There would be things common to building that 24 kind of network that are common to building the network we 25

1 are talking about here today, aren't there?

A Possibly a few.

3 Q And in the course of your work for AT&T, did you 4 solicit and try to estimate costs for things like digging 5 trenches?

A Yes.

2

6

7 Q And did you and the people you work with maintain 8 files and records about information you gathered on this, 9 about this?

10 A At the time that the organization existed we did. 11 Q And so when you joined the outside engineering 12 team for this Hatfield model, did you tell those that you 13 had worked with, that you were working with now as a member 14 of this team that you had this prior experience?

15 A Yes.

16 Q And did you tell them there were documents 17 somewhere at AT&T that reflected the cost estimates that you 18 were generating or had generated in the course of that work?

19 A I think that would have been common knowledge. I 20 don't remember specifically telling them, but they knew what 21 I had done and they knew that we would have had certain 22 costing information for the types of networks that we were 23 putting together for planning purposes.

Q Did anyone in any of these meetings that Mr.
Carver described say, Mr. Wells, why don't we get that kind

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1 of documentary information and let's use it in the course of 2 our work here?

A No, because what they said was, Wells, would you look at what we've got, and based on your experience, would you tell us if this is reasonable or should be changed and so forth. There never was a side-by-side comparison of documents as you have depicted.

8 Q All right. But based on what you have said, you 9 had this difficulty getting cost information, and yet AT&T 10 had this information already in their files, so my question 11 to you is why didn't you, if no one asked you to do it, why 12 didn't you go down and ask AT&T for thise files about this 13 cost information?

Well, first of all, the characterization that we 14 A had extensive files and multiple vendor bids and this, that 15 and the other is not correct. We were looking at a limited 16 number of projects in a couple of cities, and we had some 17 high level costing information for budgetary planning and 18 proposal purposes. What I had was probably not near as good 19 as what John Donovan and Joe Riolo (phonetic) and Joe 20 Fassett had, because they had recently retired from NYNEX, 21 and they had much better cost data than I did. So all I was 22 was one additional sanity check, if you will. But the idea 23 that I had this wealth of documentary information and could 24 do a side-by-side comparison is not an accurate depiction at 25

1 all of what happened.

Do those documents exist today, Mr. Wells? 2 0 No. That organization was shut down and all the A 3 documents were destroyed. 4 When were they destroyed? 5 0 Well, it would have been around June of '97. I A б think there is an affidavit on that. It's somewhere around 7 there. 8 All right. This validation effort that Mr. 9 0 Fassett, as I understand from your testimony, took the lead 10 on, you described these letters that he sent out. Prior to 11 turning Mr. Fassett loose, was there any discussion among 12 the team members about a procedure or process he should 13 follow with respect to, you know, whatever vendors he should 14 contact, where they are located, things like that? 15 I would surmise yes. I was not a member of the 16 А team at the time, but looking at the Fassett documents and 17 seeing the letters he wrote and so forth, there was, I would 18 say, a consensus of Dean, go contact, we need curtain 19 information from contractors, and whatever you can get. And 20 get it on a large scale project approach. But that would be 21 the extent of the formality of it. Dean then went and -- we 22 turned Dean, they turned Dean loose, to use your 23 characterization. 24 Now, you were describing the information and 25 0

quotes reflected in these charts in JWW-3 a few minutes ago.
Did I hear you say that it is your understanding that every
quote in these charts reflects information on some kind of a
letter or survey that these vendors sent back?

That's my understanding without having gone 5 A through and spent the days that it would take to correlate 6 every one of these. But if you go to the Fassett documents, 7 and this being an example of one, and this one is Concractor 8 P, it's a random. And then within here you have a number of 9 quotes, and that if you then go to this chart for these 10 types of costs you will see an entry with a P beside it. 11 That's what this reflects, okay. These are the source 12 documents. This is a spreadsheet that summarizes these, and 13 then back on I think it was Page 21, is a selection of 30 of 14 those to prove another point. So that's how all the data 15 16 ties together.

17 Q And the letter that you held up, is that what 18 contains the communication from Mr. Fassett to the vendor? 19 J. Actually this is the response from the vendor. 20 This particular one doesn't seem to have the letter that 21 went out. I have seen a letter. I have seen a copy of it, 22 but I would have to search through this pile to see if there 23 is one in there.

Q Is it important to the information that you got back that each of these contractors was told it was a large

1 scale job, as you call it?

2	A Sure. Because if you are going to have a least
3	cost model based on a scorched node approach where you are
4	replacing the entire network, you don't want a price for
5	putting in one NID, you want a price for putting in hundreds
6	of NIDs. You want a price that reflects the economy of
7	scale.
8	Q All right. So if we were to go through all of
9	this backup documentation and not find letters to some of
10	these vendors on this chart, we don't know that they were
11	told that it was a large scale job, do we?
12	A Okay.
13	Q Would you agree with me then that the values
14	represented on these charts from these vendors, that we
15	don't know what they were told, could be disregarded for
16	this analysis?
17	A No, absolutely not. Because if let's put this
18	in perspective.
19	Q Well
20	A No, no, please let me answer the question. If
21	they didn't bid on a large scale, then they would have bid
22	higher, right? They would have bid higher.
23	Q That's the assumption you make?
24	A Trust me. On economies of scale, you put in
25	1,000 poles, the cost per pole is less than if you put in

five poles, okay? Accept that, if you would. Now, it they 1 had bid on five poles, they gave us a higher number. If 2 that number then validated our pole cost, then that's even 3 further evidence that our numbers are reasonable. So the 4 answer to your question was no, for those reasons, even 5 though I can't go and show you the cover letter. 6 Now, when Mr. Fassett first started this 7 0 validation effort, isn't it true that it was the purpose of 8 the validation effort to collect guotes that would then be 9 averaged to come up with validating input data? 10 Absolutely incorrect. There are no averages in A 11 here. The numbers were derived by the engineering team, 12 this is simply to show that the numbers are reasonable. 13 Mr. Wells, that's not what I asked. 0 14 I'm sorry. You used the term average, didn't 15 A 16 you? I asked in the beginning --0 17 I'm sorry. 18 A -- wasn't the purpose of the validation effort to 19 obtain average values? 20 And my answer is no. The purpose of the 21 A validation was to obtain a number of quotes -- or not 22 quotes, but whatever you call these, but to obtain a number 23 of them to show a range and to show that the values that has 24 been derived by the engineering tean fell within that range, 25

and for the most part would fall towards the least cost end 1 of that range. There was no averaging at all done here. In 2 3 fact, if you are using average values you are not using a least cost model. 4 Okay. Mr. Wells, I don't know whether you have 5 0 Doctor Tardiff's testimony in front of you, but I know you 6 7 have been shown this document before, so I will presume you have it. 8 9 A Bear with me, I may. Great. 10 0 A I have a copy. 11 12 0 If you look at Exhibit 9. A I just seem to have Exhibit 2 for some reason. 13 14 Well, before I get into that exhibit, let me ask 0 Mr. Wells, in this proceeding it's not the first 15 you this. time you have seen all this Fassett charts and Fassett data, 16 17 is it? 18 That's correct. А You have been looking at this stuff for the past 19 0 20 several months, haven't you? I believe the first extensive review was 21 A associated with the North Carolina docket. The first time I 22 saw the information was in a deposition the end of January 23 of this year. 24 25 Right, January. And so since January you have

had these Fassett documents, you have had the ability to get behind them, so to speak, but you already testified here, I think, that you just haven't done that yet, have you?

I think what I testified was I haven't done it. 4 A It's not a question of just having done it, it's a question 5 of why would I do it. And to give you an example, I drove a 6 couple of thousand miles in Georgia to do a validation 7 study. Would you expect Dean Fassett to go out and drive 8 the same amount of mileage and verify that what I did was 9 okay? It's not reasonable for me to spend my time double 10 checking in great detail what Dean did. 11

Well, I mentioned Exhibit 9 to Doctor Tardiff's 12 Q testimony a few minutes ago. You were aware, I think it's a 13 printout of an E-mail in January of 1997 from Dean Fassett 14 to Mr. Donovan, and let me read the first sentence of it. 15 You can tell me, I think, based on that whether you are 16 familiar with it. It says, "John, when I initially 17 contacted the contractors for cost estimates, I explained 18 that the purpose was to obtain an average cost of 19 constructing local loop facilities to provide dial tone." 20 Based on my reading that, do you recall this document? 21 Could I see that, please? 22 A

Q Sure.

23

A Could you direct me to a specific paragraph? Mr.
 Mitchell, could you direct me to a specific paragraph? This

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1 is a copy of a fax or something.

That is my only copy, but I just read the --2 0 Oh, it's the first sentence, okay. A 3 Do you see there that Mr. Fassett talks about the 0 4 purpose of the collection of data is to obtain an average 5 cost of building a local loop? Is it fair to assume based 6 on that, that that is what he was doing in this validation 7 effort, at least in January 1997? 8 The letter uses the word average, and it may be 9 A that in going to the contractors he used the word average so 10 as to get their average cost. But in terms of how the data 11 was used for the purpose of validating that our numbers are 12 reasonable, there definitely is not an average. You will 13 see no average. And for the reasons I have explained, it is 14 a least cost model. 15 You look at the range and you look at 16 particularly how many bids are -- how many quotes are lower 17 than what we used. We went back to the previous example of 18 2.89 for the plant. We had five quotes lower than that. So 19 that's how the data was used. The fact that back in January 20 of '97 that Dean used the word average in an E-mail to John 21 is for what it's worth. 22

Q That's my point. Now, you are aware that in the early worksheets of the Hatfield model, and specifically those that pertain to Version 3.1, there are these bar charts, I think, are in the current HIPs, with calculations
 of average values based on the information gathered by Mr.
 Fassett, are you not?

A Could you show me an example. Or just tell me,
5 I've got the HIP, would you just give me an example?
6 Q I seem to have not brought it. Is it your
7 recollection that averages weren't computed in the bar
8 charts attached to the Hatfield model Version 3.1?

A You say were?

10 Q Were not?

9

They should not. To the best of my recollection 11 A they were not, and certainly in 5.0 they are not, because 12 the average is not relevant. What you are looking at is the 13 range, and in particular if the issue is is it least cost, 14 you are looking at the bottom end of the scale. And the 15 point is is our value within the range, and where does it 16 compare to the bottom of the range. That's the purpose of 17 this. 18

19 Q I won't do the math with you, Mr. Fassett (sic), 20 but you wouldn't dispute that if you calculated averages 21 from all of these values in your charts, most of them are 22 higher than the Hatfield model default values?

A I would certainly hope so, because in a least cost model if we were using the average we would not be doing what the guidelines of the model said. So, I'm glad

to hear that they are less than the average, because they 1 should be. 2

I would like to talk to you about poles for a few 3 0 minutes, Mr. Fassett -- excuse me, Mr. Wells. You reference 4 for a couple of pages FCC data relating to poles as 5 validating the inputs in the Hatfield model, right? 6 They serve a couple of purposes. In the direct 7 testimony, though, I'm focusing on the HAI input values, and 8 so the purpose there is to demonstrate that the number that 9 we used, the 417 is indeed a reasonable number based on the

FCC data because it varies from much less than that to 11 considerably more than that. 12

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I also used a reference to it in the rebuttal 13 testimony to illustrate also a second point, and that is 14 when you go ask the ILEC what the cost is, don't expect that 15 there is an absolute number that is going to come back, and 16 they have this knowledge that says it is this. Because it 17 varies all over. And I think the evidence shows that, and 18 some of the testimony here today shows that there is no 19 single ILEC number because they don't have it, or they can't 20 figure it out. And this just demonstrates that the ILECs 21 don't have superior knowledge in all of these areas. 22

Now, you are aware before you prepared your 23 testimony in this case that the information that GTE 24 provided in response to the FCC request excluded a number of 25

items from their responses with respect to material costs 1 and labor costs installing a pole, were you not? 2 From reading Mr. Tucek's rebuttal, I certainly 3 А was made aware of that. 4 Well, you had seen his testimony to that effect 5 0 in other states, had you not? 6 Yes, I am aware of that, but as I said there are 7 A multiple purposes here, and there is also the issue of 8 scale. And as I think came out earlier today, they reported 9 to the FCC somewhere in the neighborhood of 400-odd, and 10 then they are saying that the right input value back to the 11 FCC was \$400-something, and -- wait a second. Let me be 12 13 precise, if I may. Okay. I'm referencing Exhibit JWW-2 to my 14 direct. GTE filed with the FCC, \$134 material and \$306.04 15 labor, for a total of \$440.04. Now, in this particular 16 docket, based on my analysis, they filed a value of 801.11, 17 okay, which is considerably more. Now, if the only 18 difference is miscellaneous material for the pole, and 19 freight, or even engineering, or whatever, it will not 20 explain the \$300 difference at all. It won't come close to 21 it. 22 And the other point is that, you know, for this 23 docket BellSouth, for comparison purposes, filed with the 24

25 FCC \$410.46; Sprint filed 270. Now, those are all

apples-to-apples comparisons. They all got the same request 1 and they all filed information on the same request. So 2 disregarding the HAI input, that comparison alone would lead 3 one to some conclusions that if they told the FCC that their 4 cost in Florida was this, and then BellSouth filed slightly 5 less, 406.77, Sprint filed considerably more, but still only 6 596.14, GTE is still up around 800, or David says 758 or 7 something, whatever that number is, we would have to 8 reconcile that, but the point is they are considerably above 0 what everybody else says. 10

And the point is that, first of all, our 417 appears to be a reasonable number based on the data that is available. And, secondly, GTE's number appears to be quite high. And there is no explanation, no attempt to explain it other than that's what the GTE engineer says.

Q You mentioned this 417 figure that the Hatfield model uses. Is it your testimony here today on behalf of the outside engineering team that the 417 was the result of engin gring judgment only?

20 A Yes.

21 Q And the inputs portfolio says the 417 is made up 22 of pole cost, material cost of 201 and labor cost of 216?

23 A Correct.

24 Q Now, if Mr. Donovan, the leader of the outside 25 plant engineering team, testified under oath in Washington

that the 417 value was derived by averaging vendor quotes 1 that the team received, would he be in error? 2 That is inconsistent with my understanding. A 3 Okay. So he has a different understanding than 4 0 you do as to how the 417 was arrived? 5 Yes. And I would also say that Mr. Donovan would 6 A have better firsthand knowledge than I would on that. 7 So he might be right about it coming from an 0 8 average and you might be wrong? 9 If there is an inconsistency, then Mr. Donovan 10 A you should -- he would be more right. I'm telling you what 11 I understand. Now, as has been established earlier, these 12 were determined prior to my joining the team, so I was not 13 present when it was done. So I have not -- I have not told 14 you anything differently than what I knew, but my 15 understanding was that that number was developed on their 16 experience and knowledge and --17 Okay. Whether he is right or --18 It may have been an average of their experience 19 ٩. and knowledge, as opposed -- did it say quotes? Is that 20 what his testimony says, quotes? 21 Well, let me move on, Mr. Wells. 22 0 Well, I want to know; does it say quotes? 23 A Well, it says an average. 24 Q I'll read the transcript. 25 А

1	Q It says an average, yes, Mr. Wells.
2	A I will read the transcript.
3	Q Let's move on to the 417. Do you deny that the
4	417 was arrived at by pulling a \$201 quote from one vendor
5	and a \$216 labor quote from another vendor and adding them
6	together to get 417?
7	A As I have testified
8	Q Do you deny that or is that
9	A You asked me do I know that that is true?
10	Q I asked you whether you deny that, that that is
11	how the 417 was arrived at?
12	A Since I was not there when it was done, and since
13	my understanding of how it was done was different, I don't
14	know how I could deny it. And now you raise a question of
15	whether I can confirm it, so I guess the truthful answer is
16	I don't know.
17	Q Would it have been proper to get the to arrive
18	at the value that way?
19	A y what?
20	Q By pulling a material quote of 201 from one
21	vendor response, and a \$216 labor quote from another vendor
22	and adding them together?
23	A My answer would be, yes, because when I was a
24	member when I was part of BellSouth, or South Central
25	Bell at the time, and when I was a representative to

1	BellSouth, the process was that and I know of no reason
2	why it would change BellSouth bids poles as a material
3	item on large scale contracts. They don't go to a vendor
4	and say give me a combined price for a pole and to set it.
5	Contractors who set poles generally don't procure
6	poles to South Central or BellSouth's specifications in
7	large quantities. So the efficient thing for any ILEC to do
8	is to set its standards for its poles and go out and
9	negotiate for all the poles that it is going to use in a
10	geographic area, have those poles shipped to a pole yard,
11	and then have a contractor who does the labor go and get the
12	pole and set it. So, my answer would be that in a most
13	efficient manner you would bid poles separately than you
14	would bid the labor to set the pole. And I would be
15	surprised if the ILEC is not doing that.
16	Q So, that would be a reasonable way to go about
17	costing out outside plant items?
18	A It would be reasonable because that should be the
19	least cost practice is to bid
20	Q I'm sorry.
21	A That would be now I've lost the question.
22	Q Now, if it's okay to pull the \$201 material
23	excuse me, \$216 labor quote from a vendor strike that.
24	Let's talk for a few minutes about trenching costs, Mr.
25	Wells. It is my understanding that the Hatfield model has

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these surface texture multipliers in the model, is that right?

raduer

A Yes.

Q And the purpose of those is what?

The U.S. Geological Survey provides surface 5 A texture characterizations by census block group. There are 6 certain surface textures that could cause higher cost for 7 trenching, either for buried cable or conduit. And so to 8 the extent that that information is available, we then have 9 a multiplier that would increase the cost if the surface 10 texture was a higher cost. It's trying to be more 11 realistic. And also, as I said earlier, it's a way that we 12 take a national default value and get Florida-specific 13 outputs, because we look at the surface texture by census 14 block group in Florida, and to the extent that it is a 15 higher cost surface, the model takes care of it. 16

17 Q Okay. You are aware that at some point during 18 the early work of the outside plant engineering team, Mr. 19 Donovan, the leader of the team, asked Mr. Fassett to make 20 some values up for these surface texture multipliers, are 21 you not?

A I have -- yes, I have seen a copy of that E-mail. The understanding, and I have talked to them, is that it was in the process of developing these as an addition to a release of the model, probably 3, based on the time frame. And so you develop a methodology and the code to do that, and now you have this table of values, and so for purposes of, if you will, testing the model, we needed inputs. And so John is telling Dean we need some inputs, give us some inputs to start the process here.

The words he used was make some up? 6 0 Okay. I don't disagree with that. All I'm 7 A trying to put it is in the context that you've got to have 8 something to start with, and as I also described the 9 consensus process is that those, quote, make up numbers, 10 unquote, would later on have to reach consensus of the team 11 before they became the values that we adopted. So it's just 12 part of the -- you know, any model development, you start 13 out with test data. So, yes, you make it up. When you 14 develop a model you make up some test data. 15

16 Q And the memo talks about making them up and 17 changing them later, if need be. Do you recall that?

I think that's a -- when you develop a model, you 18 start out with something, you know, an algorithm, formulas, 19 you've yot to have some data to run into it. When you start 20 out you make that up. Later on you then come back, given 21 the time and so forth, and getting the team together, and --22 what was the quote, make changes? That's the process. 23 Okay. For the record, this memo is Exhibit 10 to 0 24 Doctor Tardiff's Exhibit 2, and it has a chart on there 25

attached. Mr. Wells, if you looked at this chart that is 1 attached to the E-mail that we have been talking about, it 2 reflects the made up values by Mr. Fassett for the 3 multipliers. If you compare that to the values that are in 4 the Hatfield model, do you know whether any of them have 5 changed? 6 No, I have not reviewed the 300-odd pages of Mr. 7 A Tardiff's filing, so I don't know. 8 No, I'm talking about if you compare this memo 9 0 that has these made up values from Mr. Fassett to the values 10 in the Hatfield model, do you know whether any of them have 11 been changed since he made them up? 12 Do I know? A 13 Yes. 14 0 No, I don't know. A 15 You have never checked that? 16 0 Checked it against what? 17 A What is in the Hatfield model? 18 Q I mean -- well, first of all, would I have had A 19 the original, and I think not. I was not part of the team 20 when the original numbers were developed, so --21 I'm talking about --0 22 So, when I came on we were getting ready to roll А 23 out 3. What I would have seen would have been part of the 24 process. I have a vague recollection of the team sitting 25

around and going through the values and making minor
 adjustments, but I can't cite a change. It seems if you
 have got the original list and we now have the current list,
 we could establish that fact. But I can't sit here and
 credibly say yes, and then point out an example.

Q I want to talk about structure sharing for a few minutes and a related concept is this scorched node that we have already talked about a little bit. But it's my understanding that in a scorched node environment you don't assume that any existing houses are scorched, do you?

11 A You do not. The scorched node concept is that 12 all of the wire center locations remain the same and all the 13 customer locations remain the same.

14 Q And you don't assume that any existing utility 15 plant is scorched, is that right?

16 A Only the telecommunications utilities. You do 17 not assume that the power company and the cable TV company 18 and all of that is scorched.

19 Q So if the power company has lines on a pole, you 20 don't assume that that pole is gone, do you?

A No. What the model does is assume that you can achieve sharing of the poles. And the ILEC input data reflects that currently they achieve a significant amount of pole sharing.

25 Q With the power company?

It has got to be just about all power company. 1 I'm not saying somebody else couldn't set a pole, but for 2 the most part I think there are agreements, and the reality 3 is the power company always goes in and sets the poles 4 5 first. Right. The power company has a line on an 0 6 existing pole, and you assume that they want to hang a power 7 line on another pole, right? 8 Say that again. 9 A I thought we alread covered the fact that the 10 0 existing poles having power lines on them are not scorched, 11 right? 12 The power company is not sccrched, that's 13 A correct. And what we are saying is that if a new 14 telecommunications company went out there in a scorched node 15 environment, that their pole cost would be about half or in 16 some cases 25 percent of what we model of what it would be 17 if they had to set all the poles themselves, because the 18 powe company has got a bunch of poles out there, and the 19 ILEC input data says indeed they do, and indeed they attach 20 to them. 21

Q Let me cover just one last area with you, Mr. Wells. Let's talk about plant mix. I am correct, aren't I, that in the two highest density zones, the Hatfield model assumes that for distribution plant, for aerial distribution

1	plant there are no poles, is that right?
2	A That is correct.
3	Q Is it fair to assume that in the second highest
4	density zone, that is between 5,000 and 10,000 lines per
5	square mile, there could be areas that have single-family
6	homes?
7	A Okay.
в	Q And in those areas you are modeling aerial
9	distribution plant with no poles?
10	A Yes, that's correct. The assumption we have made
11	is in the two highest density zones that a lot of the cable
12	will be inside of or attached to buildings.
13	Q To the houses?
14	A No, to buildings. You generally don't attach to
15	a house.
16	Q Well, there could be I thought we just covered
17	the fact that there could be houses in the second highest
18	density zor ?
19	A And I'm agreeing with you, I'm just trying to
20	physically describe what happens.
21	Q I'm just trying to understand how we get this
22	wire to and from the houses if there are no poles?
23	A And I will try to explain. The assumption, the
24	modeling assumption that we have made is in the two highest
25	density zones that most of the cable, particularly in the

highest density zone, would be inside of or attached to buildings, okay. Now, I will accept your exception that, yes, you are going to find some single-unit dwellings or single businesses that would be served off of aerial cable with drops, that's how you get there, okay.

Now, on the assumption that most of the cable is 6 inside of or attached to buildings, how do you model it? 7 What we have done is we have said that for modeling purposes 8 that you would not put a pole inside of the building. Nor 9 would you put buried cable inside of these buildings, 10 because if you put buried cable you incur the cost of a 11 trench. So you are not going to put a trench inside the 12 building. If you say, well, we will call it underground 13 cable, well, then you've got the conduit and the manholes, 14 and that's not appropriate. 15

So what we have done is going back to the FCC 16 accounts, which classifies cable that is inside of or 17 attached to building as, quote, aerial cable. It's field 18 reporting code 12C. We have adopted that, and said that for 19 purposes of costing the structure in those density zones, 20 that the cost associated with the cable, which includes the 21 material and installation, is sufficient in and of itself. 22 And that to model additional structure costs, such as poles, 23 or conduit, or trenches, when most of the cable is inside of 24 or attached to the building would overcost the model. 25

1 So, if you are trying to say would there ever be 2 a need for a pole in those density zones, I would have to 3 agree. If you had to make a choice between putting poles in 4 and not putting poles in, I would say that if you put poles 5 in, which the BCPM does, then you've got a lot of poles 6 inside of a lot of buildings, and you've got a lot of cost 7 that shouldn't be there.

8 So, we are probably -- going back to Mr. Carver's 9 analogy, we are probably a little bit wrong on the low side, 10 and BCPM is probably a big wrong on the high side in regard 11 to poles in buildings.

MR. MITCHELL: Thank you. That's all I have.
 CHAIRMAN JOHNSON: Staff.

MR. COX: Good evening, Mr. Wells. I really just 14 have one question for you. But before I start, Chairman 15 Johnson, I have two exhibits I would like to have marked as 16 exhibits at this time. The first is one that has been 17 discussed through the various company counsel here, the 18 Fasse t documents, which is AT&T's supplemental response to 19 staff's Second Request for Production of Documents Number 3, 20 and that would be a confidential exhibit. And we do have 21 copies of that if the Commissioners would like to see it. 22 The short title would be Fassett documents. 23

24 CHAIRMAN JOHNSON: We will mark that as 87.
25 (Exhibit 87 marked for identification).

2676

MR. COX: The second exhibit is identified as 1 JWW-7, and that was the deposition transcript and Late-filed 2 Deposition Exhibits 1 through 3 of Mr. Wells. I do have one 3 question for MCI Counsel. Has Late-filed Exhibit Number 2 4 been provided at this time? 5 MR. MELSON: No, it has not. We are still in the 6 7 process of getting that. MR. COX: Okay. I guess we might need an 8 additional exhibit for that late-filed exhibit, so this 9 exhibit would contain -- this is Number 88 -- it would 10 contain the deposition transcript and Late-filed Deposition 11 Exhibits 1 and 3. 12 CHAIRMAN JOHNSON: Uh-huh. 13 MR. COX: And then I would need another exhibit 14 marked for identification, and that would be the Late-filed 15 Deposition Exhibit Number 2 to Mr. Wells' deposition. 16 CHAIRMAN JOHNSON: Okay. 17 MR. COX: And that's all I have for the exhibits. 18 (Exhibit 88 marked for identification.) 19 CROSS EXAMINATION 20 BY MR. COX: 21 Mr. Wells, I believe earlier in your discussion 22 Ö with GTE's counsel you discussed something that you also 23 discuss in your rebuttal testimony, and in your rebuttal 24 testimony you recommended that the BCPM 3.1 input values for 25

distribution per residential housing unit for the ILECs 1 should be reduced to 1.5? 2 A Okay. 3 And I believe in this proceeding the ILECs have 4 0 recommended two or 2-1/2 pairs per housing unit. Is that 5 your understanding? 6 7 Yes. A And earlier in your discussion, you said that it 0 R should be reduced to 1.5, and I thought I heard you say 9 because of inefficiency, is that correct? 10 What I basically said is that they have modeled 11 A an exorbitant amount of spare capacity in the distribution 12 and so that it would be an inefficiency, yes. 13 And what is the basis of your conclusion that 14 0 they have modeled this exorbitant amount of unused facility? 15 Okay. First of all, in my understanding, and the 16 A economists would have to address this, these models should 17 not be providing for any significant amounts of growth. So 18 all of these arguments about second line growth is going to 19 come and you've got to have all of this capacity out there, 20 I think from a standpoint of developing the cost for this 21 model, that is not a valid argument. But I'm not the 22 expert, somebody else will have to address that. 23 But to start off with, do you model for the 24 ultimate capacity for ultimate growth, and my answer is no, 25

you don't do that. So that's a starting point. The second 1 is that we do model spare capacity in the cable through the 2 process of our fill factors. And in distribution, as I use 3 the example, when you take our fill factors and run them 4 down to utilization, and there is a difference there, we 5 come out with about -- and I will use a round number -- 60 6 percent utilization of the distribution plant. So, for 7 every 60 lines, we have got 40 spare pairs. 8

Now, in my opinion, that's more than sufficient 9 to handle any administrative, defective, churn, and even 10 some growth, okay. Now, on the other hand, the ILECs would 11 tell you that historically they have used 40 percent 12 distribution and, therefore, that's what they should model 13 here. So, in other words, for every 40 customers they have 14 got 60 spare pairs. Which, in my opinion, is far in excess 15 of any cost basis that there should be for developing a 16 universal service fund. What, in essence, they are saying 17 is current ratepayers and CLECs should fund the spare 18 capacity for future growth. And I don't th'nk that's 19 correct. But I'm not the economist in this proceeding. 20

21 We model two pair drops aerial, three pair drops 22 buried. We model NIDs that will handle additional station 23 protectors. The scare tactic that has been used about 24 digging up the lawn, the sidewalk, the street, and the 25 shrubs, and I forget the rest of the list, is a scare

1 tactic. We've got plenty of capacity in ours.

And, furthermore, the last point is that there is 2 currently available technology called two channel digital 3 subscriber carrier that is described guite extensively in 4 GTE's documents, and I'm referring specifically to PAR 074. 5 And just to give you an example of how this technology can 6 be used, in reference to -- this is Bates stamped 0000052, 7 it says that when two channel digital subscriber carrier is 8 utilized, a typical feeder relief trigger for qualifying 9 facility area cross connects should routinely range between 10 105 percent to 110 percent of the assigned cable count. 11 So the point is that not that you should deploy 12 this as an initial deployment, but if you run into a 13 situation where you've got growth, this technology will 14 allow you to actually exceed 100 percent utilization of the 15 copper pairs using this technology. Therefore, my 16 contention is that there is no justification for them 17 continuing to have 40 percent utilization in the 18 distribution plant or 60 percent spare capacity. It's gold 19 plating the network, and it's asking CLECs and subscribers 20 to pay for their ability at very, very little incremental 21 cost to add additional customers. Not that that is not a 22 good business practice, it's just not appropriate for a cost 23 proxy model. 24

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Now, if the Commission were to choose the two or

1	2-1/2 pairs per housing unit, would that increase the
2	overall cost of basic service?
3	A Yes, because traditionally they have modeled two
4	pair per living unit. So if you go to 2-1/2, you are going
5	to have even more larger cables and more spare capacity.
6	Q What kind of impact is that? Do you have any
7	quantification of the impact?
8	A I don't run the models, so I can't answer that.
9	MR. COX: Thank you, Mr. Wells.
10	WITNESS WELLS: Sure.
11	CHAIRMAN JOHNSON: I think we are prepared for
12	redirect. How much will you have?
13	MR. HENRY: One question.
14	CHAIRMAN JOHNSON: Okay.
15	REDIRECT EXAMINATION
16	BY MR. HENRY:
17	Q Mr. Wells, Mr. Mitchell was I think it was
18	rig' when he started his conversation with you, he asked
19	you whether you agreed that it was appropriate to use the
20	current costs of the ILECs in these models and you agreed?
21	A As a starting point.
22	Q Okay.
23	A As a starting point.
24	Q So are you talking about the current books of
25	account of the ILECs?

A My understanding of his question was current costs for current technology, and that's how I answered the question. As a starting point. In other words, if you can look at what they pay for copper cable tiday, that is a good starting point. I'm not disputing that. I wish we had that data and could use it publicly.

But you've got to apply the criteria to their
other costs, and I will use a contractor cost as an example.
Don't use a cost for setting, you know, one to five poles.
Use a cost for setting, say, 100 poles where you get the
economies of scale. It has to be, you know -- I'll just
stop there.

MR. HENRY: Madam Chairman, I think I just have some exhibits to move.

15 CHAIRMAN JOHNSON: Okay.

25

MR. HENRY: I would move Composite Exhibits
Number 85 and 86.

18 CHAIRMAN JOHNSON: Show those admitted without 19 objection.

20 (Composite Exhibits 85 and 86 received into
21 evidence.)
22 MR. COX: Staff moves Exhibits 87 and 88.

23 CHAIRMAN JOHNSON: Show those admitted without 24 objection.

(Exhibits 87 and 88 received into evidence.)

1	CHAIRMAN JOHNSON: Thank you, sir. You are
2	excused. We are going to go ahead and adjourn for this
3	evening, and reconvene tomorrow at 9:00.
4	(Transcript continues in sequence with Volum
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CHAIRDON JOHNSCH: Thank you, sir. You are 2 amoused. We are going to go ahead and adjourn for this 3 evening, and reconvens tomorrow at \$:00. (Transcript continues in sequence with Volume 5 24.) .