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	MC GINNIS & ASSOCIATES, INC. COLUMBUS, OHIO (614) 431-1344
1	PUBLIC UTILITIES COMMISSION
2	STATE OF OHIO
3	
4	In the Matter of the)
5	Application of Cincinnati Bell) Telephone Company for Approval)
6	May Result in Future Rate)
7	Increases and for a New) Alternative Regulation Plan.)
8	
9	Hearing Room 11-D
10	Borden Bullding 180 East Broad Street
11	Wednesday, March 24, 1999
12	Met, pursuant to assignment, at 9:00 o'clock a.m.
13	BEFORE:
14	Dwight Nodes, Attorney-Examiner.
15	
16	VOLUME XIII $00-050$
17	
18	EM ED
19	
20	APR 17 2000
21	MARCIA J. MENGEL. CLERK
22	SUPREME COURT OF OTHO
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1 APPEARANCES:

2	ON BEHALF OF THE CINCINNATI BELL TELEPHONE COMPANY:
3	Douglas E. Hart, Esq. Frost & Jacobs LLP
4	2500 PNC Center 201 East Fifth Street
5	Cincinnati, Ohio 45202-4182
б	ON BEHALF OF THE STAFF OF THE PUBLIC UTILITIES COMMISSION OF OHIO:
7	Betty D. Montgomery, Esg.
8	Attorney General of Ohio
9	By: Duane W. Luckey, Esq. Section Chief
10	Steven Nourse, Esq. Stephen & Reilly Esq
11	Jutta E. Martin, Esq. Assistant Attorneys General
12	Public Utilities Services 180 East Broad Street - Seventh Floor
13	Columbus, Ohio 43215-3793
14	ON BEHALF OF THE RESIDENTIAL RATEPAYERS OF THE CINCINNATI BELL TELEPHONE COMPANY:
15	Robert S. Tongren, Esg.
16	Ohio Consumers' Counsel
17	By: Thomas J. O'Brien, Esq. David Bergmann, Esq.
18	Assistant Consumers' Counsel Office of The Ohio Consumers' Counsel
19	77 South High Street - 15th Floor Columbus, Ohio 43266-0550
20	
21	
22	
23	
24	
25	

1 APPEARANCES (continued):

2	ON BEHALF OF MCI TELECOMMUNICATIONS CORPORATION:
3	Judith B. Sanders, Esq.
4	Bell, Royer & Sanders Co., LPA
5	Columbus, Ohio 43215
6	Jane Van Duzer, Esq.
7	Law and Public Policy
8	MCI Telecommunications Corporation
9	Chicago, Illinois 60601
10	ON BEHALF OF CORECOMM NEWCO, INC.:
11	Antony Richard Petrilla, Esq. Swidler Berlin Shereff Friedman LLP
12	3000 K Street, N.W Suite 300 Washington D.C. 20007-5116
13	ON BEHALF OF ATET COMMUNICATIONS OF OHIO AND TCG OHIO
14	David I Chargempa Fag
15	AT&T 222 Wogt Adams Street - Suite 1500
16	Chicago, Illinois 60606
17	Benita Kahn, Esq. Vorys, Sater, Seymour and Pease
18	52 East Gay Street Columbus Obio 43215
19	
20	
21	
22	
23	
24	
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MC GINNIS & ASSOCIATES, INC. COLUMBUS, OHIO (614) 431-1344 PROCEEDINGS 1 2 _ _ _ Wednesday, March 24, 1999 3 Morning Session 4 5 _ _ _ 6 THE EXAMINER: All right. Let's go on the record. 7 Miss Sanders. 8 MS. SANDERS: Yes. Thank you. 9 Just by way of housekeeping, when Mr. Starkey and Dr. Ankum testified last week, I didn't have two exhibits that I 10 11 marked, but I didn't have copies for the court reporters, and actually, I didn't have three exhibits. The first one was 17A, 12 13 which was the public version of Brad Behounek's testimony; the second one that I marked was 20A, which was the public version 14 15 of Mike Starkey's testimony, and those pieces were supposed to 16 have been filed December of '97; the third one was the 17 confidential version of Mr. Starkey's supplemental testimony 18 which was filed in '98. 19 I have since located the latter, the Exhibit 21, and

have given a copy to the court reporters. I have now learned that the reason I couldn't find the other two public versions is because they were never filed; that's why I'm doing this on the record, because those two exhibits actually don't exist. And quite honestly -- and everyone is laughing -- I think we all forgot the first time we filed this, there was an entry that

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1	permitted everyone to file testimony only under seal on the
2	confidential basis, and then, I think at some point, the company
3	was going to indicate what what portions of the testimony
4	would be considered to be confidential and what portions were
5	considered to be public, and I don't know whether that ever
6	happened. But, at any rate, there was never a redacted version
7	filed; so I guess we just need to clear the record of those
8	two
9	THE EXAMINER: Okay.
10	MS. SANDERS: because they don't exist and the
11	record now has all the exhibits that were filed.
12	THE EXAMINER: Okay. 17A and 20A, MCI exhibits.
13	MS. SANDERS: Yes, are not in existence. Take those
14	off the record. Thank you. I apologize for that, but it was a
15	memory test for all of us. I forgot about that.
16	THE EXAMINER: To the extent those exhibits were
17	admitted, they will now be unadmitted.
18	MS. SANDERS: Totally uncontested.
19	(Laughter.)
20	
21	Thereupon, MCI Exhibit Nos. 17A and 20A
22	were withdrawn from the record.
23	
24	THE EXAMINER: Okay. Mr. Reilly, you want to call
25	your first witness.

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1	MR. REILLY: Thank you, your Honor.		
2	We would call Nadia Soliman.		
3	THE EXAMINER: Good morning, Miss Soliman.	Would	you
4	raise your right hand?		
5	(Witness placed under oath.)		
6			
7	Thereupon, Staff Exhibit Nos. 3 and 3A		
8	were marked for purposes of identification.		
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1	NADIA SOLIMAN
2	of lawful age, being first duly placed under oath, as prescribed
3	by law, was examined and testified as follows:
4	DIRECT EXAMINATION
5	BY MR. REILLY:
б	Q. Miss Soliman, I placed in front of you two documents, one
7	marked Staff Exhibit 3 and one marked Staff Exhibit 3A. Do you
8	see those documents?
9	A. Yes.
10	Q. Could you identify them for me, please?
11	A. Staff Exhibit 3 is my testimony, the confidential version
12	of my testimony that was filed March 19th, 1999; and Staff
13	Exhibit 3A is my public version the public version of my
14	testimony that was filed on the same date.
15	Q. Were those documents prepared by you or under your
16	supervision?
17	A. Yes.
18	Q. Are there any changes you would like to make to those to
19	any of those documents?
20	A. Yes; minor changes.
21	I'll start on Page 14, Line 12. It reads, "relative to
22	fill factors", I will strike "fill factors" and replace it by
23	"spare facilities".
24	The next change would be on Page 28, Line 12. At the end
25	of the line "of the Commission's the local" should read "the

1 Commission's local"; delete "the".

2 On Page 52, minor edit on Line 12. It reads, "...unbundled 3 entrance facility study" should read "studies". 4 And the last one on Page 52, Line 14, it reads, "...either for interconnection with CBT's network or access to CBT's 5 unbundled network". It should read, "CBT's network or for 6 7 access". Just insert the word "for". 8 MR. HART: What line was that? MS. SANDERS: I didn't catch the line either. 9 THE WITNESS: Line 14 on Page 53, insert the word 10 "for" after "network or access". It should read, ...network or 11 for access". That would be it. 12 BY MR. REILLY: 13 14 With those changes, Miss Soliman, if I were to ask you the Ο. 15 questions that are contained in Staff Exhibits 3 and 3A today, would your answers be, with those changes, as shown in Staff 16 Exhibits 3 and 3A today? 17 Yes. 18 Α. MR. REILLY: Thank you. I would offer the witness for 19 20 cross-examination and move the admission of Staff Exhibits 3 and 21 3A. THE EXAMINER: All right. Mr. Hart. 22 23 MR. HART: Thank you, your Honor. 24 25 CROSS-EXAMINATION

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1 BY MR. HART:

2	Q. Miss Soliman, I would like you to turn to Page 5 of your
3	testimony, if you would. Actually, the top of Page 6. There's
4	a discussion of unbundled tandem switching. Do you see that?
5	A. Yes.
6	Q. I guess I'm a little confused. It's your understanding
7	that Cincinnati Bell has not done a tandem switching study?
8	A. It's my understanding that Cincinnati Bell did not provide
9	a direct study for unbundled tandem switching as it is defined
10	in the Commission's local guidelines and FCC rules.
11	Q. Okay. Now, are you familiar with the transport and
12	termination cost study that Cincinnati Bell did?
13	A. Yes.
14	Q. And I believe that there is a a section of that study
15	that deals with tandem switching costs?
16	A. A section? Can you point out
17	Q. Well, on the cover page summary of that sheet at the
18	bottom, there is an identification of tandem costs.
19	A. Yes.
20	Q. I guess what I'm trying to ask you is, what is the
21	difference between the tandem switching element that Cincinnati
22	Bell developed for transport and termination and how you would
23	envision a study for unbundled tandem switching by itself?
24	A. The cost shown on Line 15 on the summary page of the
25	transport and termination cost study, the reciprocal

1	compensation cost study, my understanding is that tandem cost
2	represents only the switching functionality of the tandem
3	switch, it does not reflect all the functions as associated with
4	unbundled tandem switching.
5	For example, based on the FCC's definition of the unbundled
6	tandem switching, it will include the switching capability,
7	which is connecting trunks to trunks, as well as routing calls
8	to operator services, and some call calling features like
9	call restriction and other functionalities, and I do not believe
10	that those are included in that tandem cost
11	Q. Okay.
12	A that was developed in the transport and termination cost
13	study.
14	Q. So you believe a study should be done that includes
15	additional costs other than than those which are included in
16	the transport and termination study?
17	A. That would Yes. That would include costs for additional
18	functionalities that is included in the Commission's definition,
19	as well as the FCC definition of unbundled tandem switching
20	functionality.
21	Q. Okay. Would you envision that would be a per minute of use
22	rate or would it be a combination of minute of use and flat rate
23	of some sort?
24	A. I would envision that it would be a combination of a per
25	minute of use and a flat rate.

1	Q. Like a port charge?
2	A. Similar to that, but I you know, I am not ruling out
3	having it on a single rate basis of per minute of use.
4	Q. Later on Page 6 you talk about the AIN study.
5	A. Yes.
6	Q. And it's my understanding that your recommendation here is
7	based on some belief that there were negotiations occurring
8	between Cincinnati Bell and MCI as to what AIN elements were
9	would be required?
10	A. Yes. And I got that belief from Mr. Mette's testimony.
11	Can I just find the source here?
12	Q. Okay.
13	A. Based on some information provided by Cincinnati Bell. It
14	was on Mr. Mette's supplemental testimony that was filed on
15	December 23rd, 1997 on Page 5, Line 12.
16	Q. All right. And did he indicate that the reason that there
17	was no study was that the elements were still up in the air as
18	to what elements would be provided?
19	A. Yes. It Yes.
20	Q. Okay. It's my understanding that MCI has not been in
21	contact with Cincinnati Bell any further since that testimony
22	was written to refine these elements. So I guess I'm asking
23	what it is you expect Cincinnati Bell to do now with regard to
24	AIN studies.
25	A. The staff's recommendation that Cincinnati Bell file a

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1	direct study for AIN is not necessarily based on only MCI's
2	requirement of AIN functionality as an unbundled network
3	element. So I don't believe that Cincinnati Bell should be
4	waiting for MCI to tell them all the requirements. I guess
5	Cincinnati Bell should develop a cost study that would reflect
6	the basic requirements of AIN as an unbundled network element
7	and later, if an interconnecting carrier required other
8	modifications or customization, I think that can be reflected in
9	a separate study.
10	Q. Thank you. That clarifies that.
11	If we can go to Page 10. On Line 14, you refer to a TELRIC
12	study for OSS. And this is a topic I'm going to have a lot of
13	questions about, but I'm not clear exactly what it is you mean
14	by a TELRIC study for OSS, whether that's one thing or whether
15	OSS might be multiple things.
16	A. I would like to go back how that issue have started. In
17	the Staff Report, based on the cost studies that was provided to
18	staff in 1997, Cincinnati Bell proposed to recover OSS-related
19	costs in various areas of the studies. One of the areas was the
20	direct administrative costs and the ACF study, the other area
21	was in new costs category that was also included in the ACF
22	study. And based on the record at that point of time, it was
23	clear to staff, as I indicate in my testimony, that Cincinnati
24	Bell did not have all the costs that it expected to incur for
25	the OSS at that point of time, that it was still under

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development and Cincinnati Bell did not have all the costs. 1 So staff is concerned about -- at that point of time was 2 concerned about not recovering all the costs and at the same 3 time, as I explain in my testimony starting on Page -- the 4 5 bottom of Page 8 and top of Page 9, that based on the objections from Cincinnati Bell, staff found out that some of the OSS 6 7 functionalities that is included in the direct administrative 8 costs, as well as the new costs are not necessarily -- cannot be 9 separated and it will cause more problems and might cost more to separate it and recover it through a separate rate element as 10 11 staff have recommended at the beginning.

12 So staff, based on that information, staff has tried to 13 categorize the costs associated with OSS systems. And based on 14 that categorization, staff has recommended different methods of 15 recovering those costs.

16 The first type of costs are costs associated with existing 17 databases that Cincinnati Bell uses for -- uses for its 18 provision of its retail service, as well as the provision of the 19 UNEs, and those costs are mostly included in the direct administrative costs. And I revised staff's recommendation to 20 21 recommend that it stays within the direct administrative costs; 22 however, I am not handling the dollar amount associated with it. 23 Mrs. McCarter will handle this.

The other type of costs are costs associated with modification of existing OSS to allow NECs access to it and to

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allow Cincinnati Bell to provide UNEs and bill for it, and those 1 2 costs generally, I believe it does not -- or, it doesn't have to 3 be recovered as a separate rate element because it's not completely separate from the provision of the UNE itself and, 4 therefore, I am also recommending that can be recovered through 5 the UNE rate itself. Although, maybe because it have not been 6 identified up to this point by Cincinnati Bell, what are those 7 costs, and where if it is provided within the cost studies that 8 we have received, staff has recommended that it would be 9 identified separately, and it's those costs should be allocated 10 to different UNE's based on its use, but it can be recovered 11 within the UNE rate element --12

13 Q. Okay.

14 A. -- added to the UNE rate element.

The third one, which is the costs to provide NECs with 15 nondiscriminatory access to OSS, and those are mainly costs that 16 have been identified so far by Cincinnati Bell in the new costs 17 categories. And because of information have been provided by 18 19 Cincinnati Bell through Mr. Mette's testimony is that some 20 competitors are not planning to have electronic interface to Cincinnati Bell's OSS and are planning to fax data requests, I 21 believe that, based on my experience, that if a competitor is 22 planning to order service or a UNE through faxing or required 23 some manual intervention from Cincinnati Bell, they should not 24 25 pay for those electronic -- the establishment of those

electronic systems. Only carriers that use those systems should 1 2 pay for it. 3 Okay. Let me go back and try to --0. 4 Α. Okay. 5 Q. -- focus in on a couple little points. 6 You've identified three types of costs. I take it that you 7 would expect when Cincinnati Bell does its next run of cost 8 studies to more specifically divide those costs into the three 9 categories? 10 No, not necessarily. I categorize it as I have seen it Α. within different cost studies in Cincinnati Bell. 11 And I did this categorization so I can explain why staff is recommending 12 13 that just access to operations support systems should be 14 recovered separately. 15 0. Okay. And that's the third category you described? 16 Α. The third one, yes. 17 Q. That's where I was starting when I asked the question. 18 Α. Okay. What is the OSS study? And what I'm getting at is I 19 Ο. 20 understand that the OSS system allows preorder inquiries as to 21 what services are available. It allows the submission of 22 orders. It allows the submission of maintenance and repair 23 requests, things of that sort. Is that all one OSS element or 24 are all those different functionalities of the electronic 25 interface considered different elements? I'm trying to

1	understand how you expect these to be to be costed.
2	A. As I discuss in my testimony, that based on the
3	cost-causation concept, it depends on the I am not
4	identifying the access to OSS systems as one system. You will
5	need to have access to different systems and the costs
6	associated with access depends on what unbundled which
7	unbundled network element the service order is for and how often
8	it happens. Is it per inquiry is it per order, is it per minute
9	of use? It is different how the costs are incurred and my
10	recommendation is to recover those costs only from carriers that
11	use that system and allocate it to the unbundled network
12	elements that's that carrier is ordering.
13	Q. Okay. I guess you're suggesting Cincinnati Bell needs to
14	make a proposal as to how the OSS-specific costs will be
15	recovered from individual uses?
16	A. Yes.
17	Q. Okay. And that could be per inquiry, could be per minute
18	of use, could be per order, could be some other basis, depending
19	on the particulars?
20	A. Yes.
21	Q. Okay. On Page 10, beginning at Line 20, you have this
22	discussion, and I want to focus on the sentence on Line 22 that
23	says, "The cost should include both initial investment and
24	ongoing expenses".
25	A. Yes.

1	Q. Do you envision that there would be a two-tier rate
2	structure or simply that the rate incorporate both the fixed
3	expense and the continuing expense?
4	A. I would envision it to be one rate element that
5	incorporates both initial investment and ongoing operating
6	expenses.
7	Q. Okay. Do you have a period in time over which the initial
8	investment would be amortized?
9	A. I believe it is not it's no different than the initial
10	investment associated with providing any service or unbundled
11	network element, because you built the system to meet the demand
12	for the use of that system and then you use the study period to
13	recover this demand. It doesn't mean that after this study
14	period, you have recovered 100 percent of the investment.
15	Q. That's kind of what I'm getting at. Do we need to
16	determine I hate to say this but a depreciation life for
17	an OSS system?
18	A. First, I am not a depreciation expert. I guess that's
19	something that Cincinnati Bell have to evaluate and propose
20	and
21	Q. Okay.
22	A it would be dealt with whenever the study is provided.
23	Q. Okay. I believe Mr. Francis may have suggested that there
24	be a component for initial investment that be tracked and when
25	the investment was recovered, that that be removed from the ACF.

1	Is something like that what you would have in mind?
2	A. Can you point me out where in Mr. Francis' testimony?
3	Q. Probably not. Let me try. I'm not sure I can very
4	quickly. Oh, it's Page 6, Line 16.
5	A. Pardon me, Page 6, Line?
6	Q. 16, I believe. I will have to look and see if that
7	reference is right.
8	MS. SANDERS: Yes, it is.
9	BY MR. HART:
10	Q. That It's a question related to the new costs that are
11	not specifically OSS related. And I know he is not answering
12	the exact question I've asked you, but what I'm asking is
13	whether you would envision a similar type cost recovery
14	mechanism for the OSS costs that were initial capital
15	investments?
16	A. I guess Mr. Francis would be the best to explain this, but
17	my reading of it is he is saying this would can be one
18	reasonable method; it's not the only method. And I guess he is
19	also raising the question about are all the costs included in
20	the new cost category proposed by Cincinnati Bell, are all of it
21	or part of it related to the OSS system.
22	Q. All right.
23	A. And But my recommendation would be because this is going
24	to be an ongoing functionality, this another option that
25	might give Cincinnati Bell more flexibility is to recover it on

1 a -- on a recurring basis --

2 Q. Okay.

3 A. -- will eliminate the need of tracking those costs.

4 Q. Okay.

5 A. Revenues. I'm sorry.

Q. The next question I have for you is in developing this OSS
rate element, you say at the top of Page 11 that this should be
allocated on a reasonable forecast of the NEC's demand.

9 A. Do you have a recommendation as to how Cincinnati Bell

10 should go about forecasting what the demand will be for

11 electronic access?

12 A. I personally do not have an idea about how Cincinnati

Bell -- its relationship with different competitors and how far they are and in ordering UNEs, and so I -- I personally cannot tell you how can they determine that forecast.

16 Q. Okay. Let's assume that Cincinnati Bell made inquiry to 17 the companies that have interconnection agreements with it as to 18 how many times they would expect to use the OSS system. Would 19 that be one basis for doing this?

A. I think this can be a starting point, but not the only way
you can do it. Because I do not believe if we -- if the
Commission adopts my recommendation and its -- and on the access
to OSS is recovered on a recurring basis, this does not mean
that you only encompass the forecast out of the current
interconnecting carriers. There might be new competitors in the

1 market a year from now and you need to take those competitors 2 into consideration, their demands.

3 Ο. Okay. Since this is an area that there is no experience 4 for Cincinnati Bell, I'm curious as to your reaction what would happen if we used forecasts that turned out to be dramatic in 5 error one way or the other, either the NEC said, "We're going to 6 use this a million times", or they said, "We're going to use it 7 8 a thousand times", and the number turned out somewhere in the 9 middle? Is there a mechanism for Cincinnati Bell to adjust its 10 rate as we get a better idea of what the real demand is? I believe this is the same risk that Cincinnati Bell takes 11 Α. 12 whenever they provide an unbundled network element is you develop a forecast and because of the recurring basis --13 14 recurring nature of that rate element, you do not have to necessarily recover all the costs or all the investments 15 associated with the development of that -- of that system only 16 17 through the first cost recovery period that you design, because the next time Cincinnati Bell comes for a TELRIC proceeding, 18 19 that TELRIC price for those elements will be based on the forecast for the study period at that point of time and the 20 investment that Cincinnati Bell expects to incur on a 21 22 forward-looking basis.

23 So it's not -- it's not something that is different in 24 nature than any other UNE that Cincinnati Bell provides. 25 Q. Well, let me suggest one difference to you. Most UNEs

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1	would include the demands of the NECs and Cincinnati Bell's
2	internal demands like loops, for example, and Cincinnati Bell's
3	demands will be the lion's share of that.
4	When we have an OSS gateway that only the NECs will be
5	using, isn't it a little bit more difficult to forecast that
6	usage than if Cincinnati Bell was also using that?
7	A. It is different, however, I do not believe that if if
8	you are if the actual use of the system is way out of line
9	off the forecast that Cincinnati Bell determined at the
10	beginning, that would not allow Cincinnati Bell to recover all
11	of the investments, because as I have mentioned, it depends on
12	when would be the next time that Cincinnati Bell come for a
13	TELRIC. You can still recover that cost. It's on an ongoing
14	basis of recoveries.
15	Q. Okay. I believe you said we could have different rates for
16	different uses of OSS; for example, to submit an order might be
17	a different rate than to submit a repair request?
18	A. That can be the case, depending on what's the type of
19	investment associated with giving access for providing a
20	service, of handling service orders versus giving access to
21	Cincinnati Bell OSS to handle a repair request.
22	Q. Okay. Let's change topics to dark fiber on Page 13.
23	You're suggesting that Cincinnati Bell ought to do a cost study
24	for dark fiber. Would you expect that the result of that would
25	be a per foot cost of fiber?

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1 A. Yes.

2 And you've indicated that Cincinnati Bell can deaverage in Ó. a minimum of three geographical areas. Would you then expect a 3 4 per foot cost for each of the deaveraged areas? 5 Α. Yes. Okay. Now, if Cincinnati Bell were to do that, if an 6 Ο. actual order for dark fiber came, it would still need to 7 8 determine the length of that fiber, wouldn't it? 9 Α. That's existing fiber, you mean? Right. 10 Ο. 11 Α. Yes. Okay. So we might have a per foot cost of whatever the 12 Q. rate is, then if an order comes in, Cincinnati Bell would need 13 to measure that particular route to determine what the ultimate 14 15 rate was for that particular fiber? 16 Α. Yes. 17 On Page 17, you have some more discussion of the Okay. 0. 18 difference between manual and automated order processing. And 19 you're suggesting that people who submit manual orders shouldn't 20 pay for OSS and people who submit electronic orders shouldn't 21 pay for manual order handling? 22 Α. Should or should not? Should not. 23 Q. 24 Α. Yes. 25 Ο. Is the difference between those two rates the service order

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1	repro	esentative's time versus the cost of the use of the OSS?
2	A.	Generally, yes.
3	Q.	So once the order is in Cincinnati Bell's ordering system,
4	those	e nonrecurring charges should be the same or flow the same
5	from	that point forward?
6	А.	Yes.
7	Q.	On Page 25, you have a discussion of interoffice facility
8	fills	S.
9	А.	Yes.
10	Q.	And I guess Lines 12 through 16 you suggest a method of
11	trend	ding and then carrying that trend forward to the midpoint of
12	the :	five-year study period for this case; is that accurate?
13	А.	Yes.
14	Q.	And that would be the end of June 2001?
15	A.	Here I am recommending to the Commission is the first area
16	in my	y testimony that the study period of five years would start
17	from	January 1, 1999 through December 3, 2003
18	Q.	Okay.
19	Α.	as I recall.
20	Q.	So the midpoint is
21	Α.	The midpoint would be June of 2001.
22	Q.	Okay. So that's the point at time where you would like to
23	estal	blish the fills?
24	Α.	Yes.
25	Q.	Okay. And you have two past data points, one from 1992 and

1 one from 1997, that you would use to trend up until that June of 2 2001? 3 Α. Yes. Okay. Now, I believe on the next page, Page 26, you have 4 Q. actually estimated what the annual increase is. I believe it's 5 6 1.3 percent on Line 11. 7 Α. Yes. THE WITNESS: We are on confidential record? 8 THE EXAMINER: Pardon? 9 THE WITNESS: We are on confidential record? 10 11 THE EXAMINER: Yes. 12 THE WITNESS: Yes. BY MR. HART: 13 Okay. I guess the question I have for you is how did you 14 Q. 15 arrive at that 1.3 percent; what was the calculation? 16 I used a simple present value formula using the two points Α. of time, the two values of fill factors for each circuit. 17 Like for the DS-0s, I have the increase from 80.4 percent to 85 18 19 percent applying the same formula of future values equals to 20 present value times 1 plus the interest. I am treating the growth as the interest. 21 Okay. So that's a compounded growth number then? 22 Ο. 23 Α. Yes. 24 So if I took 80.4 times 101.3 for, I guess, 4-1/2 years, Ο. 25 the result should be 85?

1 Α. Can you say that again? If I took the 80.4 percent, which was the fill in 2 Ο. Sure. December of 1992, and I multiply that times 101.3 percent 4-1/2 3 times because I want to go 4-1/2 years to June of '97, the 4 result would be 85 percent? 5 6 Α. It should be. 0. 7 Okay. Α. 8 Yes. Q. Maybe we need to carry it out some more decimal points to 9 get a more accurate number, but --10 11 Α. That's correct. I am just giving an approximate value. Okay. Does the same figure work out on the trends from 71 12 0. 13 to 75 percent? Yes. It was a coincidence, I quess. 14 Α. 15 Q. Okay. Maybe not. 16 So I guess then you would want to carry that trend forward 17 from June of '97 to June of 2001 for another four years? 18 Α. That would be more accurate than my calculation. My calculation here reflects the 1.3 percent increase per year 19 compounded for 2-1/2 years assuming the beginning of the study 20 period of January of 1999. 21 Okay. Would it be helpful to have another data point? 22 Q. 23 Α. It would be, but I have not been provided with other data 24 points. 25 Q. I understand that.

1	But if Cincinnati Bell were to take another sample of its
2	traffic, might that give you a better trend number?
3	A. Not necessarily a sample, because my understanding that
4	those data represents the entire Cincinnati Bell usage of their
5	interoffice circuits.
6	Q. Poor choice of words on my part.
7	A. That's okay.
8	Q. Another measurement of the traffic?
9	A. Yes.
10	Q. I understand you're recommending that the same fill factors
11	that would be derived for interoffice facilities also be used
12	for fiber feeder for loops?
13	A. I am not making the recommendation for fiber feeder.
14	Mr. Francis is handling all the loop fill factors, all the
15	equipment and components of the loops.
16	Q. Okay. Maybe I misread your testimony. So you're only
17	addressing interoffice facilities and not electronic loop
18	feeders?
19	A. Correct.
20	Q. Okay. I guess Mr. Francis will get those questions then.
21	Now, you indicate on Page 25, Line 17 or, Line 18 that
22	these trends would be capped at the equipment's maximum usable
23	capacity.
24	Do you know what that maximum usable capacity would be?
25	A. No.

1	Q. Okay. If the network traffic grew to the point that
2	exceeded the maximum usable capacity, would you expect that some
3	additional capacity would be added to accommodate that?
4	A. Yes.
5	Q. Wouldn't that addition of new capacity have the effect of
6	lowering the fill below the maximum usable capacity?
7	A. It depends on the increment of increase on demand or growth
8	in traffic and the increments of the additional facilities that
9	Cincinnati Bell would add.
10	Q. Okay. But the maximum usable capacity is certainly a
11	limit, an upper limit?
12	A. Yes.
13	Q. Here is the reason for my confusion earlier. On Line 20
14	you say, "This recommendation should be applicable to DS-0, DS-1
15	and DS-3 facilities and equipment included in all TELRIC studies
16	provided so far"
17	I take it you meant all interoffice studies, not all
18	studies?
19	A. Yes. And the reason I have this statement is Cincinnati
20	Bell, as I state here, that in the 1997 time frame they have
21	provided us with a transport and termination of local traffic
22	study, the reciprocal compensation that have different fill
23	factors for the interoffice facilities and equipment that is
24	different from the fill factors that was provided in the
25	dedicated transport cost studies.

1	Q. Okay. But that's another version of interoffice
2	transport transport and termination?
3	A. Yes.
4	Q. On Page 26, on Lines 13, 14 and 16, you have, I guess,
5	approximate fill calculations. Were those based on your
6	trending at the 1.3 percent?
7	A. Yes.
8	Q. Okay. Now, on Page 33 changing topics now to
9	collocation on Line 16 you recommend using the 1999 R.S.
10	Means Building Construction Costs Data.
11	A. Yes.
12	Q. Is such a book available now? I'm just curious.
13	A. Yes. I checked on R.S. Means' web site and that was a
14	couple of months ago, they had it available to order, so I
15	assumed that it is available.
16	Q. Okay. So it's published in 1999, but it probably has data
17	from 1998 and prior?
18	A. Yes. The ten years prior to.
19	Q. So that's the book you had in mind Cincinnati Bell would
20	use?
21	A. Yes.
22	Q. On Page 34, Line 7, there's a comment about labor rates. I
23	think there's other areas where you discuss labor rates. Should
24	those be brought to a 1999 level or to levels for each of the
25	applicable years in the study, if you understand what I'm

1 asking?

2 A. Could you say the question again, please?

3 Q. Let me try.

You suggest that the labor inflation rate be used to bring labor costs up to the 1999 level. What I'm asking is for labor that would be incurred in the years after that, should we continue to apply the labor inflation rate to determine the labor costs for those years after 1999?

9 (Pause.)

I'm hesitating here because there are different areas where 10 Α. labor inflation rates would apply. And it applies or it's 11 reflected -- the different -- the inflation rate for labor 12 13 throughout the five-year study period is reflected in the ECONCOST model, but for nonrecurring activities like that that 14 15 the ACF does not apply to, I think it would be more reasonable to reflect the labor rates as of the midpoint of the study 16 period. 17

18 Q. Okay. So maybe do a five-year projection and determine the 19 midpoint of those?

20 A. Yes.

Q. Okay. On Page 35, the top of the page, you recommend that, I guess this is collócation cages, have both a nonrecurring charge and a recurring charge?

24 A. Yes.

25 Q. And I take it what you would separate would be the initial

1	capital cost versus the ongoing maintenance type costs?
2	A. Yes.
3	Q. Okay. On Line 5, you suggest that if someone vacates a
4	cage and another person occupies the cage, that there would be
5	an adjustment for depreciation on the cage?
6	A. Yes. Depending on when the second collocator would take
7	the cage.
8	Q. Okay.
9	A. What point of time.
10	Q. I know you aren't a depreciation expert, but I guess it
11	raises the question as to what is the appropriate period of time
12	over which to depreciate the cage?
13	A. I actually asked Cincinnati Bell in a data request that
14	question and the response I got was Cincinnati Bell have not
15	determined life economic life of the cage; however, based on
16	the information that I have seen in other cases Before I
17	speak, can I check on something?
18	Q. Okay.
19	A. If I were to reveal confidential information or not.
20	THE WITNESS: Can you read to me what I have said so
21	far?
22	(Record read back as requested.)
23	THE WITNESS: Based on the information I have seen
24	in other cases, some other incumbent LECs have proposed a
25	seven-year economic life for the cage. I believe that this is

1	reasonable, maybe conservative, but because, as you just
2	mentioned, I am not a depreciation witness, I do not have a
3	specific number in mind.
4	BY MR. HART:
5	Q. Okay. If someone were to vacate a cage but no one else
б	occupies it, I take it you would not recommend they get the
7	refund?
8	A. That's correct.
9	Q. Okay. And I guess the other situation would be is if a
10	second person comes along and then they vacate the cage and a
11	third person comes along, the third person would only pay the
12	remaining undepreciated cost of the cage?
13	A. Correct.
14	Q. Okay. And that depreciated amount
15	A. Can I add to my
16	Q. Sure.
17	A. My answer is the third interconnector would pay the
18	undepreciated cost of the cage, but Cincinnati Bell would have
19	to, on a pro rata basis, refund the first and the second
20	collocator because Cincinnati Bell have already recovered the
21	original cost, including everything from the first one, so
22	whenever the second one second collocator comes and used that
23	cage, Cincinnati Bell have to refund the amount that the second
24	collocator have paid to the first one and so forth.
25	Q. Okay.

1	A. It's just to make sure that Cincinnati Bell recovered all
2	its costs, as well as different collocators pay a fair share of
3	the costs.
4	Q. Okay. But the refund back to the original collocator
5	wouldn't exceed the amount that the second entrant had paid?
6	A. That's correct.
7	Q. Okay. And that just so we're clear, the depreciation we're
8	talking about would be on the capital investment, not the
9	nonrecurring charges?
10	A. That's correct, on the assets.
11	Q. I'm sorry, not the recurring charge.
12	A. Yes. The recurring charges would be equal to all
13	collocators.
14	Q. Right. All right. Looking at the bottom of Page 37, am I
15	correct you recommend the same type of an arrangement for COBO
16	costs?
17	A. Similar, yes.
18	Q. Okay. So that someone who came in later wouldn't pay a
19	full share, they would pay an undepreciated share?
20	A. Correct.
21	Q. Now, should Again, this is a depreciation question, but
22	should the COBO costs be depreciated over the same life as the
23	building itself?
24	A. Again, because I am not a depreciation expert here, I think
25	that also my my understanding is in the COBO charge there are

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l	different types of assets included, so there would be, based on
2	my limited knowledge in depreciation, you would have different
3	depreciation lives for different assets.
4	Q. We would have to separate those costs out by what account
5	they fell into?
6	A. Yes.
7	Q. On Page 41, Lines 15 through 20, I believe you're
8	recommending that the same fill factors that are used for
9	interoffice facilities be used for cross connect facilities?
10	A. Yes.
11	Q. And that's for DS-1s and DS-3s?
12	A. Yes.
13	Q. Could you explain why you believe those would be the same
14	fill?
15	A. First, I would point out that the cross connect takes place
16	in the for interoffice interconnecting interoffice
17	facilities between different carriers. And I have not seen
18	anything that would lead me to believe that it should be
19	different.
20	Q. Let me ask you about one potential difference. Cincinnati
21	Bell's own interoffice facilities carry its own traffic as well
22	as traffic of other carriers. But the cross connect facilities
23	would only carry traffic of new entrants who want to
24	interconnect. Might there be a difference in dynamics in how
25	those two systems are designed?

l	A. Yes, there might be a difference because of or, based on
2	the information I have received from Cincinnati Bell, I have not
3	seen Cincinnati Bell treated them differently. And I did not
4	have any information that I can base my recommendation on
5	different fill factors for it.
6	Q. Okay. On Page 47, at the top you recommend an interim rate
7	for collocation.
8	A. Page 47?
9	Q. Yes.
10	A. Yes.
11	Q. Does this discussion pertain to the floor space charge?
12	A. No. It pertains to all and any collocation rate elements
13	in a new central office other than those four central offices
14	that Cincinnati Bell included and that central office like a
15	fifth central office that's not included here and has not the
16	Commission has not determined an interim rate for that for
17	collocation in that office through any of the arbitration cases
18	that Cincinnati Bell have because I do not know if Cincinnati
19	Bell have collocation rates for a fifth central office out of
20	your access tariffs or not.
21	Q. Okay. So it would apply to floor space, to conduit, to
22	risers, to power leads, all those things?
23	A. And COBO and everything.
24	Q. COBO as well?
25	A. As an interim basis for a fifth central office until

1	Cincinnati Bell comes with a cost study for that fifth central
2	office to determine what is Cincinnati Bell TELRIC costs for
3	COBO and others within other rate elements for collocation in
4	that central office and then a true-up would be done.
5	Q. Okay. My understanding of interconnection agreements is
6	that there is a mechanism in there for estimating the COBO
7	charges and there's a payment schedule. Are you familiar with
8	that?
9	A. Yes. Vaguely, I remember that, yes.
10	Q. Are you recommending that Cincinnati Bell, instead of
11	following that procedure, charge whatever the lowest COBO has
12	been?
13	A. I do not recall seeing a dollar amount for COBO charge as
14	an estimate in any of the interconnection agreements. I recall
15	seeing a payment schedule like a 40 percent of the COBO would be
16	paid up front once you receive a confirmation for collocation
17	orders, then the remaining of the amount. But I do not recall
18	seeing a dollar amount associated with it.
19	So to the extent you do not have a dollar amount, I am
20	recommending that the lowest COBO you have determined here, you
21	would apply until Cincinnati Bell develop a TELRIC and then a
22	true-up process would take place.
23	Q. You're correct, there's not a dollar amount, but there is a
24	process for doing an estimate. Are you familiar with that?

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A. I really do not recall.
l	Q. Okay. Well, I guess what I'm getting at is you're
2	suggesting that we charge whatever the lowest of the four
3	existing offices has been in lieu of doing an estimate for a
4	particular office?
5	A. If in your a specific interconnection agreement
6	Cincinnati Bell and the carrier have agreed to an estimate
7	process, I would believe that the estimate pro estimate
8	process would over or, supercede my recommendation for that;
9	however, because I do not recall, I believe that this would be a
10	reasonable interim rate until Cincinnati Bell developed a
11	TELRIC.
12	Q. Okay. That helps clarify that. Thank you.
13	On Page 49, and this is in the discussion of interoffice
14	transport, you, on Line 4, identified a concern with using SONET
15	rings located in Kentucky.
16	A. Yes.
17	Q. Okay. Do you need to get something to see this or
18	A. I'm just getting the cost study itself.
19	Q. Okay.
20	MS. SANDERS: Can I have the question reread as well?
21	(Question read back as requested.)
22	THE WITNESS: Yes.
23	BY MR. HART:
24	Q. Okay. It's my understanding that the ring inventory lists
25	all of the rings in Cincinnati Bell's network but that the

l	circuit table that actually is used to cost the various
2	interoffice circuits does not include any Kentucky circuits.
3	Do you have some belief that Kentucky rings were actually
4	used in the development of the interoffice costs themselves?
5	A. I believe that your characterization that the that the
6	ring inventory filed included in the cost study includes
7	Kentucky SONET rings located in Kentucky, however, looking at
8	the circuit inventory file in the study, because 3,000 plus
9	circuits are included in it, I do not recall if some of those
10	circuits include utilization of the SONET rings located in
11	Kentucky. But in case that those rings have been included in
12	the circuit inventory file to determine the average rate within
13	each band for the fixed electronic equipment or the fiber
14	mileage, it should be excluded.
15	Q. Okay. But if it's already excluded, there's nothing more
16	to be done; is that fair?
17	A. That's fair, but I do not know that.
18	Q. I understand.
19	Okay. That may be confusing because of the way the ring
20	table is is put together. But if they aren't in the
21	circuits, then there's nothing to remove?
22	A. That's correct.
23	Q. Okay. Now, in I guess this is on Page 50, Lines 1
24	through 3 This actually starts at the bottom of 49, but I
25	understand that you're suggesting that if both ends of a circuit

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1	are in Kentucky, the circuit should be removed, and if the
2	entire ring is in Kentucky, the ring should be removed.
3	If there's a circuit that extends between Ohio and
4	Kentucky, are you suggesting that that should be added into the
5	study?
6	A. Yes. If the circuit extends from Ohio to Kentucky, it
7	should be included because we are dealing with interconnecting
8	carriers here in Ohio. If they interconnect with Cincinnati
9	Bell in Ohio to transport traffic outside Ohio, I do not believe
10	it's reasonable to exclude such circuits.
11	Q. Okay. You understand those circuits are not presently
12	included in the study?
13	A. Again, I would go back and say I have to look at the 3,000
14	plus circuits to verify it is not there.
15	Q. Okay.
16	A. If it's not there, there's nothing to exclude.
17	MS. SANDERS: I'm sorry, I didn't hear that last
18	answer, the end of it.
19	THE WITNESS: If it's not there these circuits are
20	not there, there's nothing to exclude, but I have no way of
21	finding out whether it's there or not.
22	BY MR. HART:
23	Q. What I'm asking you about is, I'll call them, the
24	interstate circuit between Ohio and Kentucky, if they're not in
25	the study, you know, I think what you're suggesting is they need

1 to be added to the study? 2 Yes, I do not believe it to be unreasonable to add. Α. 3 Okay. I'm trying to understand what it is you're saying, Q. that's all. 4 5 Α. Yes. 6 Ο. Okay. Let me ask you to imagine we're in Kentucky doing If I was doing a Kentucky study, would I also include all 7 this. of those same circuits for a Kentucky study? 8 9 That are going -- extending from Ohio to Kentucky or vice Α. 10 versa? 11 0. Right. 12 Α. To develop the average rate of a dedicated circuit in 13 Kentucky, yes. 14 Q. Okay. 15 But I would just add a gualification that you will charge Α. 16 for it once. 17 0. Okay. What I'm thinking about is if the -- for some reason 18 the circuits that go between Ohio and Kentucky on average are a 19 different cost than the Ohio-only circuits, or if we were in 20 Kentucky if they were the different cost than the Kentucky-only circuits, if we count them in both studies, haven't they been 21 22 given more weight than perhaps they should be given? 23 Α. More weight in the Ohio study or in Kentucky study? 24 No. If we were to do two studies, one for Ohio and one for 0. Kentucky, and we include these interstate circuits in both 25

1	studies, haven't we, in essence, counted them twice?
2	A. No, not necessarily, because if you included it in the Ohio
3	study, you are including it to develop a rate that would be
4	applicable for an interconnector in Ohio when he when they
5	request a dedicated circuit that starts in Ohio and ends in
6	Kentucky because, absent their inclusion, I do not know what
7	rate would apply to such circuits. And we are here pricing
8	unbundled network elements, not necessarily services.
9	Q. Okay. I guess what I'm suggesting is maybe they should
10	only be given half of the weight of an Ohio-only circuit for
11	purposes of averaging because they're also going to be included
12	in the Kentucky study for purposes of averaging there?
13	A. Half of the weight?
14	Q. Yes.
15	A. How are you suggesting that half of the weight would be
16	done in the study here in Ohio? I do not understand, that's
17	why.
18	Q. Well, instead of counting the total number of circuits,
19	maybe you would treat it as if there were only half as many?
20	A. Just those few circuits?
21	Q. Just the ones between states.
22	A. I really don't believe that this would be an appropriate
23	thing to do in this study.
24	Q. Okay. One of our favorite subjects, that of the choice
25	between routing through West 7th or Evendale. You have heard

that discussion several times, haven't you? 1 2 Α. Yes. 3 Ο. You provide on Page 51 two alternatives; one is to identify 4 the actual route and the other is to do some sort of a weighting according to probability. Let's talk about the first one. 5 When you say the way it's actually routed, since we're 6 dealing with a cost study here and not necessarily an actual 7 network, I'm just wondering if you could elaborate on what you 8 mean by the actual route? 9 Although we are dealing with a TELRIC study, it is my 10 Α. understanding that the network that have been depicted in the 11 cost study represents Cincinnati Bell's network. And it is my 12 understanding that circuits -- you keep inventory of circuits in 13

the TELRIC system and through the TELRIC system you can investigate each circuit and find out which route the circuit would take, West 7th or Evendale. And that's why I'm recommending that.

Q. So you're suggesting we go back to our inventor -- Let's use our example of Avondale to Rossmoyne, which seems to be our favorite. Would we look at actual circuits between those two points and see how many are provisioned through Evendale and how many through West 7th? I'm just trying to understand if that's what you're saying.

A. For each circuit defined and, for example, in the DS-1
interoffice study, you have identified specific circuits that's

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1 going from Rossmoyne to Avondale.

2 Q. Avondale?

3 Α. Yes. And for that circuit, Cincinnati Bell in the study, 4 Mr. Mette have assumed a 50-50 probability that the circuit goes 5 through Evendale or West 7th. What I am suggesting here, recommending that through TIRK system, to examine that circuit 6 and find out which central office that circuit is routed through 7 8 and only use the cost associated with that route in the study. 9 Okay. I think I follow you. But if I had, say, ten Q. circuits that went between those two routes, would I look and 10 11 see how many went through Evendale and how many went through 12 West 7th and use those numbers?

A. Yes, if all the ten circuits you included in the study.
Q. They might all go one way or the other, or they might be
split some proportion?

16 A. That's correct.

Q. Okay. And then your alternative number 2 on Page 51, which you say is sort of a probability model, did that just look at the total number of circuits in Evendale versus the total number in West 7th and use the proportions?

A. It's looking at the rings from the ring inventory file that
go through Evendale versus the SONET rings that goes through
West 7th. And the equivalent of the DS-3 capacity --

- 24 Q. Okay.
- 25 A. -- of all those circuits.

If they turned out to be 55-45 or whatever they turned out Ο. 1 2 to be, that would be the way you would proportion the circuits 3 for the cost study? 4 Α. Yes. In the next section on entrance facilities on Page 52, at 5 Ο. the bottom of the page, Line -- or, Line 20, you recommend б having three deaveraged rates, right? 7 8 Α. Yes. 9 Let me pose a problem to you. Mr. Mette's study assumed Ο. that there would be three kinds of entrance facilities, 10 point-to-point, one central office to two NEC central offices, 11 or two Cincinnati Bell central offices to two NEC central 12 offices. There are other combinations, aren't there? 13 Yes. 14 Α. That's my understanding. Q. Okay. And those would be different combinations of 15 Cincinnati Bell's central offices and other companies' central 16 offices. Should all of those be priced individually or should 17 we include those into one of these other categories or what do 18 19 you suggest we do about those? 20 Optimally, I would recommend that they would be priced Α. individually, that like the group of circuits that will have, 21 for example, three Cincinnati Bell central offices and two 22 customer premises --23 24 0. Okay. 25 -- or any other combination; however, it's my understanding Α.

1	from the structure of the study that the three configurations
2	that are included in the study is very well representing the
3	entire entrance facilities circuit configuration or represents
4	the majority. So I believe that if Cincinnati Bell cannot do an
5	individual costing/pricing for the different configuration, you
6	can use the existing configuration as a surrogate for others.
7	Q. Okay. So we would use like two central offices, two
8	customer premises as a surrogate for anything more complex than
9	that?
10	A. Yes.
11	Q. On Page 57, Lines 7 through 10 talks about the impact of
12	OSS on the ordering of interoffice transport. And I guess I'm
13	not sure what you believe the impact would be. Could you
14	elaborate on that?
15	A. Yes. I guess it is exactly the same discussion I had in
16	the discussion of the nonrecurring charges for unbundled ports,
17	which is the study developed for dedicated transport for the
18	nonrecurring charges of dedicated transport assumes that it's
19	manual processing of service orders and the same recommendation
20	would apply, which is for manual service orders for dedicated
21	transport, use this study subject to my other recommendations.
22	If it is that you receive an order through an electronic
23	interface, you exclude any manual processing costs and you add
24	the OSS.
25	Q. So it's the same as we discussed before, it's the service

1	represent's time versus the cost of the electronic ordering
2	system?
3	A. That's correct.
4	Q. Okay. On Page 60, the last question in Line 11 there you
5	suggest that there are various corrections that need to be done.
6	Do you have a list anywhere, these corrections that you're
7	expecting?
8	A. I do not have with me now a list, but I would be more than
9	happy to develop a list.
10	Q. Okay.
11	A. Because it have been throughout responses to staff data
12	requests, but I have not attempted to make a list here in the
13	testimony.
14	Q. I'm just not sure Cincinnati Bell knows all of the various
15	corrections that you may be expecting and I would appreciate it
16	if you could do that; that would be helpful.
17	A. I can do that or if Cincinnati Bell can go through the
18	responses, at least to my data requests, you will find it
19	throughout, you know.
20	MR. HART: Okay. If I could have just a moment, I
21	think I'm finished.
22	(Pause.)
23	That's all I have. Thank you.
24	THE EXAMINER: Okay. Let's go off the record.
25	(Short recess taken.)

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1 THE EXAMINER: Okay. Back on the record. 2 Miss Van Duzer. Thank you, your Honor. 3 MS. VAN DUZER: 4 - - -CROSS-EXAMINATION 5 6 BY MS. VAN DUZER: Good morning, Miss Soliman. 7 Ο. Α. Good morning. 8 Miss Soliman, if there are recommendations that are made by 9 Ο. MCI in its testimony that you do not address in your testimony, 10 is it correct to assume that you're not offering an opinion with 11 12 regard to those issues? Maybe it would be better if you can point me out to those 13 Α. recommendations. I attempted to address all positions. 14 So you've attempted to address all of MCI's objections; is 15 Ο. that correct? 16 17 Α. Oh, you are talking about objections, not testimonies? 18 Q. Well, I was not. I was talking about testimony. I'm trying to understand what --19 20 Regarding testimonies from MCI witnesses, I have attempted Α. to address all the relevant issues that I'm addressing that have 21 been discussed in the testimonies, but as I mention in the 22 23 beginning of my testimony regarding objections that have not been explained through testimonies, I had no way of 24 understanding the nature of the objections, so I did not address 25

1	the objections and I have a list of them.
2	Q. That's fine.
3	Okay. Now, turning to Page 5 of your testimony, at the
4	bottom of Page 5. Is it true that CBT is also going to be
5	submitting or should be submitting an unbundled DS-1 study?
б	A. Unbundled DS-1 study?
7	Q. You address TELRIC studies at the bottom of the page that
8	still have to be submitted within three months of the
9	Commission's decision in the TELRIC proceeding.
10	A. Yes.
11	Q. And I'm just asking, isn't it true that cost studies still
12	need to be provided for 1.54 mb loops?
13	A. This have been listed in the Staff Report
14	Q. Yes.
15	A on Page 83
16	Q. Yes.
17	A of the Staff Report. I believe Mr. Francis will be a
18	better person to answer that question. I'm not saying they
19	should not, but I'm not quite sure if through all the revisions
20	and testimony I'm sorry, studies that have been submitted if
21	it have been included in the first round or not. But if it
22	haven't been submitted, the Staff Report says they have to.
23	It Just literally, I'm listing the cost studies that
24	Cincinnati Bell Cincinnati Bell have to submit that different
25	people have handled in their testimonies. It doesn't This

1	list of cost studies that I have included on Page 5 of my
2	testimony is not replacing the list that staff have listed in
3	the Staff Report; it's a subpart of it.
4	Q. So you're still expecting that all of the studies listed in
5	your report would be submitted; is that correct?
6	A. I believe so; but again, Mr. Francis would be a better
7	staff witness to answer that question.
8	Q. Okay. Now, turning to the issue of dark fiber on Page 14.
9	You state that, "All carriers proportionally share the benefit
10	of the existing spare facility and proportionally share the
11	associated investment risk".
12	A. Can you please point out to me the line that you're reading
13	from?
14	Q. Yes. Line Beginning on Line 16?
15	A. Yes.
16	Q. Now, if MCI leases an entire OC-3 ring and pays CBT, it
17	would pay CBT for 100 percent of the electronics in that fiber;
18	is that correct?
19	A. On that ring, yes.
20	Q. But if MCI uses that ring at the fill, which is roughly 70
21	percent that is prescribed in the studies, then there would be
22	spare left; is that correct?
23	A. That's correct.
24	Q. And that spare could be used by CBT for its own services or
25	be sold to another carrier; is that correct?

1	A. I will go back to my previous answer. When you say the 70
2	percent fill, that 70 percent represents an average fill of the
3	entire interoffice SONET rings, it does not represent the fill
4	on a specific SONET ring; that fill can be higher or lower on
5	individual SONET rings.
6	Q. And depending on the fiber used to provide the fiber
7	cable used to provide that OC-3 ring, there may be spare on that
8	ring, but I just wanted to clarify that the 70 percent does not
9	represent the fill on that individual OC-3, it represents the
10	average of the entire SONET ring facilities in Cincinnati Bell's
11	network?
12	Q. I understand.
13	So if there were spare on that left over on that ring,
14	then that spare could be used by CBT for its own services; isn't
15	that correct?
16	A. That's correct.
17	Q. That would be true if it were an OC-3 ring, or OC-12 ring,
18	or OC-48 ring, as long as there was spare left on that ring; is
19	that correct?
20	A. That's correct.
21	Q. Could you explain in that instance how it is that that
22	would be a proportional sharing of the risks of the risks and
23	benefits?
24	A. Yes.
25	When Cincinnati Bell developed a fill factor on a

forward-looking basis and whatever the spare available, this 1 represents that, of course, based on the guidelines and the 2 3 rules, it takes into account the demand of the NECs, as well as Cincinnati Bell's demand, and because of service quality 4 requirements and minimum telephone service standards requirement 5 of intervals of providing services in the nature of leasing 6 facilities from incumbent LECs, generally is that -- and that 7 have been discussed in different FCC rules and Eighth Circuit 8 decisions, that there is a risk associated with leasing 9 unbundled network elements, which is when MCI orders dedicated 10 transport from Cincinnati Bell, you provide them with the level 11 12 of demand of dedicated transport facilities that you will need 13 to provide service.

That ded- -- That demand, Cincinnati Bell have to take into 14 account in their design of the network. And any spare facility 15 is a result of both Cincinnati Bell's demand requirements and 16 17 MCI's, as well as other NECs, and regardless if MCI's actual use would be equal to the demand forecast, or less or more, MCI 18 19 orders this amount of facilities from CBT and pays for it, and that's the risk that MCI takes when using unbundled network 20 21 facilities versus the risk if you are a reseller; this is the risk associated with it. 22

However, my understanding of the unbundling requirement, if, for example, MCI requests 100 DS-1 circuits from CBT and give the 100 circuits, if your demand, your actual demand,

1	becomes more than 100 and when you require more circuits, that
2	spare facility would be used equally by MCI and Cincinnati Bell
3	to meet additional demand or future demand.
4	Q. So it's fair to say that because it's interoffice
5	transport, Cincinnati Bell can put other traffic on our spare;
6	is that correct?
7	A. I couldn't hear the whole question.
8	Q. Is it fair to say that because this is interoffice
9	transport, Cincinnati Bell can put other traffic on the spare
10	that MCI pays for; is that correct?
11	A. I would not characterize it this way, because the spare is
12	paid for proportionally by both MCI and Cincinnati Bell, as well
13	as any other competitive carrier leasing unbundled dedicated
14	transport or unbundled interoffice transport from Cincinnati
15	Bell, so it's not necessarily that it is the spare facility that
16	MCI pays for that CBT would use.
17	I would characterize it as the entire spare facilities are
18	available for future demand by all carriers paying for the
19	entire network, not necessarily that MCI would pay for the spare
20	and Cincinnati Bell would use it. It is available for future
21	demand by all carriers.
22	Q. So it could be used by any carrier and a carrier could
23	arguably use more than what what they what their
24	proportionate share of the spare would be?
25	A. That's correct; because when the carrier when a

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competitive carrier leases unbundled network elements from an incumbent, it's not necessarily asking for or requesting a specific amount of spare to be available. They provide the demand for the unbundled network element to the incumbent LEC and the incumbent LEC takes the competitor -- the competitor's demand into account when they develop the network.

7 So it's not necessarily that MCI would ask Cincinnati Bell to have X amount or X percent amount of spare available, it is 8 the risk that both Cincinnati Bell and the competitive carrier 9 will take. And, as I recall, this have been articulated very 10 well by the Commission in the Cincinnati Bell/MCI arbitration 11 12 award when there was an argument about the binding forecast. 13 Okay. Okay. Moving on to Page 19 of your testimony where Ο. you discuss the ECONCOST model. 14

15 A. Yes.

16 Q. You indicate that the ECONCOST model is a reasonable tool 17 to calculate the capital cost components of the ACF; is that 18 correct?

19 A. Yes.

Q. And you say that you have reviewed the algorithms of the model; is that right?

A. Yes, I have reviewed the explanatory notes and the
algorithms included in them that have been provided by
Cincinnati Bell.

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25 Q. But you haven't had a chance to review the actual equations
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1 of the model, correct?

2 Can you explain to me what's the difference between the Α. 3 algorithms and the equations here? Were you able to use the algorithms or just read about the 4 Ο. 5 algorithms? I was able to test the inputs and the outputs that have 6 Α. been provided by Cincinnati Bell as a part of the explanatory 7 8 notes to test the algorithms that have been provided within the 9 model, which is equal to testing the equations that's used by the model. 10 11 Now, are you familiar with the phrase "levelizing"? Ο. 12 Α. Yes, to a certain extent. And are you familiar with the difference between a tax life 13 Ο. 14 and the economic life of a facility? 15 I am familiar with them within the context of engineering Α. 16 economics. 17 And, typically, the tax life and the economic life of a Ο. 18 facility are not the same; is that correct? 19 Α. That's correct. 20 While typically the tax life of a facility is shorter than Ο. the economic life, correct? 21 22 Α. I'm not sure. 23 Now, if you wanted to determine whether the equations in Ο. 24 the ECONCOST model levelizes the payment stream over the tax 25 life or the economic life, would you have any way of determining

that by looking at the equations yourself? 1 2 THE WITNESS: Can you read the question for me, 3 please? 4 (Question read back as requested.) THE WITNESS: Yes, if I have the time, yes, I can do 5 that. 6 7 BY MS. VAN DUZER: You can do that if you have the time? 8 Ο. Yes. 9 Α. 10 Okay. How would you go about doing that based on the Q. information that you have? 11 12 I cannot find -- While I'm looking now at all the Α. 13 equations, I would need to plug in some of the inputs to handle I cannot do it now while I am here. 14 that. But you're certain you could do it? 15 Ο. I believe if I have the time, I can do it, just I -- I 16 Α. 17 cannot re-create it here now. 18 Okay. Miss Soliman, do you have any information that Ο. 19 wasn't made available to the intervenors about the ECONCOST model? 20 This, I do not know. I know that I -- all the information 21 Α. I have received regarding the ECONCOST model have been through 22 23 Staff Data Request 52, that to the best of my knowledge 24 different intervenors have asked for and have received it, but 25 if they have received the whole information or not, I cannot

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1 answer that.

2	Q. Okay. Turning to Page 16 of your testimony.
3	Does staff have any independent verification beyond
4	Mr. Mette's testimony that the NECs have no immediate plans to
5	implement electronic interfaces?
6	A. No, I do not. I would just add to that that regardless, if
7	this have been taking place or not, staff recommendation would
8	stand as a more appropriate cost recovery mechanism.
9	Q. Okay. Turning to Page 25 of your testimony. When you
10	refer to DS-0, DS-1 and DS-3 facilities and equipment, are you
11	including digital loop carrier equipment in that group?
12	A. I am basing this analysis on the information that have been
13	provided by Cincinnati Bell within the context of the transport
14	and termination of local traffic study, the reciprocal
15	compensation study, as well as the unbundled dedicated transport
16	studies.
17	Q. So are you including the Fujitsu FACTR equipment that CBT
18	incorporated into its unbundled loop study?
19	A. No, I am not.
20	Q. Would you consider the Fujitsu FACTR equipment to be DSO
21	equipment because that's its ultimate responsibility, to support
22	DS-0 based loops?
23	THE WITNESS: Can I have the question read, please?
24	(Question read back as requested.)
25	THE WITNESS: I will defer the answer to that question

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1 to Mr. Francis. He would be the staff member to ask the 2 question of.

3 BY MS. VAN DUZER:

Q. Turning to Page 26 of your testimony. You extend your
recommendation to include the interface equipment component of
the SONET equipment utilized in various TELRIC studies. Can you
tell me what that means?

8 The SONET equipment have different components within Α. Yes. 9 the SONET multiplexing equipment. They are common equipment and interface equipment. The common equipment are the equipment 10 required regardless how many DS-1, DS-0, DS-3 facilities have 11 been added or dropped at any specific site, but the interface 12 equipment is directly -- the utilization of the interface 13 equipment is directly related to the circuits, the quantity of 14 circuits dropped or added at the specific site, and that's why I 15 16 broke down the fill factors of those equipment to the interface 17 component of it and the common component of the SONET equipment. 18 0. So does that mean all FLM equipment?

19 A. What I have just described is the components of FLM20 equipment.

Q. Is your fill recommendation specific to a piece of equipment or would it differ depending on whether that piece of equipment was being used to provision DS-0, DS-3, DS-1, OC-3, et cetera?

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25 A. My recommendations are specific to the different pieces of
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1	equipment: and if you notice. I have different fill factors for
2	$DS-0S DS-1S DS-3S and OC_3S OC_12S OC_48S$
2	O Turning to Dogo 27 of your togtimony you propose enproving
5	Q. Turning to Page 27 of your cestimony, you propose approving
4	CBT's proposed fill of 70 percent for electronics; is that
5	correct?
6	A. I am recommending the approval of the 70 percent fill
7	factor for SONET facilities, as well as the common common
8	equipment component of the SONET electronics.
9	Q. And on Line 7, you say that SONET is a relatively new
10	technology, correct?
11	A. Correct.
12	Q. In fact, many of CBT's interoffice facilities are not
13	really SONET rings; is that correct?
14	A. I do not believe this would be an accurate representation
15	pursuant to my understanding.
16	Q. Is your understanding that the SONET rings that are
17	contained in the cost studies exist in actuality in CBT's
18	present network?
19	A. Most of it, that's my understanding.
20	Q. Not all of it?
21	A. I believe that the nonSONET facilities included in the cost
22	studies represent the nonSONET facilities that actually exist in
23	Cincinnati Bell's network today. And that was based on a series
24	of responses to staff data requests.
25	Q. So you do agree that Cincinnati Bell's entire network is

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1 not SONET?

2 A. I agree not 100 percent of the network.

Okay. Would you agree that it is irrelevant in a TELRIC 3 Q. proceeding whether or not SONET technology is new for CBT? 4 Yes, I believe that in TELRIC when you, as Cincinnati Bell 5 Α. have done, assumed that all their interoffice facilities are 6 SONET, it is irrelevant if it is new or not. At the same time, 7 the fill factor does not necessarily reflect -- it reflects what 8 is expected to be the fill during the study period, and you take 9 into consideration the expected use of the facility and the 10 capacity included in the study. 11

12 Q. Mr. Francis refers to your testimony with respect to fills 13 for DLC equipment; is that correct?

14 A. Generally, yes.

Q. An you discuss and recommend fills for DLC equipment on Pages -- on Page 26, Lines 13 through 16; is that correct? A. I don't believe that this is correct. I discuss the fill factor for interoffice facilities and its associated electronic equipment. I did not specifically mention the DLC equipment here in my analysis -- or, my discussion.

Q. But this is the portion of your discussion that Mr. Francisis referring to, is that correct, when he is --

23 A. Again, you have to ask Mr. Francis which portion he's

24 referring to; but in response to your question, is that where I

25 am discussing DLC, I am not discussing DLC equipment here,

l	Mr. Francis is referring to my testimony, but which part,
2	Mr. Francis will be better able to answer that.
3	Q. Okay. I'm reading from his Page 25, this probably will
4	clarify it, "For the DLC electronic equipment investments"
5	A. Can you give me time just to find it?
6	Q. Sure.
7	A. What line on Page 25?
8	Q. Line 9. So he's saying there that for the DLC electronic
9	equipment investments that he represents using the same fill
10	factor that will be applied to the interoffice electronic
11	circuit equipment, and then he refers to your testimony, and
12	that portion of your testimony is here on Page 26 of your
13	testimony, correct, Lines 13 through 16?
14	A. That portion talking about the DLC facilities on my
15	testimony on Page 26, Lines 14 and 15, is discussing the DLC
16	facilities and interoffice context and Mr. Francis is referring
17	to that section.
18	Q. Thank you.
19	Now, the DLC systems in the outside plant are OC-3 SONET
20	technology; is that correct?
21	A. I have not looked at or analyzed the DLC equipment.
22	Mr. Francis would be a better person to ask that question.
23	Q. The OC-3 SONET technology is used in the interoffice study;
24	is that correct?
25	A. Yes.

1	Q. Miss Soliman, assume for me that the fill on the OC-3 SONET
2	equipment is lower on the interoffice network than in the
3	outside loop network, or assume for me that staff has
4	recommended that.
5	Can you explain why that would be the case, why staff would
6	recommend fill on the OC-3 SONET equipment that is lower on the
7	interoffice network than in the outside loop network?
8	THE WITNESS: Can I have the question read, please?
9	(Question read back as requested.)
10	THE WITNESS: If I understand the question, you're
11	asking me to assume that the fill factor for interoffice is
12	lower than the loop and then explain why?
13	BY MS. VAN DUZER:
14	Q. Yeah.
15	A. I cannot answer that question. I do not understand the
16	question.
17	Q. Miss Soliman, were you here during Mr. Hart's
18	cross-examination of Dr. Ankum?
19	A. Yes.
20	Q. And do you recall discussion in which Mr. Hart and
21	Dr. Ankum discussed the redesign of ring No. 229, which is an
22	OC-48 ring?
23	A. I recall that discussion, but I do not recall the details.
24	Q. Perhaps I could refresh your recollection a little.
25	Dr. Ankum suggested that the ring could be redesigned by using

three OC-12 rings. I believe he may have demonstrated that on
 the board.

A. I recall several drawings on the board. I recall a
recommendation of redesigning some rings into smaller rings, but
I do not recall the specifics.

Q. During that discussion, Mr. Hart stated, and I'm reading from Page 190 of the March 16th transcript, and I'll just quote it, Line 5. "Now, would you acknowledge as possible that ring 299 that you've been discussing actually has a fill in excess of 70 percent?"

11 A. I do not recall the statement, but if you are reading from12 the transcript, I will accept it subject to check.

13 Q. So would you agree that it's possible for CBT to run the 14 SONET rings at fills that are higher than 70 percent?

15 A. Yes; and as I described earlier in our discussions of the 16 spare facilities, that the 70 percent that Cincinnati Bell

17 proposed and I am recommending represents the fill factor, the 18 average fill factor over the entire network, not necessarily a 19 specific ring, so some rings will have higher fills and some

20 will have lower fills.

Q. And will you agree that if higher fill factors were used,then the cost per DS-0, DS-1 and DS-3 would go down?

A. Are you assuming higher fill factors for the entire networkor on a specific ring?

25 Q. Either.

THE WITNESS: Can I have the question read, please? 1 2 (Question read back as requested.) 3 THE WITNESS: If that fill would represent that higher fill, higher than 70 percent, and would represent the average 4 5 fill factor over the entire network, that would impact the cost 6 of a per DS-0, DS-1 and DS-3. BY MS. VAN DUZER: 7 So then higher fills result in a less costly network; is 8 Q. 9 that correct? Higher fills over the entire network generally results in a 10 Α. lower cost, if you keep the investments fixed and the demand 11 12 fixed, and I -- I do not understand how you keep the demand fixed and you have a higher fill. 13 Are you generally familiar with the FCC's Local Competition 14 0. 15 Order? Α. Yes. 16 17 And I know you're not an attorney, but would you agree with 0. me that the Supreme Court recently reinstated certain portions 18 19 of the order that had been vacated? 20 MR. REILLY: Objection. Calls for a legal conclusion. 21 Very clearly calls for a legal conclusion. She's asking for --22 She's not asking if you're aware did the Supreme Court reverse 23 portions of the FCC order, she's asking if the Supreme Court reversed specific portions of that order in a specific way. 24 Ι 25 think that calls for a legal conclusion.

1	MR. HART: Your Honor, I would join in the objection
2	and note for the record that numerous motions are currently
3	pending before the Eighth Circuit asking that court to actually
4	decide what is left to be reinstated or vacated out of the FCC
5	order, so that's not a done deal either.
6	THE EXAMINER: Okay. Is there some point to having
7	Miss Soliman give an opinion about what the Supreme Court has
8	done?
9	MS. VAN DUZER: Perhaps I could restate the question
10	in a way that isn't objectionable.
11	BY MS. VAN DUZER:
12	Q. Is it your understanding that the TELRIC studies in this
13	proceeding must comply with the FCC's Local Competition Order?
14	MR. REILLY: Objection. Calls for a legal conclusion.
15	I think that's argumentative. That's legal argument for the
16	briefs.
17	THE EXAMINER: Well, she's she's familiar with the
18	FCC order. She can give an opinion about whether she thinks it
19	needs the TELRIC study needs to apply comply with it. So
20	I'll overrule the objection.
21	THE WITNESS: Can I have the question reread, please?
22	(Question read back as requested.)
23	THE WITNESS: Cost studies in this proceeding deal
24	with unbundled network element provisions, costing, pricing,
25	deals with a lot, and as a nonattorney, I do not know which

1 rules are in effect and which are not.

2 BY MS. VAN DUZER:

Q. If Ameritech engineers can run the DLC system according to ACAR at a 96 percent fill, why is it that the same or similar piece of equipment operated by CBT can only be run at a 70 or 80 percent fill?

7 MR. REILLY: Objection. No foundation. Assumes facts 8 not in evidence.

9 MR. HART: I join the objection.

10 MS. VAN DUZER: I think the -- I think the ACAR fills 11 are in evidence.

THE EXAMINER: Well, I think the question that you 12 asked, though, assumes something that may not be in evidence. 13 Ι think the way you phrased your question was that -- that the 14 15 ACAR fills indicate that Ameritech can run its system at that. 16 I'm not sure that that's what the evidence indicates. There's 17 been testimony in this case about what the Commission's decision is related to the ACAR in the Ameritech case. 18 I think Miss Soliman testified, and I think other people have testified, 19 20 about what the Commission's decision actually was based on, 21 maybe not necessarily that it was more or less a default based 22 on what Ameritech had failed to present, but as opposed to any 23 affirmative finding with respect to those fills. So I'll sustain the objection. 24

25 MS. VAN DUZER: Okay.

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1 BY MS. VAN DUZER:

Let me ask you a more generic guestion. If Ameritech and 2 0. CBT were competing in the same city, say Cincinnati, then would 3 4 CBT be forced to achieve the same level of efficiency as Ameritech --5 6 MR. REILLY: Objection. BY MS. VAN DUZER: 7 8 -- in order to compete? Q. THE EXAMINER: What's the basis? 9 MR. REILLY: I don't think there's a foundation for 10 11 it. THE EXAMINER: Let me have the question read back, 12 13 please. 14 (Question read back as requested.) 15 MR. REILLY: If I can expand briefly. I think if 16 you're talking about some -- you're talking about something that can range from every customer to one customer, the combinations 17 You're talking about what -- I assume this relates 18 are endless. 19 to fill factors. So what Ameritech may have to run its system 20 at may be -- you may have lots of -- lots of different factors 21 which -- which would affect management decisions that are not --22 that are not specified in the question. Just competing, I mean, 23 competing for what, under what circumstances? I think has to be specified for the witness to answer it. 24 25 MR. HART: I'll join in the objection, too, and note

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1 that the question doesn't state whether that competition is on a 2 facilities basis, unbundled element resale basis, or a wholesale type resale basis and without that foundation, it's impossible 3 for anyone to answer that question. 4 5 THE EXAMINER: Can you rephrase your question? MS. VAN DUZER: Your Honor --6 THE EXAMINER: I mean, it is -- it is a bit vague at 7 8 minimum, it seems to me. 9 MS. VAN DUZER: I was trying to actually ask the 10 specific question about running their equipment at the same level of efficiency, and now I'm just trying to make it a very 11 general question, given that Miss Soliman is a member of the 12 13 staff and we're talking about opening the markets to 14 competition, and I think that's what all of these cases are 15 about is opening everything to competition. So I asked a very 16 general question, which was if they were competing, wouldn't two 17 carriers who were competing in the same market, if one were more efficient and one less efficient, wouldn't the one that's less 18 19 efficient have to ultimately be as efficient as the more 20 efficient carrier in order to effectively compete. 21 MR. REILLY: If I might just respond. Efficiency 22 itself -- The extent of the efficiency is a result of a number Restraints on one, if they're not the same as the 23 of factors. restraints on the other one, they may be equally efficient with 24 different results on a given factor. 25

THE EXAMINER: Well, as a general economic principle, 1 2 can you answer the question? 3 THE WITNESS: I'll try. I'm sorry, can I have the question -- if you can find 4 it -- reread? 5 THE EXAMINER: Can you restate your question, 6 7 Ms. Van Duzer? 8 MS. VAN DUZER: Yes. BY MS. VAN DUZER: 9 If Ameritech and CBT were competing in the same city, would 10 0. CBT be forced to achieve the same level of efficiency as 11 Ameritech in order to compete with Ameritech? 12 13 MR. REILLY: Objection. 14 MR. HART: Same objection about no statement as to whether this is competing on separate facilities, each of 15 16 them would build or on some other basis. Without that 17 clarification, I don't think the question is proper. THE EXAMINER: All right. Well, as a general economic 18 principle, if you can answer the question, I'll overrule it. 19 20 THE WITNESS: If you are -- First, without defining to 21 me what you mean by efficiency, it's going to be a very hard 22 question to answer; however, if your question -- the efficiency 23 means the same utilization factor, the same fill factor, if 24 that's the question, it is not a one-to-one relationship, it depends on -- although they are operating in the same market, 25

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1	using the same piece of equipment, there are different factors
2	that can affect how what's the level of utilization, number
3	of customers that each one is serving, the growth in demand, the
4	price they pay the vendor to obtain that piece of equipment,
5	including any discount, their engineering labor to install the
6	equipment. All those factors can affect it. Although they may
7	be equally efficient in utilizing the sources, you might have a
8	different utilization factor just because of all those factors.
9	BY MS. VAN DUZER:
10	Q. Okay. Moving on to Page 29 of your testimony. Would you
11	define usable capacity in the same way that Mr. Francis does on
12	Page 28 of his testimony?
13	A. Just a second, I'll get it out.
14	(Pause.)
15	Generally, yes.
16	Q. So a piece of equipment would never be used beyond its
17	usable capacity; is that correct? Couldn't be used beyond its
18	usable capacity, really.
19	A. Taking into account engineering consideration, you cannot
20	use a piece of equipment beyond its designed capacity.
21	Q. Or it's usable capacity?
22	A. Usable capacity is a little bit different than designed
23	capacity, because usable capacity in different pieces of
24	equipment would give a leeway of how you administer the network,
25	what is the service quality level that you want to achieve from

the use of this piece of equipment. That can affect the 1 2 administrative spare of that piece of equipment, so in my mind 3 there is a distinction between the usable capacity and the 4 designed capacity. But the amount needed for administrative purposes, that's 5 0. necessary, right, for administrative purposes? 6 It is necessary, but -- and I assume you're talking 7 Α. 8 generically here, because different pieces of equipment you have a different flexibility of what would you reserve for 9 administrative purposes. Depends on the service quality you are 10 to provide and the change in the network -- in the environment 11 that you are operating in. 12 13 I'm trying to find an example here. But if you are -- if 14 you want to operate at or if you are -- for a certain area you are serving this certain area with a very high level of fill 15 16 factor because of the demand change, you will need more for 17 administration in this network or is it critical for you to reserve for administration then if you have more spare 18 19 facilities. 20 So the administration of the network will be -- it's not

20 So the administration of the network will be -- it's not 21 100 percent discretionary, but my understanding is it depends on 22 the piece of equipment and the service standards that you are 23 looking for providing.

Q. But when you're operating at usable capacity, which is the maximum physical capacity engineered into the net- -- in the

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1 network equipment --

2 MR. REILLY: Objection. I don't think that was how Miss Soliman characterized it. 3 4 MS. VAN DUZER: I'm reading from Mr. Francis' 5 testimony that she agreed with. THE WITNESS: I said generally. I'm sorry. 6 MR. REILLY: I believe Miss Soliman distinguished 7 between designed capacity and usable capacity. And Miss Soliman 8 defined them. Designed capacity is the maximum engineered 9 capacity of the system, usable capacity is the capacity assuming 10 administrative necessities. 11 12 MS. VAN DUZER: I haven't finished my question, so I guess I'm not sure what he's objecting to. 13 14 THE EXAMINER: Go ahead and ask the question. 15 MR. REILLY: Okay. 16 BY MS. VAN DUZER: If you're operating at usable capacity, which is the 17 0. maximum physical capacity engineered in the network equipment, 18 19 then at that point you would have a certain amount of 20 administrative functioning that has to take place also; is that 21 correct? 22 MR. HART: Object to the question. She has misread 23 the testimony and left out an important qualification if she 24 intended to read from Mr. Francis' testimony. 25 THE EXAMINER: Well, she can ask the question in

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1	general. She didn't paraphrase the actual question that was
2	just posed with this in Mr. Francis' testimony.
3	Can you answer the question?
4	THE WITNESS: I will answer by saying I do not this
5	is not a good representation or accurate representation of what
6	I have just explained.
7	BY MS. VAN DUZER:
8	Q. Miss Soliman, is it your understanding that the fill
9	factors included in Ameritech's ACAR are usable capacity factors
10	as you define them?
11	A. That's my understanding, yes.
12	(Pause.)
13	Q. And is the purpose of ACAR to provide guidance as to how
14	Ameritech can position itself as a least-cost provider of
15	services in a competitive environment?
16	MR. HART: Objection. Irrelevance what Ameritech
17	does.
18	THE EXAMINER: Miss Van Duzer?
19	MS. VAN DUZER: Her testimony talks about and it makes
20	recommendations about the use of ACAR factors of fill
21	factors, I apologize.
22	THE EXAMINER: Yeah. Your question went beyond that
23	to what Ameritech achieved.
24	MS. VAN DUZER: What the purpose of the ACAR was for
25	Ameritech, what her understanding of that was.
THE EXAMINER: All right. I'll overrule it to get 1 2 this moving along. 3 Can you answer the question, your understanding of ACAR? 4 5 THE WITNESS: Can I clarify if I have the right 6 understanding of the question, or no? 7 THE EXAMINER: Sure. 8 THE WITNESS: Okay. Are you asking me how Ameritech 9 uses ACAR or what ACAR have been intended to be used by 10 Ameritech? 11 BY MS. VAN DUZER: I would ask you both of those questions. How Ameritech 12 Q. 13 uses ACAR. 14 During Ameritech's -- Up to the time of the Ameritech Α. 15 TELRIC proceeding, my understanding was Ameritech used to use ACAR for their LRSIC studies, long-run incremental cost studies, 16 17 to develop a floor price for its retail services, but if your 18 question is how the ACAR was structured and what was the intent, I cannot answer that. It's up -- Ask Ameritech. 19 Okay. Let's turn to Page 52 of your testimony. Starting 20 0. 21 on Line 17 where you say, "First, I would point out that I agree 22 with CBT's assumptions that SONET ring architecture should be 23 the forward-looking network architecture for conducting the TELRIC studies for all of its unbundled entrance facilities". 24 25 Α. Yes.

Q. Is your agreement based upon the idea that the SONET ring
 must be cable diverse or could the SONET ring be -- Let me just
 stop.

4 Is your agreement based on the idea that the SONET ring 5 must be cable diverse?

A. Cincinnati Bell's cost study assumed that cable redundancy,
which is the use of four fibers to provide each SONET, based on
my experience throughout my career here in the Commission,

9 competitors always request diversity and redundancy. I have not10 seen a competitor that does not ask for this capability.

11 And based on that, I assume that meets the future demand of 12 all the competitors, and based on that, it is reasonable to make 13 that assumption within the TELRIC study.

14 Q. Could the SONET ring be collapsed?

15 A. Yes.

16 Q. And if it were, would you still agree with CBT's

17 assumptions that SONET ring architecture should be the

18 forward-looking network architecture for conducting TELRIC

19 studies?

A. A collapsed SONET ring is still a SONET ring, it's just the fiber, instead of having two opposite directions of transmission and receiving within the same fiber cable, it's not indifferent to fiber cable, but it is still a SONET architecture. That's my understanding.

25 If technology existed that allowed the provision of at Ο.

1	least DS-1 level entrance facilities at a much lower cost using
2	existing copper plant, for example, HDSL technology, why
3	wouldn't such a technology better meet the least-cost parameter
4	of the TELRIC methodology?
5	THE WITNESS: Can I have that question reread, please?
6	(Question read back as requested.)
7	THE WITNESS: First, technically, I don't know if you
8	can provision entrance facilities based on the HDSL. I have not
9	personally investigated if that can be done or not.
10	Second is, you can provide that, but you cannot get
11	diversity or survivability that you will get with the SONET
12	technology.
13	And, again, as as my experience is that carriers
14	need this capability for their interoffice traffic, which
15	includes the entrance facilities.
16	BY MS. VAN DUZER:
17	Q. So for that reason, you would not think that such a
18	technology would better meet the least-cost parameter of the
19	TELRIC methodology?
20	A. I think that the least cost and the most efficient
21	requirement in developing a TELRIC study is not to be considered
22	without considering the needs of the carriers and how they will
23	utilize it and today's requirement for interconnection, at the
24	same time, if the carrier would not require redundancy and
25	survivability and do not need to utilize a SONET, I think

1	nothing would prohibit them from requesting such facilities
2	through negotiations with other carriers, and based on that, the
3	incumbent would have to develop a different cost study to handle
4	that request, but this is the what you can call individual
5	case basis, but here, my understanding is what the TELRICs are
6	evaluating here is to meet the requirements of different
7	competitors of unbundled dedicated transport.
8	Q. Okay. On Page 53 of your testimony, could you explain why
9	TELRIC pricing for newly constructed point-to-point entrance
10	facilities should be determined in the future?
11	A. It is my understanding of the unbundling requirements of
12	the FCC and the PUCO, is that the incumbent LECs are required to
13	provide unbundled dedicated transports only at their existing
14	facilities, and when you price the unbundled dedicated transport
15	of the existing facilities you set all your assumptions,
16	including investments, fill factors and everything based on the
17	existing facilities. Newly constructed entrance facilities
18	would have different fill factors and this, in my mind, would be
19	more appropriately handled on an individual case basis because
20	also it can be for two different purposes, as I explained,
21	either to allow new competitors access to unbundled network
22	elements, and in that case, the NEC would bear the whole cost of
23	that dedicated facility, or if it is for exchange of traffic,
24	each each carrier will bear their own cost based on if it is
25	through a meet point arrangement or not.

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1 (Pause.)

Q. So you're saying that -- you're recommending that for future point-to-point facilities, there would be a different rate element established?

Not future, newly constructed entrance facilities, but if 5 Α. MCI requests an entrance facility from CBT, that CBT have the 6 capacity today to provide, and they are not constructing a new 7 8 facility, point-to-point entrance facility, Cincinnati Bell will charge the out -- the rate that the Commission will set based on 9 that proceeding, but if MCI requests a new -- a new construction 10 of a SONET ring, at that point of time it's going to be priced 11 on an individual case basis. 12

Q. So in the interim, they would be charged the current existing rate until the new rate was established, if there were a -- if there were a new point-to-point facility being built or constructed?

A. Are you asking if Cincinnati Bell would construct new
entrance facility, SONET ring for entrance facilities, and you
start using it, what rate they will charge until they come
before the Commission?

21 Q. Yes.

A. Yes, you will use this as the interim rate, however, they
would come with a new study just for this SONET -- newly
constructed SONET ring.

25 Q. Okay. Moving on to collocation. You're recommending the

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approval of CBT's common area factors; is that correct? 1 Yes. 2 Α. 3 And you're aware that the factors vary across the four 0. 4 central offices that CBT studied, correct? 5 Α. Yes. Would you agree that the variation is caused by CBT's 6 0. 7 existing structures? 8 Α. Yes. Is it your opinion under TELRIC that the entire network has 9 Q. to be reconfigured to be optimally efficient except for the 10 central office spaces? Can these central office spaces be 11 12 embedded? 13 THE WITNESS: Can you read that question again, 14 please? 15 (Question read back as requested.) 16 THE WITNESS: Based on the TELRICs, the incumbents 17 have to provide to develop a cost that represents the most efficient technology of their -- deployed in their current wire 18 19 center locations; however, and I am reading from the FCC's First 20 Report and Order, Paragraph 685, discussing how the incumbents 21 would reflect what are the costs that they expect to incur on a forward-looking basis, and I would read starting -- actually, 22 the second sentence -- or, the first sentence that reads that 23 24 the cost would be "...a forward-looking economic cost 25 methodology based on the most efficient technology deployed in

the incumbent LEC's current wire center locations. 1 This 2 approach mitigates incumbent LECs' concerns that a forward-looking pricing methodology ignores existing network 3 design, while basing prices on efficient, new technology that is 4 compatible with the existing infrastructure. This benchmark of 5 forward-looking cost and existing network design most closely 6 7 represents the incremental costs that incumbents actually expect to incur in making network elements available to new entrants". 8

I read that because my understanding is that in 9 10 developing a TELRIC study, you maintain the existing wire center location, but you try to develop what would be the cost that the 11 incumbent LEC would actually incur on a forward-looking basis to 12 13 provide UNEs and collocation in this scenario, and the FCC in its rules and the PUCO Commission have decided that the rate 14 structure-wise and rate level in determining for collocation, it 15 refer to the FCC expanded interconnection rules, which was set 16 in CC Docket 91-141, and in that docket the FCC have established 17 18 the rate elements to be charged for physical collocation, and among those rate elements it allowed incumbents to deaverage, 19 20 develop a rate based on a central office specific; however, it 21 required the incumbent to charge all collocators within that central office the same rate, but it can differ by central 22 office. 23

It allowed the incumbents to set a rate element that would recover the preparation of the central office for

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1	collocation, which is the COBO charge, but your question is
2	regarding to the floor space, the common area factor, and to
3	determine the common area factor based on central office
4	specific, I believe is consistent with the Commission's
5	guidelines and the FCC requirement, the FCC and the Commission
6	allowed them to develop a central office specific rate based on
7	the central office, their the actual cost that they will
8	incur on a forward-looking basis of providing collocation in a
9	specific central office.
10	BY MS. VAN DUZER:
11	Q. Okay. On Page 39, you state that the COBO charge
12	represents "a reasonable estimate of the forward-looking costs
13	of providing collocation services based on the most efficient
14	network design and technology assuming the ILEC's current wire
15	center wire center locations". Excuse me.
16	A. This is Page 39?
17	Q. Yes.
18	A. What line? Can you tell me the line where you're
19	Q. Look at the top of the page.
20	A. Yes.
21	Q. Have you investigated what costs are recovered in the R.S.
22	Means Building Cost Construction Data figure of \$135?
23	A. Are you done?
24	Q. Yes.
25	THE WITNESS: Okay. Can I have the question read,

1 please?

2 (Question read back as requested.) THE WITNESS: Yes, I have done that; not within this 3 proceeding, but during a prior proceeding. 4 BY MS. VAN DUZER: 5 6 Do you know exactly what costs are included in that figure? Ο. 7 Α. I cannot tell you now from the top of my head the 8 itemization of all the costs included in that figure, but 9 generally, I can explain to you that it represents the cost 10 of -- And I'm just looking at the R.S. Means publication that have been provided as part of the collocation study. 11 12 This cost would represent the cost of constructing the 13 central offices within the costs that have been reported by 14 different incumbent LECs within the last 10 years of building 15 central offices in their serving area. This cost, pursuant to 16 the R.S. Means Building Construction Cost Data, it does not include architectural fee or land costs, but all other costs to 17 18 build a central office. 19 Would you agree that if MCI and other new entrants were to Ο. build a new central office space then, by definition, the R.S. 20 21 Means data would be a good approximation of how much that space 22 would cost on a per square foot basis? 23 It would be a good estimate of the cost that any carrier, Α. 24 incumbent or competitive carrier, the cost that they would incur 25 to build a single-tenant central office building without the

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1 architectural fee or land cost.

Q. Do you have any reason to think that it would cost more per square foot to build a multi-tenant office than a single-tenant office?

5 A. Yes.

6 Q. Why do you think it would cost more per square foot to7 build a multi-tenant office?

First, I want to make sure that I am not an architectural 8 Α. 9 engineer; however, it is my understanding, if you have a multi-tenant -- if you are building a multi-tenant building, you 10 would have to consider partitioning between tenants, if they 11 12 would need specific security arrangements, you have to consider 13 that, you have to consider different levels of environmental conditioning based on the requirements of the safety codes, you 14 15 have to consider -- I just -- I can't think of more examples, but you have to consider all those factors in designing the 16 building and building it. 17

Q. Miss Soliman, are you able to point to anything in the FCC's orders that would support your position -- your position that fills are specific to companies and not to pieces of technology?

22 A. I have a two-part answer for that.

First, I would point to the FCC's and the Commission's definition, which are consistent, definition of a fill factor, that it represents the portion of the facilities that will be

1	used by the network, that will be filled with the network usage,
2	and the FCC have and the Act, my understanding is, requiring
3	each incumbent to develop their costs. It did not require one
4	cost to represent all incumbents' costs, one rate to represent
5	all incumbents' costs, so when you're evaluating the portion of
6	the network that will be filled with the network usage, you look
7	at each each carrier's network separately, because they have
8	different characteristics based on their demand, geographic
9	location, type of equipment, prices, labor rates, everything.
10	The second part of my answer is, I cannot find anything in
11	the Act or the FCC rules or the Commission's guideline that says
12	it's not a company specific.
13	Q. And nothing that says that it is?
14	A. That's right; nothing says it is and nothing says it's not.
15	MS. VAN DUZER: We have no further questions, your
16	Honor.
17	THE EXAMINER: Okay. Thank you.
18	Do you want to do redirect?
19	MR. REILLY: Yes, we will want to do redirect. We
20	want to continue now or do we want to break?
21	THE EXAMINER: Let's go off the record.
22	(Discussion held off the record.)
23	(Luncheon recess taken.)
24	
25	

MC GINNIS & ASSOCIATES, INC. COLUMBUS, OHIO (614) 431-1344 PROCEEDINGS 1 2 _ _ ~ 3 Wednesday, March 24, 1999 Afternoon Session 4 5 _ _ _ _ б THE EXAMINER: All right. Let's go back on the 7 record. Mr. Reilly, redirect. 8 9 MR. REILLY: Thank you, your Honor. 10 - - -REDIRECT EXAMINATION 11 BY MR. REILLY: 12 13 Ο. Miss Soliman, I'd like to direct you to Page 27 of your 14 testimony, the discussion in the paragraph beginning --15 running -- running between Lines 7 and 14. You're discussing the fill factor for interoffice transport, are you not? 16 17 Α. I'm discussing the fill factor for SONET rings and common 18 equipment component of the SONET rings within the interoffice 19 transport. 20 Q. All right. And you recommend a fill factor of 70 percent; 21 is that correct? 22 Α. Yes. 23 Would you tell us the basis for that fill factor? Q. 24 Yes. That was based on a response from Cincinnati Bell to Α. 25 a dat- -- Staff Data Request 120 where I asked about the support

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for this fill factor, and Cincinnati Bell have responded that
the current fill factor for OC3 and 12 rings is runs between
46 and 52 percent currently, and they project it to be 70
percent over the economic life of the equipment and the ring;
however, evaluating this and evaluating the level of competition
for interoffice transport in Cincinnati Bell's area, I
believe I found it to be reasonable to adopt the 70 percent
fill factor proposal.
MR. REILLY: Okay. We have nothing further.
THE EXAMINER: All right. Mr. Hart?
MR. HART: Nothing.
THE EXAMINER: Miss Van Duzer?
MS. VAN DUZER: Nothing.
THE EXAMINER: All right. Thank you, Miss Soliman.
You're excused.
THE WITNESS: Thank you.
(Witness excused.)
THE EXAMINER: Any objection to admission of Staff
Exhibits 3 and 3A?
MR. HART: NO.
THE EXAMINER: Okay. Those exhibits will be admitted
into the record.
Thereupon, Staff Exhibit Nos. 3 and 3A
were received into evidence.

1	
2	Thereupon, Staff Exhibit Nos. 4, 4A and 5
3	were marked for purposes of identification.
4	
5	THE EXAMINER: Okay. Will you raise your right hand?
6	(Witness placed under oath.)
7	THE EXAMINER: Okay. Mr. Reilly.
8	MR. REILLY: Thank you, your Honor.
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1	ALLEN R. FRANCIS
2	of lawful age, being first duly placed under oath, as prescribed
3	by law, was examined and testified as follows:
4	DIRECT EXAMINATION
5	BY MR. REILLY:
6	Q. Would you state your name, and spell it for the record,
7	spell your last name for the record?
8	A. Yes. My name is Allen R. Francis, spelled F-r-a-n-c-i-s.
9	Q. Mr. Francis, I've laid before you on the witness stand a
10	document marked staff Exhibit 5 and a document marked Staff
11	Exhibit Excuse me. Strike that.
12	I've laid before you a document marked Staff Exhibit 4 and
13	4A. Can you identify Can you find those?
14	A. Yes, I have them in front of me.
15	Q. Okay. Can you tell me what those two documents are?
16	A. The Staff Exhibit 4 is my confidential version of my
17	testimony, direct testimony, and Exhibit 4A is the public
18	version of my testimony.
19	Q. Were Staff Exhibit 4 and Staff Exhibit 4A prepared by you
20	or under your supervision?
21	A. Yes, they were.
22	Q. All right. Do you have any changes or corrections you
23	would like to make to Staff Exhibit 4 or 4A?
24	A. Yes, I have a few few changes.
25	Q. Please elaborate.

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1	A. On Page 13, on Line 3, it looks like I inadvertently
2	included the word "provisioning" a couple different times; so
3	what I would like to do on Line 3 is remove the word
4	"provisioning" and the comma before the word "grooming".
5	Q. Please continue.
6	A. On Page 14, on Line 14, before the word "system", I'd like
7	to include the two words "electronic interface"; so that should
8	read "CBT's OSS electronic interface system".
9	On Page 19, on Line 7, I would like to correct a typo. The
10	last word on that line, "form", should be "from", f-r-o-m.
11	On Page 20, Line excuse me, Line 15 and 16, I would like
12	to take out the words "or any extensions to CBT's plan".
13	And, also, at the very bottom of that page, on Line 21 and
14	22, it looks like there's a pagination problem. It should
15	say the last word on 21 should be "staff's", apostrophe "s".
16	You will notice the apostrophe "s" was carried to the next line.
17	Since I'm on that page, we might as well make that correction.
18	And I believe one last correction would be on Page 37,
19	Line 2, and the word "switch" towards the end of that line
20	between "office" and "prior" should be removed; so it should
21	state "the universal DLC system terminates the loops to the main
22	distribution frame, MDF, within the central office prior to
23	being", so on and so forth.
24	I believe that's all the corrections I would have.
25	Q. All right. Mr. Francis, if I were to ask you the questions

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1	as ti	hey appear in Staff Exhibit 4, would your 4 and 4A, would
2	your	answers be the same as they appear in Staff Exhibit 4 and
3	4A?	
4	A.	Yes, they would.
5	Q.	All right. Mr. Francis, I've laid another piece of paper
6	up a	t the witness stand marked Staff Exhibit 5. Can you find
7	that	?
8	A.	Yes, I have it.
9	Q.	All right. And could you do you know who prepared it?
10	А.	Yes, I do. I prepared it.
11	Q.	All right. Can you tell us what that is?
12	Α.	Yes, I can. I referred in my testimony to to using a
13	vari	ety of different states' fill factors to help me in my
14	anal	ysis of a reasonable fill factor.
15	Q.	Would that be the reference on Page 25, Line 17?
16	A.	I believe it is, but let me check. One second.
17		Yes, Page 25, Line 17.
18	Q.	I'm sorry to interrupt. Please go on.
19	Α.	Yes. This was this was a document that was not
20	orig	inally attached as an exhibit, but now I would like to
21	prov	ide it to the parties for their review and also for the
22	reco	rd for the Commission's review.
23	Q.	Just so we can understand what the what's been marked
24	for	identification as Staff Exhibit 5 represents, I notice that
25	at t	he top of the document running from left to right across the

top of the document are four columns. Do you see those columns 1 2 one is marked "Company", one is marked "State"? Α. 3 Yes One is marked "Distribution", and one is marked "Copper 4 Ο. 5 Feeder"? 6 Α. Yes. 7 Could you tell us what is reflected in each of those 0. columns? 8 Yes. I sure will try. In the first column marked 9 Α. 10 "Company", that is the ILEC in which I actually try to or actually did get into a -- a -- a document to determine what 11 specific states had determined these company's fill factors for 12 13 distribution and copper feeder to be. And I can elaborate on how I got those, and I'm sure I'll be asked that later. 14 15 The second column, of course, is the -- is the "State" column, and that just represents all the states that I was able 16 to obtain this information. The first line, you'll notice it 17 says "all states". Well, that is in reference to Ameritech 18 19 states with the exception of Ohio. 20 And then in the third column would be what I had found for 21 these states in regard to the distribution fill. 22 And also in the fourth column is the copper feeder column, and that -- those numbers represent what I had -- what I had 23 found the fill factor for -- I'm sorry, for copper feeder to be 24 for those states. 25

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Now, just so I'm clear, under the "Company" column, when 1 Ο. 2 you say Ameritech states --3 Α. Yes. 4 -- what you're talking about is the states in which Ο. 5 Ameritech, I think it's corp., has subsidiaries? 6 That would be Illinois, Wisconsin, Michigan and Α. Yes. 7 Indiana. All right. And then reading down, and where in the 8 Ο. 9 distribution column you provide two numbers, 70 percent to 85 10 percent. Yes, that would reflect the range of those four 11 Α. Yes. states. And maybe now would be a good time to explain why this 12 was done. 13 It is my understanding that these numbers were provided to 14 15 me by Ameritech, but they were provided to me under the understanding that the state-specific numbers are confidential, 16 but I did get their permission to use the range. So I can't 17 reveal what state is what, but they did give me permission to 18 reveal the range that -- that I'm revealing. 19 Okay. The lowest fill any state is approved would be 70 20 Ο. 21 percent and the highest fill any state is approved would be 85 22 percent; is that correct? That's correct. And that's shown at the bottom of those 23 Α. 24 factors in the range, yes. 25 THE EXAMINER: That's just for Ameritech.

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- 1 BY MR. REILLY:
- 2 Q. That's just for Ameritech?
- 3 A. I apologize. I must have misheard you.
- 4 Q. All right. Now, in -- for copper feeder also, Ameritech
- 5 provides a range, is that not correct?
- 6 A. That's correct.
- 7 Q. Okay. Going down to the next company, BellSouth as an
- 8 example, BellSouth is the next company?
- 9 A. Yes.
- 10 Q. And there is a distribution fill identified for BellSouth,
- 11 is that not correct?
- 12 A. That is correct.

13 Q. And there is, as I understand your description, there's

- 14 copper feeder fill for BellSouth?
- 15 A. That's correct.
- Q. And the state which approved those fills is shown in the state column; is that correct, and that state would be Alabama in BellSouth's case?
- 19 A. Yes, that would be correct.
- Q. All right. And at the bottom of the tables you developed,
 you have a -- you have a -- an entry you call "Range". Do you
- 22 see that?
- 23 A. Yes.
- 24 Q. Could you tell us what that is?
- 25 A. Yes. This is what I actually misspoke to a minute ago when

l	I misunderstood your question. The range is represents
2	simply the total range of the fill factors that I was able to
3	find. For an example, it looks to me that Southwest Bell was at
4	40 percent, which would be the bottom end of the range, and so I
5	go through the entire states and provide a range. And for
б	distribution, it was 40 to 85 percent; and for copper, it was 60
7	to 90 percent.
8	Q. Okay. And then under "Range", you have a section
9	identified as "Sources". Do you see that?
10	A. Yes, I do.
11	Q. Can you tell us what's contained in that section?
12	A. Well, what I'm attempting to do here is to demonstrate or
13	provide the resource or the source that I used to to gain
14	this information. And I think that you'll notice that First
15	of all, let me say, with the exception of Ameritech, all of
16	this all of these fill factors are in public documents. Some
17	of these I got from the National Regulatory Research Institute's
18	web site, which takes you into different states' orders, and
19	some other examples would be that I managed to get into the
20	states myself and find orders, or there is a couple cases where
21	actually we had the orders already here at the Commission and I
22	just reviewed them here at the Commission.
23	MR. REILLY: Your Honor, at this time, that's all I
24	have. We would present Mr. Francis for cross-examination and
25	move the introduction of Staff Exhibits 4, 4A and 5.

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THE EXAMINER: All right. Mr. Hart. 1 2 MR. HART: Thank you, your Honor. CROSS - EXAMINATION 3 BY MR. HART: 4 Afternoon, Mr. Francis. 5 0. Good afternoon. б Α. 7 Q. I'm sure you've been waiting for this day for some time. It's been a long time coming, yes. 8 Α. I want to turn to Page 4 of your testimony, which is the 9 Ο. 10 first topic you address specifically of new costs. And let's just explore this generally first before I ask you about 11 specific testimony. I understand when you reviewed Cincinnati 12 13 Bell's initial annual charge factor calculations, you discovered 14 that there was a category there called new costs? That's correct. 15 Α. And within those new costs were some costs that were 16 Ο. 17 estimates of the expense necessary to make OSS functions available to other companies? 18 When you say "some costs", when I looked at it, it looked 19 Α. 20 to me probably all of the costs in that document were, in some 21 fashion, related to OSS. Okay. Upon further review, have you determined that there 22 Ο. are perhaps different types of expenses in that category? 23 I haven't been able to determine that. I have -- I've 24 Α. looked at it, I've reviewed it, I looked at the supporting 25

1	documents, but I haven't been able to determine if there is any
2	of those new costs that would not be related to OSS.
3	Q. Okay. Now, even though the costs are related to OSS, do
4	you have an opinion that those costs maybe should be recovered
5	in different ways depending on the nature of the cost?
6	A. Just a clarification, are you asking me my My opinion
7	right now is I have no belief that they're not OSS; so based on
8	that, how would they be recovered, is that your question?
9	Q. Let me try to ask it a little better.
10	A. Okay.
11	Q. Were you here for Miss Soliman's testimony this morning?
12	A. I actually missed I was here for most of it, but I think
13	I missed her entire discussion on OSS, if that's what you're
14	asking.
15	Q. Okay. My understanding is she looked at costs in three
16	categories, one was costs that ought to remain in annual charge
17	factors as perhaps a direct administrative cost, and there was a
18	second category that might be attributable to unbundled elements
19	as a whole, including CBT and NECs, and there was a third
20	category she felt could be recovered entirely from NECs. Are
21	you familiar with that analysis?
22	A. I am somewhat familiar with her recommendation, yes.
23	Q. Okay. What I'm trying to understand is where your
24	testimony picks up from that general scheme of three categories
25	of costs and which of those categories you're addressing, if

1 any?

2	A. Yes. Well, I'll attempt to answer that the best that I can
3	because this is a difficult a difficult area because I think
4	it's a brand new area and we're all trying to find our way
5	perhaps in this area. Miss Soliman is, by far, the expert in
6	this area for staff, but what I'm attempting to do is or,
7	what I was attempting to do is just solely identify within the
8	new cost component of the ACF the proposed new cost component
9	of the ACF to identify first what those functionalities were
10	and, second, whether or not the costs associated with those
11	functionalities are reasonable costs and actually how those
12	costs then should be recovered, I think, would actually go back
13	into Miss Soliman's recommendation on her OSS and the three
14	different, I guess you could call them, components or three
15	different ways to recover OSS costs.
16	Q. Okay. So you're trying to quantify rather than qualify
17	what the costs are?
18	A. I think that's correct, yes.
19	Q. I think you make reference to Staff Data Request 90 and, I
20	believe, Staff Data Request No. 52 also addressed this issue.

21 Is it your testimony that the information from those data

22 requests was insufficient for you to determine what the costs23 were?

24 A. Yes. Unfortunately, that is my opinion, yes.

25 Q. Okay. And you understand that the cost study that you've

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1	reviewed was performed more than two years ago?
2	A. Yes, I'm aware of that.
З	Q. And that at that time many of those costs may not have
4	actually even been incurred?
5	A. Well, that's that's possible, sure.
6	Q. Okay. I'm trying to get at what your recommendation is
7	here and I I kind of reading between the lines, I believe
8	what you're saying is that Cincinnati Bell, when it does
9	compliance runs of its its cost studies, needs to better
10	document what it is it is contending are the OSS costs, is
11	that fair?
12	A. That's fair. And if I may add add to it a little bit,
13	and I don't want to get into Miss Soliman's issues here, but I
14	think that you have an opportunity to well, you should you
15	have an opportunity here because the recommendation is that you
16	need to do an OSS an access to OSS TELRIC, and so you and
17	we have not seen a TELRIC of that sort. So I think this is an
18	opportunity for you to come back with that TELRIC and to support
19	those costs. Now, if those costs happen to be the same costs
20	that I'm looking at in the ACF, then then you need to support
21	those costs.
22	O. Okav.

A. If those costs are to be recovered in one of the other two
components that she referred to, then they need to be supported
in -- in the manner that she thinks they should be recovered.

Okay. Now, are you commenting only on the OSS costs 1 0. 2 themselves as opposed to all three categories? 3 "All three categories" being? Α. 4 Well, costs that maybe should go in an ACF, costs that Ο. could be directly assigned to a UNE, and the third category 5 6 being those which are stand-alone OSS? 7 Of the new costs component in the ACF, I'm only -- my -- my Α. testimony is that I only was to look at the functionality of 8 9 those components and the costs associated with that 10 functionality and determine whether or not the functionality was -- would support it and the cost would support it. 11 And 12 then, I guess, from there then, I guess you could say, then pass it over to Miss Soliman to say, okay, you know, in an OSS --13 access to OSS TELRIC, how would you handle these costs. 14 15 Okay. You may have answered my next question, which was 0. when we do this OSS study, it's not clear to me what it is we're 16 17 studying, as I understand that OSS systems do a variety of 18 things. 19 And my question is: Do you envision that there's going to

20 be an OSS rate element or are there going to be multiple rate 21 elements depending on the use to which the OSS is put? 22 A. I think this is a fine line between maybe what I'm 23 attempting to recommend here and then actually what Nadia 24 Soliman is recommending in her OSS testimony. I -- my testimony 25 and my recommendation would -- would be -- Well, I'm sorry, I

was thinking of another piece of the recommendation. 1 You know, I think I just confused the question. 2 Could I hear the guestion or could you repeat it for me? 3 4 Ο. Sure. 5 Α. I think I was thinking of another piece of the testimony. 6 0. Let me try. Getting ready to give you the wrong answer, I think. 7 Α. There's general discussion in your testimony about doing an 8 Ο. 9 OSS cost study. And we're all kind of treading on new ground 10 here, you and I together. I'm trying to understand what that study is attempting to measure and is OSS a single thing that 11 we're pricing or are there different uses of OSS that maybe are 12 13 separate rate elements that need to be individually priced? 14 Α. Okay. And I want to be real careful here because I really 15 think this is going into Miss Soliman's testimony, but I think 16 in some circumstances within -- within my studies that I reviewed, some of those things may just overlap. And let me 17 18 explain that. 19 I think that the three components that you're going to have 20 access to OSS, I think Miss Soliman is best to explain what that 21 is, how that can be recovered, but you're probably also going to 22 have some OSS costs or costs related to OSS that may be, as I 23 understand her testimony, that may be related to your current

OSS system that you use for providing services yourself, then a third one would be those OSS systems that need to be modified so

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1	that you can provide those services to competitors; so those are
2	the three categories. So I I'm not here to say that they all
3	go into one category or the other or which ones go here or which
4	ones go there. I think it's maybe I don't know. Maybe
5	that's to be seen when we see the study itself.
6	Q. Okay. Just one follow up to that. Give you an example.
7	One of the functions of the OSS interface is to be able to do
8	preorder investigations of what facilities might be available or
9	what services might be available. I'll contrast that with an
10	actual order that might be placed using an electronic interface.
11	Would you recommend that the cost study treat those two
12	functionalities as separate items or are they somehow part of
13	the same study? And if you can't answer, that's fine?
14	A. I don't know. I just don't know. It's getting a little
15	deeper than what I've been able to get with OSS.
16	Q. Miss Soliman dished some questions to you about OSS; so
17	that's fair.
18	A. Did she?
19	(Laughter.)
20	Q. Now, on Page 6, Line 16 through 20, I'm kind of giving you
21	a general area there.
22	A. Okay.
23	Q. I assume you're suggesting that costs be recovered
24	differently depending on whether they're one-time costs or
25	recurring costs?

1 A. Yes. I think I am.

2	Q. Okay. I asked Miss Soliman a little bit about this this
3	morning and the question I had was for the one-time costs, you
4	recommend that they only be recovered for some period of time.
5	I'm trying to get a little bit of understanding as to what you
6	recommend as the mechanism for doing that, like what is the
7	period of time and how do we spread it out, et cetera?
8	A. Once again, this section, I'm not familiar with what
9	Miss Soliman testified to. This is totally on my own.
10	Q. Okay.
11	A. We didn't talk about this and and but the way I look
12	at this is there's two reasonable options here; one would be
13	to and what I'm referring to here is those costs that are not
14	OSS related, I believe, is what I'm referring to here, if I'm on
15	the right page.
16	Q. You're correct.
17	A. Okay. And to the extent that that were the case, then I
18	think that it would be reasonable one reasonable alternative
19	would be to include them in the ACF, but only for a period of
20	time because these are, in my opinion, at least what I was able
21	to discover in looking at this or at least the assumption would
22	be because we're talking about these new costs are those that
23	are one-time, upfront costs. And it doesn't seem to be
24	reasonable that these should go into an ACF to be recovered on a
25	recurring basis indefinitely.

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l	I think you're entitled to recover the costs, but I think
2	once they're recovered, you shouldn't be able to charge for them
3	any longer than what's necessary to recover it. I don't know
4	what that time period is; so I think I'm suggesting that CBT
5	come up with a method to track the revenues associated with
6	recovering these costs, and then at that point in time that you
7	would want to adjust your ACF calculation.
8	Q. I see. So what you're suggesting is that they should track
9	the revenue they earn attributable to that part of the ACF and
10	when it reaches the amount of the upfront cost, to take that out
11	of the ACF?
12	A. Yes, that seems reasonable to me.
13	Q. I thought that's what you're suggesting. I just want to
14	make sure.
15	A. Yes.
16	Q. But the new costs that would be recurring would continue to
17	be recovered in whatever fashion they were built into the rates?
18	A. I believe that if they're recurring costs, that would be
19	reasonable.
20	Q. Okay. On Page 8, down on Line 20 and going over to the top
21	of the next page, you have a discussion of of manual order
22	processing versus electronic ordering.
23	A. Yes.
24	Q. And, again, this is the topic we covered this morning. I
25	don't recall if you were here.

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1 A. I don't believe I was.

Q. If I could just sort of simplify the issue here, I believe what you're saying is that if an order comes in manually, the company that submitted that order should pay for the manual processing time of that order, but if an order is processed electronically, they should only pay the cost of using the electronic system?

8 A. Yes.

9 Q. So the trade off there is how much time does it take for
10 Cincinnati Bell's order clerk to input that order versus what's
11 the cost of using the electronics up to that point?

12 A. I think that's fair, yes.

Q. From that point where the orders flow the same way, whether it's submitted manually or electronically, those nonrecurring costs would stay the same?

16 A. When you say "those costs", are you talking about the costs 17 that are proposed, nothing changes, or are you just talking 18 about just theoretically those costs would stay the same,

19 whatever the reasonable costs turn out to be?

20 Q. Right. Once the order gets into Cincinnati Bell's system 21 and other people have to do things, like installers go out and 22 do work, so forth, assuming those are equal depending how the 23 orders came in, those parts of the nonrecurring charge should 24 not be affected by OSS, is that fair?

25 A. Well, should not be affected by the access to OSS charge,

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1 yes. Or the access to OSS charge should not be affected by 2 Ο. those? In other words, they're two different charges, one for З manual, one for the electronic? 4 Okay. I think on Page 9, Lines 6 through 13 is where you 5 0. 6 recommend that there be two different sets of rates, correct? I'm sorry, the pages you referred to? 7 Α. Page 9, Lines 6 through 13. 8 Ο. 9 Α. Yes. On Page 10, you begin a discussion about the Loop 10 0. Assignment Center function, the LAC? 11 Yes. I see that. 12 Α. And you give an opinion here that that function will only 13 Ο. occur in the manual system. I'm not sure I really understand 14 what you mean by that. 15 Okay. As -- as I understand the cost study, in this 16 Α. 17 particular component, the Loop Assignment Center, as I understand it, this is a manual function -- Let me refer to the 18 study so I can get the description --19 20 ٥. Okay. Α. 21 -- accurate. The three -- the three different LAC components that 22 Yes. 23 are calculated within this study are functions such as pull the order from the printer and sort by date and pick up by a clerk, 24 and so those all appear to be manual functions. 25

1	And what I'm suggesting, based on the our previous
2	discussion, is that you're going to have electronic order
3	processing, but you probably will need to keep the manual
4	process as well. This appears to be a manual process. And so
5	I'm suggesting that you don't you don't you can you can
6	include this function and the reasonable costs to recover these
7	functions.
8	Q. Well, let me stop you. You read some descriptions, I
9	guess, from the cost study that talked about pulling orders from
10	the fax and entering the orders and so forth?
11	A. Yes, I just read one description.
12	Q. Isn't that what we just talked about before about how the
13	orders are taken, whether they come in manually or whether they
14	come in electronically? Now, the Loop Assignment Center, isn't
15	that a subsequent step?
16	A. A subsequent step? I guess I would it could be, I
17	guess. Let me clarify what I was the way I was looking at
18	this. Based on the three different OSS components that
19	Miss Soliman spoke about, I looked at this as an OSS component,
20	but it would be the manual process.
21	Q. Okay. Now, when you say "the manual process", you mean if
22	the orders comes in manually?
23	A. Well, I think our recommendation would be that you have
24	electronic one an electronic process as well as a manual
25	process.

1	Q. Okay. Well, let me back up a second.
2	A. Okay. Maybe
3	Q. You understand that Cincinnati Bell's own internal system
4	today when an order is placed by a service rep, if the
5	facilities aren't in place, that that order goes to the Loop
6	Assignment Center to do some work?
7	A. Yes. That's that's my understanding.
8	Q. Okay. Someone in the Loop Assignment Center then needs to
9	actually figure out how to provision that order?
10	A. Yes.
11	Q. Now, are you suggesting that by giving NECs access to
12	Cincinnati Bell's ordering system, that the Loop Assignment
13	Center function would go away?
14	A. Well, I don't know if it would or not, and that's why I
15	think that we chose to have two alternatives, the electronic
16	interface alternative and also your manual process as you
17	proposed it. So I'm not sure it would go away or not. I think
18	that I'm recommending that if it would be replaced, that your
19	costs should be adjusted to represent that.
20	Q. Well, I guess I'm kind of confused because I don't know
21	that there's an electronic system that can perform that Loop
22	Assignment Center function. I'm asking if you're suggesting
23	that there ought to be one or that the access to OSS is going to
24	create such a thing?
25	A. I don't know if there would be one as well. And I don't

1 know if it's part of the access to OSS function.

2 Q. Okay.

3 I don't know that, but I don't know that it won't. I don't Α. 4 know that it will stay. I don't know whether it will go. So 5 I'm simply saying that it's a manual function now that you have 6 to perform and it appears to me to be reasonable to recover your costs for these functions, without going into what the 7 reasonable costs are. But it appears to be a reasonable 8 9 function and you should be able to recover the costs.

10 At the same time, the alternative is that you're going to 11 have an electronic system as well. To the extent that an 12 electronic system does some of these functions, then your manual 13 costs should reflect that.

14 Q. I guess you're assuming then that there would or could be 15 an electronic function that takes the place of the Loop 16 Assignment Center?

17 A. I am -- I'm making the assumption that that's a18 possibility.

19 Q. Okay. I guess what I'm getting at is if Cincinnati Bell 20 doesn't have such an electronic function for its own orders, are 21 you expecting that it will create one to process NEC orders that 22 come in through the electronic gateway?

A. I'm envisioning that Cincinnati Bell may be doing things
different in the future that you haven't necessarily done in the
past either to become more efficient for yourself. In doing

l	that, you need to pass on that efficiency to your competitors.
2	Q. Well, I guess I have a more philosophical question then and
3	that is, are you evaluating nonrecurring costs based on a future
4	network that doesn't exist or are you evaluating them based on
5	the way things are really done in Cincinnati Bell's network
6	today and going forward?
7	A. Just in reference to this discussion with the nonrecurring
8	charges here, I with the manual functions, as I understand
9	it, these are the things that Cincinnati Bell will need to do
10	for the NECs to provide them unbundled loops.
11	Q. Let me ask maybe a more extreme question. You understand
12	that when certain orders are placed, that a service technician
13	needs to go out in the field and actually physically connect
14	some things or maybe even install some wires?
15	A. I understand that that that that does happen, but I'm
16	not sure it happens a hundred percent of the time.
17	Q. Right. I'm not representing that it does, but, say, when
18	somebody orders a second line and the drop isn't connected to a
19	distribution pair, would you agree that somebody has to go out
20	and physically do that work?
21	A. If it's not currently done.
22	Q. Okay. And that isn't going to be different, is it, with
23	an electronic ordering system?
24	A. Are you asking me would an electronic ordering system
25	connect pairs at a drop?
1 Q. Exactly.

2 A. I don't believe so.

3 Q. What I'm trying to do is step back a step and ask you if 4 there might also be some manual functions in the provisioning 5 procedures that, likewise, would not be changed by virtue of 6 giving a NEC electronic access to OSS systems?

7 Well, that's -- that's probably a very good question. I Α. 8 wish I had a good answer, but the best answer I can give you is that I don't know what's going to happen in the future. And I 9 look -- I look at things that function -- once again, to repeat 10 to pull an order from a printer and sort by date. I don't know 11 what there would be about this that potentially couldn't be done 12 electronically. 13

14 Q. You're talking about the service order taker at the front 15 end of the process there, right?

16 A. I'm not talking about receiving the fax. I'm talking about 17 pulling an order from a printer and sorting it by the date. I 18 mean, that's your description; so I don't know if that

19 eventually or in time could be done electronically.

20 Q. What does that description go with, that's what I'm asking 21 you?

A. Oh, I'm sorry, the customer sales -- I don't know if it's a
representative, but it's a component of your LAC cost, your Loop
Assignment Center cost.

25 Q. Okay.

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1	A. I'm sorry, I should have identified that.
2	Q. All right. Let me see if you understand this: That orders
3	that cannot flow through automatically, somebody needs to find
4	facilities and take the steps necessary to order those to be
5	provisioned?
6	A. I believe that I understand that your flow no flow is as
7	you just described it, yes.
8	Q. Okay. And if orders cannot flow through electronically for
9	Cincinnati Bell or for a NEC, would you expect them to be
10	treated any differently?
11	A. I'm sorry, I'm confused by your question.
12	Q. Okay. Well, I'm I guess I'm trying to understand
13	whether your recommendation is that all manual functions would
14	go away with electronic access or whether there might be certain
15	manual functions that are just inherently how it needs to be
16	done or maybe even the most efficient way to do it overall?
17	A. Okay. I Let me see if I can clarify my recommendation
18	then because I think maybe I've been perhaps we've been
19	talking around each other.
20	Q. I think we have been.
21	A. My recommendation isn't that all the manual functions will
22	go away. My recommendation is that to the extent that some of
23	them do, then then your costs should reflect that.
24	Q. Okay. That's fair.
25	A. Maybe I should have said that earlier.

1 Q. I guess then the ultimate question is whether the function 2 goes away or not? 3 I think that's the question. Α. Now, further down on Page 10, there's a discussion 4 Ο. beginning at Line 20 about multiple loops and order. 5 6 Α. Yes, I see that. And I quess I'm a little confused by this in light of CBT 7 0. Exhibits 13 and 14 as to whether this testimony has taken into 8 account Mr. Mette's further division of those nonrecurring costs 9 based on loop and order? 10 Well, let me -- let me answer that question. This, as we 11 Α. 12 all know, this -- this case, this procedure has been a dynamic 13 procedure. We have just had lots of things going on for a long 14 We've had a lot of revisions and a lot of information time. 15 added as we've -- as we've gone. My testimony is based on my evaluation of CBT's original 16 17 proposal, and CBT's original cost studies without any changes. 18 My testimony states that I did -- I am aware of Mr. Mette's revised recommendation and that I'm also aware of Exhibit 13 and 19 20 14, but because I wasn't able to, prior to receiving Exhibit 13 21 and 14, I was unable to verify his revised recommendation, I was kind of handicapped there. Even though I -- I spent quite a bit 22 23 of time, I just couldn't do it. 24 So I stuck by my original recommendation, as I still

25 stick -- I stick by my original recommendation, however, since

1 my testimony was filed last Friday, as a matter of fact, last 2 night late into the evening, I finally had time to actually take 3 Exhibit 13 and 14 and to do an analysis on it.

4 And what I have found in -- and I'm sure that as you ask 5 questions, I will refer back to these exhibits to explain my 6 position, but right now looking at Exhibit 13 and 14 and now 7 answering your -- your question of multiple loops, my 8 recommendation was that you need to take multiple loop orders 9 into consideration when you're provisioning these services. In fact, I don't believe that you did that originally and I think 10 11 that there's probably some data requests and such that even would indicate that that wasn't the case. 12

However, in Mr. Mette's revised position and looking at Exhibit 13 and 14, it appears to me that now that has been taken into consideration, but I got to tell you I am only looking at two exhibits that really wasn't a cross -- I don't know if this is -- I don't think the witness was cross-examined on these; so I don't think there's a lot of record on these two exhibits. So I'm just kind of taking them at face value here.

I did the analysis and it appears to me that at least for the multi-loop concern that I had -- the multi-loop order concern I had, if, in fact, this is what CBT eventually does do in this case, then I think that takes -- could possibly take care of my concern about multi-loops. That was a really long answer, but I think that we're going to get into more

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discussions based on Exhibit 13 and 14; so I got that out of the 1 way so we can refer to this as we go if there's additional 2 questions. 3 4 Okay. Well, I was guessing that the paragraph at the Ο. 5 bottom of Page 10 had been written before you had a chance to 6 read Exhibits 13 and 14 and I quess you just confirmed that. 7 I did. Oh, would that have been the right answer? Α. 8 (Laughter.) 9 Yes, it was. And I believe Exhibits 13 and 14 have source document 10 Ο. 11 references to where those line items came from, don't they? I think Exhibit 14 does. Exhibit 13 was a little more 12 Α. difficult because the source references are not -- are not that 13 14 clear. So all I'm insinuating is it took -- or, all I'm 15 suggesting is it took more time to figure out 13 than it did 14. 16 Sure. Ο. 17 MS. SANDERS: Your Honor, could I make a request if 18 we're going to have more questions about these, could somebody identify which 13 is and which 14 is so we know. 19 I don't have 20 copy of Exhibits 13 and 14 here. If we could identify which 21 costs are being discussed. 22 MR. HART: I believe 13 is the loop migration and 14 23 is the new loop; is that right? 24 THE WITNESS: Yes, that's correct. I apologize. 25 MS. SANDERS: Thank you. I want to make sure I knew

1 which sets. Thank you. 2 THE EXAMINER: Let's go off the record a minute. 3 (Discussion held off the record.) 4 THE EXAMINER: Back on the record. 5 BY MR. HART: 6 Ο. Mr. Francis, the same question on Page 11, Line 18, there's 7 a paragraph there and I believe the discussion on Page 10 8 probably was probably for migration and the discussion on 9 Page 11 is about new loops, but I see the same kind of discussion about not taking into account multiple loops per 10 order. 11 12 Would the discussion we just had also apply to that paragraph? 13 14 Α. On Page 11? Line 18. 15 Ο. 16 Α. Line 18. Let me just verify and go back and look at my 17 questions. On Page 11, Line 18 I'm still referring to the new loops on 18 19 this page, yes. Okay. But, likewise, you wrote that before you had the 20 Ο. chance to really analyze the new exhibits? 21 That is correct. Yes. 22 Α. 23 Ο. Okay. On Page 12, the paragraph that begins on Line 5 24 deals with customer premise visits. Do you have that? 25 Α. Yes, I see that.

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Q. Okay. I'm not clear exactly what you're recommending here.
 There's two possibilities I'll throw out and you tell me which
 it is.

4 A. Okay.

Q. One would be that perhaps you believe the number of customer premise visits would be different and, therefore, the costs should be adjusted, and the other could be you're suggesting we only charge customer visits on cases where they occur. I wasn't sure which way you were headed here.

10 A. Well, my recommendation is that when a customer premise 11 visit occurs, it's reasonable to charge for that and recover 12 those costs. When it doesn't occur, then I don't believe that 13 it's reasonable to charge.

Q. Okay. And you understand the way Mr. Mette originally did the study was to estimate the percentage of occasions when a customer premise visit would occur and to blend that into an average nonrecurring charge?

18 A. I believe he did that. I believe your proposal, and I 19 don't believe that this was changed. As a matter of fact, I 20 believe it's on Exhibit 14 that would be the 86 percent 21 weighting.

22 Q. Yes?

23 A. I'm aware of that.

Q. That weighting might change depending on how we weight business in residence loops, am I correct?

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1 A. That's my understanding.

I quess you're going the next step and suggesting that the 2 Ο. customer premise visit only be charged where it occurs? 3 That's my recommendation, yes. 4 Α. 5 Q. If we were to do that, are you recommending that we develop a uniform rate for all customer premise visits or should they be 6 7 charged on, say, a time-and-materials basis? And you're asking me for those that there really is a 8 Α. 9 customer premise visit? 10 ο. Yes. 11 Α. I would think that like most everything else that you have costed out, it would be on an average basis. 12 And I guess in order to do that then, we would need to 13 0. 14 still estimate the number of times we would expect to see a customer visit? 15 16 Α. There would still be an estimation, yes. 17 Ο. And that would end up with a higher nonrecurring charge where a customer visit is required than what the average would 18 19 have been if we spread it across all -- all cases? And, of course, the other way of looking at that is those 20 Α. 21 customers that don't need a visit would receive a lower charge. Whether the glass is half empty or half full, right? 22 Q. 23 Α. Yes. 24 Ο. Now, on Page 12, down at the bottom of the page here, you suggest that perhaps some of the LAC functions wouldn't be 25

1	required where the Fujitsu FACTR system is used, and I guess I
2	had difficulty in envisioning that. I was wondering if you
3	could explain where you would think the FACTR system would do
4	away with the Loop Assignment Center function?
5	A. Well, it was my thought that very similar to the discussion
6	we had just a few minutes ago with the mechanical I'm sorry,
7	with the manual functions that you would be doing in the Loop
8	Assignment Center, as I read some of these functions, I don't
9	know this, of course, as a fact, but it seems to me that some of
10	these may may become electronic.
11	And I was under the impression that with a FACTR system,
12	that some of the, I'll call it, grooming, some of the grooming
13	that you would use in a loop would be done in the central office
14	and that some of these functions may not need to be done that
15	were normally done in a manual setting.
16	Q. Okay. Let me try to put a diagram on the board so we can
17	make sure we're talking about the same things.
18	A. Okay.
19	Q. I'm going to draw a box on the left. I'll call that the
20	central office. And I'll draw a line here and call that the
21	MDF, main distribution frame. Okay. Then out in the field,
22	let's have a serving area interface and on the right-hand side
23	of that will be distribution and the left side of that will be
24	feeder. And what I really intend with this initial drawing is
25	that this is a copper loop, okay?

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1 A. Okay.

2 Q. Now, would you agree with me where the loops are

3 provisioned on copper, that the FACTR system isn't going to have 4 any impact?

5 A. Yes, I agree.

Q. Okay. Now, when we do a DLC system, there's some sort of
electronics in the central office, right, and then there's
something out in the field and those two things talk to each
other on fiber?

10 A. Yes.

11 Q. And then the DLC system in the field takes that fiber

12 signal and converts it to an electrical signal and sends that to 13 an SAI?

14 A. Uh-huh.

Q. Okay. Now, I'm not an expert on FACTR either, but my understanding is that what FACTR allows you to do is to take individual loops on the -- I'll call this subfeeder, and allow you to assign those electronically, I guess, on the other side of this DLC onto a particular DS-1. Is that consistent with your understanding?

21 A. Yes.

Q. Okay. And that essentially you can electronically cross connect these loops so that they might appear on a different DS-1 than if we just lined them up straight?

25 A. Uh-huh.

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- 1 Q. Okay.
- 2 A. Yes.

3 Q. I'm sorry. You need to answer out loud.

4 A. Yes. I'm sorry.

5 Q. She can't hear you when you don't talk.

Now, the Loop Assignment Center, my understanding of it, and correct me if I'm wrong, is that what they do is when they get an order for facilities at a given address that aren't in place, is they go and find facilities and order that they be provisioned. Does that seem reasonable?

11 A. Yes.

12 Okay. And I can understand how the FACTR system might Ο. 13 assist in provisioning the feeder part of that loop, but I guess 14 I don't understand how the Loop Assignment Center function would go away because we still have the SAI to provision and we still 15 16 have the drop, and I didn't draw the drop terminal. I can put 17 that out there. We still need to provision a drop and we still 18 need to determine where the central office end of the loop is 19 going to attach.

20 So would you agree those functions will still be necessary 21 even with FACTR?

22 A. Yes. Yes, I believe they would be.

Q. Okay. So the -- maybe the actual provisioning of the loop would be a little bit different, but somebody still needs to look and see if those parts are available and order that they

1 put be together?

2 A. Some of the parts.

Q. Okay. I got another question for you. You agree with me that the copper loop wouldn't be affected by this. You understand that in real life in the network right now, maybe three percent of the loops are on Fujitsu FACTR and, obviously, in this forward-looking study, we assume a much greater percentage are.

9 For purposes of a nonrecurring charge for loops that I 10 might provision tomorrow, should I assume that there's a greater 11 than a three percent impact on the digital loop carrier portion 12 of this or are you suggesting that I assume that everything is 13 on DLC -- Fujitsu FACTR DLC?

14 A. I'm thinking.

15 Q. Okay.

What I did not take into consideration in my recommendation 16 Α. 17 was the copper, the copper feeder. I perhaps made an assumption, I think it was the assumption goes to a FACTR 18 19 system. In your loop study, you have a composite of copper and -- and DLC system, which is a FACTR system, but this 20 recommendation did not take into consideration copper and those 21 22 things that you would have to do with a copper system. 23 Okay. I guess I'm asking a little different question. 0. That is on the digital loop carrier loops that are in the study, 24 25 for purposes of nonrecurring costs, are you assuming that the

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1	network is as represented in this TELRIC study or should we
2	determine nonrecurring charges based on the work that will
3	actually have to be done in the real network?
4	A. Well, I think that the nonrecurring charges you're
5	proposing are related to the unbundled loops that you're
6	proposing as they are in your study.
7	Q. Okay. On Page 14, the first question and answer you, I
8	guess, deal with migration of existing loops here; is that
9	right?
10	A. Yes. Yes, the service order.
11	Q. Okay. And I take it the same principle applies we just
12	talked about a moment ago, that you would suggest a manual order
13	charge where manual orders come in and an electronic order
14	charge when they come in electronically?
15	A. That's correct.
16	Q. The trade-off there is the time the service rep takes to do
17	the work versus the cost of the electronic system?
18	A. That's correct.
19	Q. On Page 15, Lines 10 through 12, you comment on the amount
20	of time the technician spends in the field.
21	A. Yes.
22	Q. I want to test your memory here a little bit and take you
23	back two years to the MCI arbitration. Do you recall an issue
24	we had there about the window for cutover of loops?
~ -	
45	A. Vaguely.

Q. Okay. Do you remember -- Well, let me ask you this way:
 An existing loop that's going to be migrated is a live telephone
 line, there's a customer who may be expecting to use that line?
 A. Yes. Yes.

Q. And the new loops that we've been talking about are brand new phone lines that aren't in use yet, so they get turned on whenever they get turned on?

8 A. Yes.

9 Q. Okay. Now, might there be a difference in what's going on
10 to coordinate the cutover of that live loop than what might be
11 going on for a brand new loop that's not in service?
12 A. To answer that, what I would like to do is go back to
13 Exhibit 13 and compare Exhibit 13 with Exhibit 14.

14 Q. Okay.

A. Because I think that what -- what you're showing here addresses part of my concern and -- and part of it doesn't. And maybe that's what I want to refer to is the part that doesn't. But on Exhibit 13 on Line 10 and Exhibit 14 on Line 10 also, I compare those two with these two exhibits and they both represent 10 minutes of activity.

And my concern was that, in my study, is that that activity, which it seemed to be demonstrated in your support seemed to not have the same number of minutes for that activity, and that was my concern. So it appears to me now that you have broken it per order, per loop that. Now you're demonstrating to

1 me that -- that the -- the amount of time is the same.

2 Q. Oh, it is the same now?

3 A. It is the same.

4 Q. Okay.

A. Except you split -- I'm sorry, the line connection charge in Exhibit 13, you split the per order is 21 minutes, but the per loop is 10 minutes. I guess my concern kind of went away with what is the difference between the two, and Exhibit 13 and Exhibit 14 demonstrates that there is no difference.

10 Q. Okay.

11 A. Except now that there is a Line 7, which is 21 minutes, now 12 you're saying there's 21 minutes of activity, and I -- so I 13 would only be able to make the assumption that the difference 14 then would be the difference as I'm stating in my testimony, 15 which has to do with screening the service orders and scheduling 16 a technician to be dispatched to the central office.

17 I'm kind of trying to make that assumption and I don't know 18 if that's a good assumption or not. So I'm still sticking by my 19 recommendation because I -- I don't have any proof of what those 20 21 minutes are.

Q. What's the time on Exhibit 14 that corresponds to the 21 minutes?

23 A. I beg your pardon?

24 Q. You said on Exhibit 13 it's 21 minutes?

25 A. On exhibit -- on Exhibit 13, I have two functions now which

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- 1 I didn't before.
- 2 Q. I'm talking about Line 7, which you said was different.
- 3 A. Line 7 says 21 minutes.
- 4 Q. What is it on Exhibit 14?
- 5 A. It's not there.
- 6 Q. There's no time there?
- 7 A. No, there's no time there.

Q. I understand you don't have what you consider documentation of this, but would you agree where the cutover of a live loop needs to be coordinated with the other carrier, that somebody is going to have to do something to make sure that that occurs?
A. Yes.

13 Q. And the new loop orders, there's really not a need to 14 coordinate the timing of that function?

15 A. According to your exhibits, that's correct.

16 Q. Thank you. This is why I asked you about the MCI

17 arbitration. Do you remember there being a large concern in 18 that case about that cutover being closely coordinated with the 19 new carrier having their switch activated and being ready to 20 take that customer on?

A. I do remember the issue, but I don't remember any of the
discussions or the details, but I do remember the issue, yeah.
Q. Okay. On Page 18, middle of the page, Lines 9, 10, 11, you
suggest that the conditioning charge wouldn't be necessary if
Cincinnati Bell had knowledge of what the loops looked like?

1 A. Yes, that's what I say.

2 Okay. For Cincinnati Bell to obtain that knowledge, Q. 3 wouldn't it need to take some sort of a survey or canvas of the 4 loops to actually see what they are? I believe at some point in time they could have done this, 5 Α. yes. You know, it's either -- it's either track it as you go or 6 at some point in the future stop and back up and find out where 7 8 everything is at. I quess I would --Okay. If you do the stop and back up and find out where 9 Q. everything is at, somebody has to spend some time to do that, 10 don't they? 11 Somebody has to spend some time to do that. 12 Α. 13 0. Now, there are records of the plants. I mean, there are engineering plat diagrams that show the various cables, right? 14 I would believe so. 15 Α. Okay. So some information was being recorded as the 16 Ο. 17 network was built and that's how those cable plats are put 18 together? 19 Α. Uh-huh. That's correct. 20 Okay. And would you agree with me that for its own 0. 21 purposes, when Cincinnati Bell needs to determine the makeup of 22 a given loop, it needs to go to its records and look at them to see what that makeup is? 23 24 Today, that's probably what you do for yourself. Α. 25 0. Uh-huh.

1	And today, if another company asked us to, you know, check
2	the makeup of the loop that goes from Point A to Point B, we'd
3	also need to do that, right?
4	A. Well, you would only need to do that because you never did
5	it before.
6	Q. Uh-huh.
7	A. But should they pay for something that perhaps should have
8	already been available? I think that's the question.
9	Q. I guess what I'm getting at is, if Cincinnati Bell would
10	incur that cost to do that function for itself, is there some
11	reason why the new entrant shouldn't have to compensate
12	Cincinnati Bell for that cost when it performs that function for
13	the new entrant?
14	A. I guess then the question would be, to what level are you
15	entitled to recover the cost? I think that in a I think that
16	in a forward-looking competitive environment, this information
17	to me seems like it should be could be conceivably
18	information that you would have on a database, electronically,
19	and it wouldn't take the long amount of time or, the amount
20	of time, I should say, to provide this function, even for
21	yourself. Seems to me that this could be or maybe even should
22	have been maybe a database of some sort, electronic database of
23	some sort.
24	Q. You're saying individual loops might pass through a whole
25	variety of cables between the central office and the customer?

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1 A. Yes.

And it's not necessarily a simple matter to trace a given 2 Q. loop, is it? 3 I don't think it would be a easy task to go back and do it; 4 Α. it would be an easier task to do it going forward as you're 5 installing new plant and you keep records -- or, you develop a 6 7 database, I would think it would be easier to do it that way. 8 Well, wouldn't it kind of depend on how often you needed to 0. 9 research individual loops for their makeup before you'd really 10 determine whether it's worthwhile to create and maintain this database? 11 12 Α. That would be a factor in developing a database, yes. 13 Ο. On Page 19, you have a question and answer there on Lines 4 through 10 about the relationship between conditioning and OSS 14 15 costs. The first sentence of that answer. 16 I'm not sure what impact you believe OSS access would have on loop conditioning. 17 Well, I'm thinking that part of that OSS cost has to do 18 Α. with the service ordering system, so let me verify that. Give 19 me one second to find that. 20 21 (Pause.) 22 THE EXAMINER: Let's go off the record a minute. 23 (Recess taken.) 24 THE EXAMINER: Okay. You got it all figured out. 25 THE WITNESS: I think I do, but I may need to hear the

1	question just to make sure I answer correctly.
2	THE EXAMINER: Okay. We back on the record?
3	Okay. Do you want it reread?
4	BY MR. HART:
5	Q. Want me to ask it again?
6	A. That would be fine.
7	Q. On Page 19, this paragraph beginning on Line 4, you made a
8	comment that certain OSS costs should be removed from the
9	conditioning charge. And before we took the break, I believe it
10	was your belief that that related to the order issue that we've
11	already been talking about.?
12	A. Yes, that's correct, and I verified that in the cost study
13	and that's what I'm referring to.
14	Q. Okay. That solves that mystery.
15	The next topic in your testimony deals with time and motion
16	studies, and I guess maybe I need to get a definition from you
17	as to what you consider a time and motion study to be.
18	A. Yes. I envision a time and motion study being a process
19	where you actually have somebody that is actually, perhaps,
20	witnessing or viewing a function taking place and is able to
21	actually determine what reasonable times are associated with
22	certain activities or certain functions.
23	Q. So maybe we'll follow a technician around who's installing
24	the loop and see how long it takes him to do that, the different
25	pieces of that?

1	A. I would think that would be a reasonable way to do it, yes.
2	Q. Okay. Would you also agree with me that in order to do a
3	time and motion study, you have to have the activity that you
4	want to study going on?
5	A. I think I recognize that in my testimony as well. Yes, I
6	agree.
7	Q. Okay. So, for example, provisioning some of these
8	unbundled element requests which hasn't occurred yet, it's kind
9	of hard to do a time and motion study until we get some orders
10	to do that?
11	A. That is true; and again, I recognize that. Uh-huh.
12	Q. Okay. I take it the reason you want those types of studies
13	is to get something that's a little more concrete than an
14	estimate of time?
15	A. That's exactly the reason for it, yes.
16	Q. On Page 20, kind of the middle of the page there, I think
17	you're recommending that those time and motion studies be done
18	before the end of Cincinnati Bell's alt. reg. plan, right?
19	A. That's correct.
20	Q. In the interim, until those studies can be done, what are
21	you recommending we use as the times in these various functions?
22	A. I have no alternative other than what you've proposed.
23	Q. All right. The next thing I want to ask you about is the
24	fiber versus copper loops.
25	A. Yes.

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1	Q. Maybe there's some confusion here, but at the bottom of
2	Page 22, you make a statement about all the copper loops being
3	shorter than 9,000 feet. I guess it says "non-DLC copper
4	loops".
5	A. Yes, that's the statement I make.
6	Q. Okay. Are you referring to every individual loop or do you
7	really are you referring to the averages of copper loops?
8	A. I'm referring to what is supported in the cost study. In
9	the cost study, and I believe it's in Tab 8 of the loop cost
10	study, the very last page, it shows what the average loops are
11	for feeder, distribution, copper, fiber, and that's that's
12	the reference that I'm referring to.
13	Q. Okay. And those are averages, not the series of individual
14	loop lengths?
15	A. Those are averages, sure.
16	Q. That's probably where there was a little confusion. My
17	understanding is that there actually are loops longer than 9,000
18	feet in the copper sample and that's how we get a 9,000 foot
19	average, perhaps?
20	A. I would anticipate there being longer loops, yes, and the
21	900 (sic) was the average.
22	Q. And you understand that Cincinnati Bell used a 12,000 foot
23	threshold in band one and then larger as we get into the more
24	remote bands?
25	A. Yes.

1	Q. I know your original recommendation in the Staff Report was
2	that all of the loops be provisioned on fiber and you now appear
3	to be amending that result.
4	Are you in agreement with the crossover points that
5	Cincinnati Bell is using in its studies?
6	A. I have no reason not to agree to those.
7	Q. Okay. On Page 23, just curious, Lines 5 and 6, you have a
8	comment here about how copper loops can go to 12,000 feet if
9	there's less than 600 pairs.
10	A. Yes.
11	Q. I'm just kind of curious, where'd you come up with that?
12	A. It's a good question.
13	Actually, CBT's is not the first loop study that I've
14	looked at. I've looked at other ILEC's loop studies, some of
15	them, you know, in a formal proceeding and some of them not.
16	And some I'm Obviously, I'm not an engineer and I
17	don't even pretend to be an engineer, and so I don't really want
18	to get into some of the assumptions that engineers use, but one
19	of the assumptions that I've seen in a couple different places
20	indicates that when you use a copper loop, there's there's a
21	couple things that you need to look at, a couple things you need
22	to consider, is the length of the loop and the density, and if
23	you're providing For an example, what I'm familiar with, and
24	I think it's just a rule of thumb that perhaps engineers use in
25	assumptions, at least for the sake of developing cost studies,

1	is that if the copper loop is beyond 9,000 feet then Let me
2	rephrase it because I'm getting ahead of myself. To the extent
3	that you have It goes hand in hand, so I need to say it
4	right.
5	You can provide services over copper facilities greater
6	than 9,000 feet out to 12,000 feet to the extent that you have
7	no more than 600 pairs on that facility; however, if you have a
8	loop that doesn't extend greater than 9,000 feet, you can have
9	over 600 pairs on that facility. That's really what this is
10	coming from.
11	Q. That's from your experience in looking at other cost
12	studies?
13	A. That's correct, because I did not get this out of CBT's
14	assumptions.
15	Q. That's really what I was wondering.
16	A. No, I did not. But I'm using this because the question
17	was I anticipated the question being, well, how why is it
18	that you changed your recommendation over the Staff Report? The
19	Staff Report was recommending that all feeders be fiber, and
20	looking at it again a second time in the light of comments and
21	objections by both CBT and the parties, when everybody disagrees
22	with me, but I probably did something wrong, when I only have
23	you agree, well, maybe I did or maybe I didn't.
24	But in this case, it appeared that everybody kind of
25	perhaps was disagreeing with me in some fashion, at least the

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1	impression I got, so I went back and researched it some more and
2	went back into some other areas that I had some experience in,
3	and so I'm putting this in as rationale for also revising my
4	original recommendation in the Staff Report.
5	Q. Okay. I just want to confirm you're okay with the 12,000
6	foot cutover, that you're not suggesting here we ought to reduce
7	that to 9,000 feet.
8	A. No, I'm not suggesting that at all. Matter of fact, I even
9	say that copper loops could extend out to 12,000 feet.
10	Q. Okay. Move on to fills, beginning on Page 24. You start
11	by citing to the guidelines as to what they say about fill, and
12	you indicate that an actual fill is not appropriate, right?
13	A. Yes, that's my interpretation of the guidelines, yes.
14	Q. Now, if an actual fill was the same fill that you would
15	expect to see in the future in an efficient network, could an
16	actual fill be appropriate?
17	A. Depends on To answer that, it depends on the time that
18	you're looking at the actual fill. To clarify that, if newer
19	you're saying my actual fill is based on some historical
20	information and under perhaps a monopoly environment versus what
21	my actual fill will be in two years in a competitive
22	environment. I mean, it depends on how you want to use the term
23	"actual". And I think that CBT, using the term "actual", as
24	this is what we have seen in the future, we have no reason to
25	believe it's going to change I said that backwards. This is

what we've seen in the past and I have no reason to believe that 1 2 it's going to change for the future. Okay. In order to use something other than actual fill, 3 0. 4 would you need to expect that the fill would be something different in the future? 5 I apologize. Can you repeat that or can I have it read 6 Α. back? 7 8 (Question read back as requested.) THE WITNESS: Well, I think that if you're developing 9 a forward-looking fill factor, you would want to take into 10 consideration all those different things that may happen to the 11 network or to the environment, competitive environment versus a 12 13 monopoly environment. You know, if you're asking me can CBT have the opinion 14 that your fill factor -- your actual fill factor is going to be 15 the same fill factor you're going to see in even a competitive 16 17 environment, yeah, you can have that opinion, but I'm not sure that would be the correct opinion. 18 BY MR. HART: 19 20 Q. Well, I'm not suggesting you agree with it, my question really is: In order to say that the future fill is going to be 21 22 something other than the current fill, wouldn't you have to expect that something is going to be different in the future 23 than what currently exists? 24 25 Α. I think -- Sure. I think you would have to anticipate some

1	changes in the environment, yes.
2	Q. On Page 25, on Lines 9 through 11, you recommend using the
3	same fill factor on DLC equipment as Ms. Soliman used in her
4	DS-0 interoffice study; am I correct in that?
5	A. That's correct.
б	Q. Okay. Do you recall what that figure was?
7	A. I think it's around 80-something. Around 88 percent or 86
8	percent, I think it's what she suggested.
9	Q. Now, while the electronic equipment may be the same, would
10	you agree with me that the usage in the network of interoffice
11	facilities and the usage in the network of loop feeder
12	facilities are different uses?
13	A. I don't know if they are or not.
14	Q. Well, the diagram we have on the board, the part that's
15	between the DLCs, is that what we're talking about right now?
16	A. Yes.
17	Q. Okay. And that would be used to serve loops from a central
18	office out to a given distribution area, right?
19	A. Yes.
20	Q. And when I'm in the interoffice network, I'm handling
21	traffic that's going from a central office to some other central
22	office, or even multiple central offices?
23	A. Yes, I believe that's correct.
24	Q. Would you agree with me that the ability to aggregate
25	traffic and engineer to a higher utilization exists in that

interoffice network that may not exist in a feeder system that's 1 2 only going to one location? 3 Α. I'm going to need that back. I kind of got lost halfway 4 through. 5 (Question read back as requested.) 6 THE WITNESS: I'm not familiar with the interoffice transport study and how the electronics was used in interoffice 7 8 transport studies, so I'm having a difficult time answering that question, because I just don't know. 9 10 But I would think that the electronics -- I just -- I 11 don't know. 12 BY MR. HART: 13 I'm really not asking you about the electronics per se, so Ο. much as I am the usage of the capacity that might be there. 14 And 15 let me give you an analogy. You're familiar with interstate highways, right? 16 17 Α. Sure. 18 And as you travel around Ohio, there are exits all over the Ο. 19 place. 20 Α. Yes. Now, the highway and the side roads are all made out of 21 Ο. 22 concrete and bridges and so forth, right? Same material? 23 Α. Yes. 24 But the interstate highway is designed to handle a lot more Ο. 25 capacity of traffic than the side roads are.

1 A. Yes.

2	Q. Okay. Now, can you see an analogy between that and the
3	interoffice facilities that connect the various central offices
4	as being the freeway and the feeder route that goes out to a
5	particular distribution area as being a side road?
6	A. I see your analogy, yes.
7	Q. Okay. And might it be possible that the density of usage
8	on the interoffice facilities is somewhat higher than the
9	density of usage on the feeder facility?
10	A. Well, I guess the traffic what you're asking, the
11	traffic would be different, but the usage of the electronics,
12	I'm not sure how that may be different.
13	Q. Wouldn't it depend on how many lines I needed in that given
14	distribution area?
15	A. But you would I would imagine that you would size the
16	electronics to match the lines and you would use whatever
17	portion of the electronics was a reasonable portion to use.
18	Q. All right. You've been here through most of the hearing
19	and you've heard the number 1,920 thrown out
20	A. Yeah.
21	Q as the number of lines that a Fujitsu system handles?
22	A. Yes.
23	Q. Okay.
24	A. 1,920, yes.
25	Q. It's in the neighborhood of 2,000, right.

1		Now, it might be cost effective to install one of those
2	syst	ems where actually fewer lines are needed, right?
3	Α.	Install a system where you need less than the 2,000 lines?
4	Q.	Yes.
5	A.	Yes.
6	Q.	In fact, the efficiencies are the farther out you get into
7	the :	network, the greater cost savings you have with the DLC
8	syst	em because you're only paying for fiber instead of a lot of
9	copp	er cable?
10	Α.	Yes.
11	Q.	And so it might be out in some of the more remote areas
12	that	it would pay off to use DLC even if you had a very small
13	numb	er of lines relative to its capacity?
14	Α.	I suppose so.
15	Q.	Okay. There are certain common components of the DLC
16	syst	em that you need to install at a minimum to make it work,
17	righ	t?
18	A.	Of the electronic equipment?
19	Q.	Right.
20	A.	Like common shelf?
21	Q.	Uh-huh.
22	A.	Yes.
23	Q.	Okay. Could you give us any further explanation as to why
24	you	believe the electronics fills in the DLC feeder would be the
25	same	as the interoffice facility?

1 A. Yes. I think I can.

I think that the reason I recommended using the fill factor that Miss Soliman is using in her interoffice electronics circuit equipment is because the equipment that she's looking at, as I understand it, was equipment that is very similar, if not the same equipment, that's used in -- in the DLC technology; in other words, the -- the FLM equipment I believe is what she looked at.

9 Now, the -- as I understand it, the universal digital loop 10 carrier electronic equipment is FACTR equipment, and the 11 electronic equipment that you are using, I believe, in your 12 integrated system is FLM and FACTR.

And if I'm not mistaken, although I haven't looked at your 13 14 retail cost studies that were provided in the alt. req. plan, but it's my understanding that you used the same fill factors 1.5 16 for both studies; in other words, I believe that you used the 70 17 percent fill factor for electronics in both studies, and subject to check, but I believe that this is accurate, that you also 18 19 recommend using the 70 percent fill factor in the electronics, I think, for some -- some -- I really need to check this, but I'm 20 going to say it anyway, for 70 percent fill factor some of the 21 electronics in your interoffice transport. 22

And so it seemed to me that if CBT themselves believed that it's reasonable that the fill factors are the same for all of these, then whatever fill factor that Miss Soliman would come up

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1	with for the FLM equipment, the electronic equipment, and the
2	interoffice study should be very close, if not the same, fill
3	factor that we probably should use for this electronic equipment
4	in the DLC systems, as well.
5	Q. Okay.
6	A. Now, beyond that, the actual electronic equipment study
7	itself, I believe Miss Soliman did that and I believe she
8	testified to that, as how she did that and came up with that.
9	Q. How she developed the fill for interoffice?
10	A. That's correct. Yes.
11	Q. I take it nobody has done a similar study for the loop
12	feeders?
13	A. It has not been done.
14	Q. On the subject of distribution and copper feeder fills,
15	you've got some ranges stated here, and I understand that those
16	are based at least in part on Staff Exhibit 5.
17	A. Yes, that's correct.
18	Q. Okay. I noted that there were some decisions on fill that
19	Mr. Gose had cited in his testimony that aren't on your exhibit
20	and the ones that come to mind were New York and Maryland.
21	A. I recall those. I don't recall what they were, but I
22	recall those states, yes.
23	Q. I have this vivid recollection of New York being 50
24	percent, which you may or may not.
25	A. I do not.

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-	O and Thelious Meriland much have been 40. The path surge of
Ŧ	Q. And I believe Maryland may have been 48, 1°m hot sure of
2	that, but if we were to put those on your chart here, they would
3	be consistent with the ranges that you have, correct?
4	A. It appears it would still fit in the range, yes.
5	Q. And if we took out the Ameritech result of 85 percent, that
6	range would be lower, right?
7	A. It would come down, yes.
8	Q. And likewise, on feeder, other than Ameritech, which has a
9	range as high as 90, the next highest is 80.
10	A. That's correct.
11	Q. One thing I'm curious about, Mr. Francis, is what these
12	fill factors actually represent, and what I'm getting at, do
13	these represent fills that we would expect to see in the network
14	in terms of pairs in use versus pairs that exist, or are they
15	intended as inputs to cost studies, or perhaps both?
16	A. My fills, as I recommend them here in my opinion, in my
17	mind, are fill factors that would be used as an input into a
18	cost study.
19	O. Okay. Now, is that the same as the fill factor that you
20	would expect to measure in the outside plant?
21	A I think that it is the same fill factor that I would
2 I 2 2	A. I CHIMA CHAC IT IS the same fill factor that I would
~~	ancicipate seeing in an outside plant in a in a
23	forward-looking competitive environment.
24	Q. Okay. Now, you saw the cross-examination of several
25	witnesses where I walked through kind of a calculation?

I believe I recall that, yes. 1 Α. 2 Q. Okay. And I'm going to spare you some of the detail of 3 that. But there's a step of it that I wanted to ask you about 4 towards the end. Were you here for Mr. Webber's testimony? 5 6 No, I wasn't. Α. 7 I didn't think you were. Let me try to get to the bottom Ο. line, if I could. 8 9 Remember, I had a 1,000-foot cable and I think the example I was using was 100 pairs and I had the average loop being 500 10 feet? 11 12 Yes, I recall. Α. 13 0. And do you recall whatever fill I used, let's just call it 14 X, that in order to back into the actual investment in the cable, I had to actually use in my cost study a fill of X over 15 16 2? 17 X over 2 meaning? Α. 18 Ο. Half. 19 Α. Oh, just half. I see. Okay. Yes. 20 And what you missed with Mr. Webber, we got into a ο. discussion as to why that was, and the issue came up of if the 21 22 loop's 500 feet, then the cable that goes out another 1,000 -- a total of 1,000 feet, has another 500 feet of copper 23 24 in it that's not being used to service that customer. Does that 25 sound fair to you or reasonable?

1	A. In context of the cost studies or just your hypothetical?
2	Q. Just in this hypothetical.
3	A. I understand I believe I understand what you're saying
4	in your hypothetical.
5	Q. Maybe I'll have a loop out here that's 900 feet long and it
6	will have 100 feet of dead pairs out into the cable.
7	A. Yes, I think I understand what you're saying.
8	Q. And if I have my customers evenly divided here for every
9	average loop, there's another piece of copper wire that I have
10	to pay for and install, but it doesn't really factor into the
11	average loop, right?
12	A. Once again, in your hypothetical, I agree with you.
13	Q. Okay.
14	A. Yes.
15	Q. And where I'm headed here is in order to not divide my fill
16	in half in this hypothetical to make everything come out even,
17	wouldn't I have to treat all the loops in this cable as if they
18	were 1,000 foot loops?
19	A. I don't understand that logic, no.
20	Q. Okay. Well, if I have Say it's 10 cents a pair foot and
21	it's per pair feet and I multiply times my 500 feet, I get \$50
22	per pair, right?
23	A. Yes.
24	Q. And even if I had this cable full to 100 percent times 100
25	customers, I get \$5,000, but my total cable is 1,000 feet times

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1	10 cents times 100, and it's a \$10,000 investment. Do you
2	recall that's how we got the X over 2?
3	A. Yes.
4	Q. Okay. What I'm asking you is, in order to avoid having to
5	adjust this fill, if I instead treated all of these loops in
6	this cable as if they were really 1,000 feet long, and I
7	substitute 1,000 in here for 500, I'll come out to the right
8	number, won't I?
9	A. In your hypothetical, the math is correct, yes.
10	Q. Okay. What I'm getting to is, Cincinnati Bell's cost study
11	prices loops based on the average length, right?
12	A. Yes, it does.
13	Q. It doesn't price the loop based on the length of the cable
14	in which the loop is contained?
15	A. Your Your loop cost studies develop a cost for an
16	average loop.
17	Q. Okay. Now, if I take a fill factor and substitute into
18	this model, would you agree with me that I ought to take into
19	account the part of this cable that I have to invest in but
20	which is not included in my average loop length for purposes of
21	the cost study?
22	A. I'm having a difficult time following that logic,
23	because
24	Q. If I treat every loop as if it is 500 feet long, then half
25	of this cable is not going to be recovered, is it?

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A. I think it will be, because the other half is not 500 foot
 long.

3 Q. Which other half?

A. Well, if an average loop is 500 foot long, then that means
there's a loop that's in your hypothetical one foot long, as
well as one that is 1,000 foot long, so what you're not
recovering in your 1,000 foot loop you're recovering in your one
foot loop.

9 Q. Well, I thought -- Let's use, because it's easier,
10 increments of 100. If I have a loop every foot along here and
11 each one of these is going to have 1,000 minus its length of
12 unusable pairs -- 1,000 feet minus its length, I should say.
13 A. Okay.

Q. So the -- I happened to pick 500 because that would be the average of all these numbers, but you know the 400 foot is going to have 600 feet that's not included in the average, right? A. 600 -- 600 foot would not be -- You're saying that the length of the loop is 400 foot, but the --

19 Q. There's another 600 feet I put in there, I put in the cable 20 that is not included in that measurement of 400 feet.

21 A. Okay.

Q. So the only loop that I'm actually recovering all of the copper that's installed to provision it is the loop that's 1,000 feet long.

25 A. You're -- In your hypothetical, you're assuming that all

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- 1 100 pairs go out 1,000 foot.
- 2 Q. Yes.

3 A. Even though some of those 100 pairs may only be a foot4 long --

5 Q. Yes.

6 A. -- in your hypothetical.

7 Q. Right.

8 A. I guess I understand what you're saying, but I'm just not 9 comfortable with the logic.

10 Q. I could make this a 25 pair cable, which is the smallest, 11 and the same principle would apply. What I'm really asking you, 12 bottom line, is: Should we somehow take into account in our 13 cost model the portion of these cables which are not included in 14 our average loop length?

A. I think that the way that you've developed your average loop length was that you considered all your cables and then you developed -- I think you developed your -- your fill based on a sampling of what was in use and what was not in use at the time and you applied that fill, your own fill, as an input into your cost model, and divided that fill by the investment of an average size cable.

Q. You understand, though, that the development of this average loop was based on a cost per foot?

24 A. A cost per foot, yes.

25 Q. We use 10 cents here just as an example. That 10 cents per

1	foot	was developed using the entire network of cables?
2	A.	Based on your cable investment, yes.
3	Q.	It's different depending whether it's underground or aerial
4	and s	so forth.
5	A.	Yes, it does.
6	Q.	There's a blended number that we use for an average loop,
7	right	2?
8	A.	Yes.
9	Q.	But you'd agree with me, wouldn't you, that there are many,
10	many	cables out there that are longer than the average loop
11	lengt	ch?
12	Α.	Well, they would have to be or else it wouldn't be your
13	avera	age. Yes, I agree. Sure.
14	Q.	Okay. Now, when you recommended a range, and I think you
15	actua	ally came down to a point at one time of 60 percent.
16	Α.	Yes. That's correct.
17	Q.	Is that what you would expect the fill in this cable to be?
18	What	I mean by that is 60 customers on this 100 pair cable, or
19	is th	nat the number that you suggest should be used in the cost
20	study	y to price the cables?
21	A.	My recommendation is it's an input to your cost study.
22	Q.	Okay.
23	A.	My number is My number is not based on engineering
24	assur	nptions.
25	Q.	Okay. Have you looked at the Southwest Bell orders that

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- 1 came out at 40 percent?
- 2 A. Yes, but I don't have them memorized.
- 3 Q. I understand.
- 4 A. I obviously did, or else --

Q. I was wondering if you recall any discussion that the Texas
or the Missouri Commissions may have put in their order about
how they came out at 40 percent.

8 A. I don't recall the discussion at all.

9 Q. Okay. You've got about 12 orders listed here. Do you know 10 are all of these cost study inputs or are some of them cost 11 study inputs and some of them are attempts to estimate what the 12 fill would be in the network?

13 A. I think it's a combination of those, and sitting right

14 here, I can't tell you which is which. It was a lot of reading 15 over a period of time.

16 Q. Uh-huh.

A. But I can tell you that these -- these are the state
determinations of what fills will be used for calculating costs
for unbundled loops.

Now, that may mean that some of these are -- Well, quite honestly, I'm -- I'm positive they're from different types of models, different types of costing models. I would -- I cannot tell you that every one of these fill factors are going to be used in an L- -- LCAT model as CBT uses an LCAT model, and I'm sure there's different types of costing models out there. I

1 think we're aware of that.

2	So I'm not here to say that these are all all these fill
3	factors are are used for the exact same purpose, other than
4	the states have determined that the reasonable fill factor to be
5	able or, the reasonable fill factor to use in their states
6	are are these numbers.
7	Q. Uh-huh.
8	A. I think also by looking at the source documents, what
9	you'll also see is some of these were determined in
10	arbitrations, some of them were actually determined in TELRIC
11	proceedings, so the numbers are what they are.
12	Q. Am I correct that there are some cost models that use fill
13	inputs as what's called a cable sizing factor? Have you ever
14	heard that term?
15	A. I have heard the term. I could not tell you whether that
16	was the case with these numbers or not.
17	Q. I'm not suggesting any one of these you would know
18	A. Okay.
19	Q but when a cost study uses a cable sizing factor, does
20	that mean that the study looks at the number of customers to be
21	served and then uses that fill factor to determine what size
22	cable to put in?
23	A. I'm trying to remember if if I recall.
24	Just a clarification. Are you Are you suggesting that
25	do any of these numbers represent an input that an engineer

l	would use to size their network or are they a function of the
2	sizing of the network? I guess I'm somewhat
3	Q. Well, the former, it's not necessarily what engineers do,
4	but might just be the mechanics of the model.
5	A. Mechanics of the model.
6	Q. Let me give you an example. Say a street had 60 customers
7	on it, and I had a cable sizing factor that says I want 40
8	percent fill on that, the model might take 60, divide it by 40
9	percent and decide that I need 150 pairs; is that right?
10	A. I'll take your word for it.
11	Q. I'm just kind of going here on the fly.
12	A. Sure. I'm with you.
13	Q. And if there's not 150-pair cable available, the model
14	might select the next size up that would fit.
15	A. I don't know.
16	Q. Okay. You've heard us talk about the phenomenon known as
17	breakage, right?
18	A. Yes.
19	Q. And that's cables come in fixed sizes but customers don't?
20	A. Yes, I think that maybe you were referring to breakage in
21	your hypothetical.
22	Q. No, not really. The example of breakage might be if I had
23	101 customers and my cables come in increments of 100
24	A. Oh.
25	Q I'd have to go up to a bigger cable to serve them.

1 A. Yes.

2 Do you know whether the fill factors listed on Staff 0. 3 Exhibit 5 are before or after the effect of breakage? I don't know that either way, whether it is or not. 4 Α. 5 Okay. Is your 60 percent intended to be before or after 0. 6 breakage? 7 Α. My 60 percent is intended to replace CBT's fill factor as

8 it's currently used in the cost study, taking into account a 9 couple things.

10 One is, this would take into account an increase in demand, 11 but I think that, as I discuss, it also should consider that CBT 12 probably in a -- to become more efficient probably would also 13 need to resize.

Q. Okay. Would it be fair to state then if a fill such as the 60 were inserted in the cost study where it uses 35 now, that maybe some of the other assumptions in the study would change? A. The other assumptions?

18 Q. Such as cable sizes.

I would think it's reasonable that the cable size would 19 Α. 20 change if you wanted to become more efficient. If you wanted to 21 utilize it to the 60 percent level, then two things would 22 happen -- one of two things, if not two things, would happen. 23 One is, you would increase your demand and/or you would become more efficient by using a different cable size. 24 25 You don't -- If we kept the network the same size, I take Ο.

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1	it you wouldn't really expect the demand to jump from 35 percent
2	to 60 percent over the next five years, would you?
3	A. I don't know.
4	Q. Okay. Fair enough.
5	Might there be some combination of growth and an assumption
6	that the network itself is smaller in size?
7	A. I think I allude to that. Maybe allude's not a strong
8	enough word. I think I actually say that in my testimony
9	Q. Okay.
10	A that I think You know, I talk a lot about growth and
11	demand, and then I also, on Page 27, Line 4, at the last
12	sentence, "At the same time competition should drive any market
13	participant to become more efficient and reduce unnecessary cost
14	and excess capacity". What I meant by there, you may have
15	you may have to take a look at your network and I guess skinny
16	it down or skinny or build it up or whatever it is you may
17	have to do, but you may have to become more efficient in your
18	design.
19	Q. If I could take you back to Page 26.
20	A. Okay.
21	Q. At the bottom there, am I correct you indicate that
22	competition might drive up demand for services so that there may
23	be more demand for multiple loops in a single location?
24	A. Yes.
25	Q. So that's, I guess, an opposing force that would suggest

maybe the network ought to stay the size that it is? 1 2 Well, it's a consideration in designing your network, yeah. Α. 3 Ο. Okay. 4 Α. Sure. Because if we're going to have more than a single loop per 5 0. 6 household, we'll need to plan accordingly to accommodate that? I'd think you'd want to consider that. 7 Α. You refer to fax machines, computer dial-up services and 8 Ο. 9 the Internet as reasons that will drive additional demand. 10 Α. I think they are reasons that demand is increasing. Okay. And would you expect that those demand drivers would 11 Q. exist regardless of local competition? 12 13 I think demand is increasing for certain services like Α. this. 14 15 Currently, and I'm not sure that we're really at the level 16 of competition that we thought we would be at a couple, two, three years ago, and demand, I think, probably because of these 17 types of services, are increasing, but I believe that in a 18 19 competitive environment they probably will increase even to a 20 greater extent. 21 My own personal situation is I'm a plain old POTS telephone 22 user and when the price is right and the package is right, and 23 someone makes me a good offer, I'm ready, but right now I'm just a POTS customer. 24

25 Q. Okay.

1 A. So....

2 Q. So maybe some of the participants should direct some

3 marketing materials to you?

4 A. Well, I don't know. I don't know. I get enough of that in5 the long distance area.

6 (Laughter.)

Q. Okay. In your recommendations about fill, have you taken into account Cincinnati Bell's obligations as carrier of last resort?

10 A. I've thought about it.

11 Q. Okay. Even --

A. And I don't have the answer because I'm not -- First of all, I'm not an attorney, as everybody knows. I don't know how to answer that question because I think it's a legal question whether or not CBT is or will be the provider of last resort in a competitive environment. I don't know if that's been answered or not, so....

18 Q. Okay. When you thought about it, did it impact your 19 recommendations one way or the other?

20 A. It did not impact my recommendations, no.

Q. Okay. I'm going to move on to fiber feeder. Particularly on Page 32, on Lines 7 through 10, there's the sentence there about 33 percent of the 12-fiber strand or 25 percent of the 48-fiber strand.

25 A. Yes.

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l	Q. I couldn't figure out what the 25 percent represents. You
2	may need to read some of this to get into the context, but I
3	wonder if you could explain that to us?
4	A. I can attempt to explain it. I'm not sure what relevance
5	25 percent would have other than it was just demonstrating how
6	much of a 48-fiber strand cable, which is the average size
7	cable, I believe that CBT is saying they'll deploy, and if you
8	were to put four DLC systems over 48-strand cable, you would
9	essentially be using 25 percent of the 48-strand cable.
10	Q. I guess I figured that at 33. Maybe there was a mis
11	miscalculation there.?
12	A. Can you give me a second? I'll try it again
13	Q. Sure.
14	A just to make sure.
15	(Pause.)
16	Well, I think that what I'm trying to point out here is
17	that if you have a 48-fiber strand cable and you have over
18	that 48-fiber strand cable you have what I'll call buffers, you
19	have four 12-strand buffers.
20	Q. Like binder groups?
21	A. Binders. Bindings.
22	And if your proposal is that for each 12-strand binder or
23	buffer you're going to have one DLC system, which is four
24	strands, so if you're going to have four binders of 12 over 48,
25	and one system on each buffer, that's 12 strands being used of

l	the 48, if my math's correct, that's 25
2	Q. We have four at 16?
3	A. That's why my math is not correct.
4	Q. Maybe you're suggesting three systems, that may be what
5	you're
6	A. I'm suggesting 48 16. My math is incorrect.
7	Q. Okay.
8	A. So you're right, it should be 33 percent.
9	For the record, I want to state that I had calculated 33
10	percent originally and re-did it and said how could I have made
11	that mistake, and changed it to 25.
12	Q. Okay.
13	A. So that's why I wanted to check my math again because I did
14	the same thing just a week or so back.
15	Q. All right. That's what confused me.
16	A. And I apologize, because
17	Q. All right.
18	A again, I had it correct once and doubted myself and
19	changed it.
20	Q. Later on in that page you've got a discussion of 36-fiber
21	strand cable. I guess I'm not sure where the 36-strand fiber
22	came from either.
23	A. Well, that is confusing to me as well, because maybe it was
24	the Staff Report's recommendation that perhaps confused CBT and
25	perhaps it didn't, I don't know, but I felt that I needed to

1 address it.

2	The objection was of the Staff Report that my
3	recommendation in the Staff Report was, first of all, perhaps
4	you shouldn't use a 12-strand buffer, perhaps you should use a
5	6-strand. And by making that recommendation, the objection to
6	that was, well, if we do that, first of all, we don't buy it
7	that small, which I think in my mind is still in question, but
8	to the extent that you don't buy it, CBT was saying, well, then,
9	if we did that, we'd have to go to a 36-strand cable instead of
10	a 48-strand cable. And if we want with a 36-strand cable, our
11	investment for that cable per strand would be more, and so I'm
12	just I'm just trying to address the 36-strand issue as not
13	in my mind, it's not really the issue.
14	Q. Okay. Is it your ultimate recommendation a 67 percent
15	fill, which would mean eight strands out of 12 in use?
16	A. That is That is my recommendation, yes.
17	Q. Okay. So on average, that would mean two systems per each
18	12-fiber group?
19	A. Well, it means that you could you could and probably
20	will be providing two systems over a 12-strand buffer, yes.
21	Q. Okay. Now, you probably heard some discussion about you
22	can increase capacity by adding systems or you can increase
23	capacity by upgrading electronics for a given system, right?
24	A. I've heard that, yes.
25	Q. So for an OC-3, for example, to increase capacity, I might

.

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1	add another OC-3 or I might just swap that out for an OC-12?
2	A. Increasing the electronics?
3	Q. Right.
4	A. Yes.
5	Q. In which case, my fiber fill isn't going to increase even
6	though I've increased my electronic capacity?
7	A. That's true; but then if that's the case, then you're using
8	a 12-strand buffer when you will ever only need to have four
9	strands, and then I would go back and say, well, why aren't you
10	using a 6-strand buffer then?
11	Q. Well, let me pose this to you: If I have more than four
12	fibers available, or more than six fibers available, would that
13	give me the flexibility to choose between adding additional OC-3
14	systems or upgrading to an OC-12?
15	A. I'm sorry, the first part of your question was adding
16	additional OC-3 systems?
17	Q. If I lay more fiber so that I have more than six strands
18	available, because I'm going to need eight if I want two
19	systems, doing that would give me the flexibility of either
20	adding another OC-3 or upgrading to an OC-12?
21	A. Okay. Two OC-3s then?
22	Q. Yes.
23	A. Or one OC-12?
24	Q. Right.
25	A. Okay. And you're suggesting that if I need the flexibility

for the second OC-3, don't I need four more fibers? 1 2 Yes, sir. Ο. 3 Yes. And I would say yes. Α. Okay. And depending on the relative cost of electronics at 4 Q. 5 a given point in time, one or the other may be the better 6 solution? 7 At any given time, yes. And I say that because when I look Α. 8 at your -- your loop samples and the supporting documents that go behind the fill factor, it's obvious that there are some 9 systems at 100 percent where some systems are not, and some 10 11 systems, of course, would be in the middle somewhere, so.... Now, if I limit the amount of fiber I deploy, don't 12 Q. Okay. I limit my choices in what I can do with electronics? 13 Again, going back to either the two OC-3s or the 12? 14 Α. 15 Ο. Uh-huh. 16 Α. Well, you would limit your -- your choice if you don't have 17 enough fibers to add an extra OC-3 system, so you would 18 either -- if you know you need an extra OC-3 system, then you --19 then you install the 12-strand buffer and you use a fill to 20 indicate how much of that buffer you're going to use, which in 21 this case would be eight of the 12, or you make a decision that 22 I don't need a second OC-3 and I can upgrade it to OC-12, in 23 that case I don't need 12, I only need six. So yeah, I mean, it 24 may be a -- you may have to weigh which one you want to do. 25 Ο. Well, let's get our timing right here now.

.

1	Let's say I lay my cable now and I only have enough demands
2	for an OC-3. Are you suggesting that I should only put in
3	enough fiber to run one system at that site?
4	A. I think I'm suggesting now that the OC you can use the
5	OC-12, but the reason that you would want to use the OC-12 is
6	that you're going to have more than one system. I think that's
7	what you're telling me, I want the option to have more than one
8	system because I may very well need to have more than one
9	system, therefore, I need the cable there.
10	I'm saying, well, if you do, then you should account for
11	that cable in your fill factor, because you're telling me you're
12	going to use it.
13	Q. Well, do I know I'm going to use it or do I want it there
14	in case when it does come time to expand it's available as an
15	alternative?
16	A. I almost believe that's the same thing.
17	Q. Should I treat it as if it's two-thirds full over its whole
18	life or just at the point at which I do actually add a second
19	system?
20	A. Well, I'm kind of suggesting that My rationale, I'm
21	suggesting that you only have three choices when it comes to a
22	12-strand fiber buffer, because you need four strands, you're
23	either going to be 33, 67 or 100 percent.
24	Q. Right.
25	A. And my opinion is if your actual is 33 percent and I feel

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1	that you're going to be something greater than actual, but yet
2	I'm giving you the benefit of the doubt that you're not always
3	going to be at 100 percent, that only leaves me one other
4	choice, and that would be two systems, which would be 67 percent
5	fill of that particular cable.
6	Q. Well, let me present another thought to you. We're looking
7	at network as a whole, not just individual systems. Couldn't
8	there be one group of systems that are at 33 percent and a
9	different group of systems that are at 67 percent, so that on
10	the whole, maybe I'm only at 50 percent?
11	A. You would have a third group of systems that may be at 100
12	percent.
13	Q. But if the cost of three systems of equal size was less
14	than the cost of one system of larger size, maybe I would never
15	get there?
16	A. I think this is kind of a circular argument. I understand
17	what you're saying, but I happen to believe that you have a
18	choice, I think, and my first recommendation, my first
19	suggestion was maybe a 6-strand buffer. There's some reasons
20	why you would not want to do that, so if we're going to use a
21	12, I think that for those reasons you want to use a 12, then
22	which are that, hey, we may need those extra strands, or we will
23	need those extra strands, and I'm suggesting that in a
24	competitive environment, you know, likely you will, or
25	potentially you will, so price it such.

Do the fill assumptions that you're making for purposes of 1 0. loop systems affect the cost study assumptions for the dark 2 3 fiber study? I don't know. Honestly, I haven't -- haven't even -- I'm 4 Α. 5 not even familiar with the dark fiber issues. Q. 6 Okay. 7 Probably should be, but it's never been one of my issues to Α. 8 review, so I have no opinion on dark fiber at all. 9 What I was curious about was whether for purposes of the Ο. 10 dark fiber studies I should start with what you're suggesting 11 would be vacant in the fiber that's used for particular DLC 12 systems or whether I should look at what's actually vacant.? If 13 you have no opinion, that's fine. 14 Α. I have no opinion. I apologize. 15 Ο. Okay. 16 Α. I just have not thought of it. 17 Ο. All right. Page 36. At the top of the page here, you 18 suggest Cincinnati Bell use the discounts for the \$20 million 19 level of investment. You use the term "in the year 1999". 20 Α. Yes. 21 My understanding of the Fujitsu contract, which I think 0. you're referring to here, is that the \$20 million level applies 22 23 to a two-year period? 24 Α. For a two-year period? What I'm referring to here -- and I hope I didn't misstate it -- is that through all of the 25

depositions and the cross and what have you, that there was a l lot of discussion on what was the appropriate discounts that 2 should be used, and I think originally CBT only used the 3 baseline investments without any discounts, and my 4 recommendation was that, well, that's not reasonable if there's 5 discounts to be had, you should -- you should reflect those in 6 your study, and I think that Mr. Mette's recommendation, I 7 believe it was in his supplemental testimony, said that -- if 8 9 I'm not mistaken -- that the reasonable discount would be 11 10 percent discount for FACTR equipment at the \$2 million level, and I think that the term of the contract -- that 1990 was the 11 middle of the term of the contract, and I think that's the 12 13 reason he recommended that, and I'm also -- and the reason I 14 believe that that's reasonable is that the 1990 time frame is 15 now. This is the beginning of the -- If he was to come in with 16 a --

17 Q. I think we're passing each other.

18 A. Are we passing each other? I'll just stop and give you19 another chance.

Q. The \$20 million is a threshold that needs to be met to kick into a certain level of discount, right?

22 A. Yes.

Q. Okay. All I'm trying to understand here is the period over which that \$20 million threshold is measured would have been 1997 and 1998?

1	A. I think that's I think that's correct, unless I just
2	misunderstood, which I don't believe I did.
3	Mr. Mette, in his supplemental testimony, I believe, is
4	recommending that the reasonable discount is 11 percent, and
5	that 11 percent represents the 19 investments of \$2 million
6	at the 1999 year.
7	Q. Let me try to state it a different way and see if you agree
8	with me.
9	A. Okay.
10	Q. In 1999, the 11 percent discount would apply during 1991
11	because of the purchases that had occurred in 1997 and 1998?
12	A. Well, I think that I think that's correct, because I
13	think the contract goes out two more years past '99, and I think
14	1999 was the middle of the contract.
15	Q. Okay. I'm just trying to make sure that you're not
16	suggesting here that there's \$20 million worth of purchases
17	during 1999.
18	A. No, I don't think I don't think that's my recollection
19	of what the what I seen in the contract.
20	Q. Right. Mine as well. Just on reading the testimony the
21	way it's written, it suggested to me perhaps that the \$20
22	million applied to the year 1999 as opposed to being what it had
23	purchased in the past to arrive at a particular discount during
24	1999.
25	A. And perhaps my testimony could have been clearer. What I'm

1	actua	ally trying to represent in my testimony is that I don't see
2	where	e Mette's recommendation is unreasonable.
3	Q.	Okay.
4	A.	And I was trying to state what that represented.
5	Q.	All right.
6	A.	Yes.
7	Q.	I think we're saying the same thing.
8	Α.	Okay.
9	Q.	Okay.
10	A.	I'm not sure, but okay.
11	Q.	The next section of your testimony deals with integrated
12	versu	is universal DLC. On Page 37, Lines 5 through 7, you make
13	refei	rence excuse me to a loop inventory tracking system.
14	A.	Yes.
15	Q.	Now, I'm not sure what your understanding is of what such a
16	loop	tracking system would and wouldn't do. Could you
17	elabo	prate?
18	A.	Well, I wish I could because I'm not I'm not sure
19	exact	ly what the inventory tracking system does or doesn't do as
20	well,	, but I recall in Mr. Meier's deposition that he spoke to
21	the :	inventory your inventory tracking system as something
22	that	would prohibit you from providing unbundled loops on an
23	integ	grated digital loop carrier system.
24	Q.	Okay.
25	Α.	I mean, I believe that he had two depositions. I think he

,

1	said it in both depositions. I'm not sure what it does or
2	doesn't do, but evidently, according to Mr. Meier, it's not
3	something that would allow you to unbundled loops on a DLC.
4	Q. Let me give it a shot and see if this makes sense to you.
5	When Cincinnati Bell tracks its loop, it has something called an
6	F1 and F2. Have you ever heard of that?
7	A. Yes.
8	Q. Okay. F1 would be the feeder section, and F2 the
9	distribution section.
10	A. Yes.
11	Q. So when we have these cross connects going on in the SAI,
12	the loop inventory system needs to know what F1 is attached to
13	which F2?
14	A. Yes.
15	Q. Okay. Now, when we get into the DLC system, if I've got
16	cross connect capability in the remote terminal of the DLC,
17	don't I now have an F1 and an F2 and an F3?
18	A. Yes.
19	Q. Okay.
20	A. The F2 is subfeeder.
21	Q. So I have got a new section of the loop that needs to be
22	separately be tracked if I'm going to do some sort of cross
23	connects at the remote terminal?
24	A. That would make sense, yes.
25	Q. And if I have an inventory system that only tracks two
	· · · · · · · · · · · · · · · · · · ·

ŗ	components I can't use that system to track three components?
÷	Now would have to modify your system. I would think
2	A. You would have to modily your system, I would think.
3	Q. You suggest that maybe we ought to price what it would cost
4	to do that as opposed to the alternative?
5	A. There seems to be a lot of debate on several different
6	alternatives, and I only have the cost on one of maybe three or
7	four different methods; and so, yes, I think it I think it
8	would be reasonable to at least try to come up with a cost
9	difference between the two and see which one is more
10	economic
11	Q. Okay.
12	A economical to provide.
13	Q. Right now I want to focus on the digital cross connect
14	piece. You were here for Mr. Starkey and Mr. Gose's
15	cross-examinations, weren't you?
16	A. Yes.
17	Q. You recall we talked about what that digital cross connect
18	allowed you to do would be to take subfeeder pairs which are on
19	copper, this F2 is on copper, and then map that onto a
20	particular DS-1 circuit in this fiber feeder section?
21	A. Yes.
22	Q. So when I come out the opposite side of the digital loop
23	carrier, those loops will be contained within a given DS-1
24	signal?
25	A. Excuse me. Let me back up.

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1 What system are we referring to here; is this an IDLC or UDLC. 2 This would be the integrated, I believe. Q. 3 Α. 4 Okay. Maybe I should -- Let me draw another one down here. We'll 5 Ο. 6 have to expand our central office. And I've got something called a common shelf and a narrow band shelf? 7 8 Α. Yes. And I might have another DLC site out here that came into 9 Ο. that and you understand that this comes out on a DSL level? 10 Yes; and that would be you're referring to universal then. 11 Α. 12 0. This is universal and this is integrated. Α. 13 Okay. The way Cincinnati Bell uses integrated, this goes right 14 Ο. into a switch, doesn't it? 15 16 Α. That's my understanding, yes. 17 Ο. Okay. Now, the inventory system we're talking about would be needed to allow the F2 sections to be cross connected to F1 18 sections in anything other than a straight one-to-one fashion? 19 20 Α. Yes. 21 So the way Cincinnati Bell provisions this currently would Q. be -- Let's say there's 100 plug-ins on the system, they would 22 23 pluq them all in in order, and then in the central office they 24 would all appear in order on the DS-1s? That's my understanding. 25 Α.

1 0. Okay. So the cross connect system allows us to scramble 2 those so that they appear different places in the central 3 office? 4 Α. Okay. Now, you could still use integrated digital loop carrier 5 Ο. 6 without this remote cross connect, couldn't you, if you did manual cross connects? 7 Excuse me, the first part of that --8 Α. I could still map loops onto the individual DS-1 channels 9 Ο. without the electronic cross connects, couldn't I? 10 Α. I don't know. 11 12 0. Well, can't I do that at the SAI? Since the ultimate customer is downstream, couldn't I manually do cross connects at 13 the SAI and still point particular loops onto particular DS-1s? 14 Yes. Are you asking can you do that manually in the remote 15 Α. 16 digital terminal? 17 I'm suggesting we do that at the SAI as opposed to the Q. No. DLC. 18 Α. Yes. 19 20 So the comparison there, am I correct, would be the cost of Ο. a new inventory system that will track F2 separately versus the 21 22 cost of manually cross connecting wires at the SAI? 23 Yes. If that's how your inventory system works, that would Α. 24 be the comparison. Okay. Now, you've heard some of the discussion about 25 Q.

1	using	g integrated DLC requires a DS-1 signal. Do you recall that
2	with	the other witnesses?
3	A.	I apologize. Can you repeat the question?
4	Q.	If I use an integrated DLC Actually, I should relabel
5	this	. Instead of DLC, this box is called a FLM, right?
6	Α.	Yes. IDLC, yes, that's a FLM.
7	Q.	It comes in one side optical, comes out the other side as
8	elec	trical DS-1?
9	A.	Yes.
10	Q.	If I want to pick out individual loops on a given DS-1
11	sign	al, I'm going to need some additional piece of equipment to
12	do ti	hat?
13	Α.	And are you Yes, you will.
14	Q.	And what Cincinnati Bell uses is its switch?
15	A.	Yes, it does.
16	Q.	And you've heard some discussion of hair pinning. Are you
17	awar	e of how hair pinning works?
18	A.	I wasn't until I crossed until I heard cross, yes.
19	Q.	That uses the switch as well, it just does it so that it's
20	an e	xternal interface as opposed to inside the switch?
21	Α.	Yes, that's my understanding of hair pinning.
22	Q.	And there's a third way, which would be to send this DS-1
23	into	a multiplexer, right?
24	Α.	Into D4.
25	Q.	Right.

- 1 A. Yes.
- 2 Q. It comes out a DS-0?
- 3 A. Yes.

4 Q. Now, I guess the final alternative would be to take a5 straight DS-1 signal, right?

- 6 A. To where?
- 7 Q. To whoever is trying to buy a loop off of that system.
- 8 A. You mean to a collocator?
- 9 Q. Right.

10 A. I've heard the choices being -- I don't know about your 11 last one. Your last choice, I've heard the choices being the 12 IDLC as you provide it, terminates into the switch, another 13 alternative would be, as you mentioned, going to the D4 for --14 for a multiplexer and the hair pinning.

15 Q. Okay. I didn't draw that one, but let's do that, hair 16 pinning.

17 A. Okay. Then I'm also somewhat familiar with the

18 multi-hosting arrangement. I'm not an expert on it, but I'm

19 familiar with it because I've heard it described a couple

20 different times, so I'm familiar with those four different ways

21 to do it, but I'm not sure exactly what you're referring to by 22 just a straight DS-0 coming off.

23 Q. DS-1, I meant. Is that multi-hosting?

24 A. I'm sorry. I seen DS-0 up there.

25 Q. That's down here on our universal system.

1 A. Okay.

2	Q. Okay. So when you said multi-hosting, that's the DS-1?
3	A. That's what I Yes. That's the only ones I know about.
4	So about so that's what you're referring to by drawing the
5	lines saying it's a DS-1 going to a collocated spot where I
6	believe that the collocator would also have equipment that you
7	would have in your remote digital terminal, that kind of stuff.
8	Q. Okay.
9	A. If that's what you're referring to with that line, yes.
10	Q. Okay. So I can use universal which produces a DS-0 signal,
11	I can use hair pinning through my switch, which uses a
12	DS-0 signal, I can demultiplex off a FLM to produce a DS-0
13	signal, or I can produce a DS-1 signal which you call
14	multi-hosting?
15	A. I think that's the choices.
16	Q. Okay. Now, which of these choices is it you're
17	recommending that we use?
18	A. I'm recommending you to use the the least-cost, most
19	efficient one. And I'm asking you because I don't know which
20	one it is. I can't recommend one of those because I have no
21	idea. I've heard the discussion. I'm not sure without somebody
22	doing the work. I don't know if anybody knows which one. You
23	may have a good CBT and MCI and the other parties may be able
24	to come up with a good estimate, but staff can't.
25	Q. Okay.

A. Before I can say, "Hey, it's either A, B, C or D", I can't
do that in good faith without knowing what the other three
represent as far as least-cost, most efficient type of an
arrangement.

There's a couple things that come to question, and I -- I 5 do recognize that in each one of those four alternatives there's б 7 going to be either less or more electronics involved or no -- or less or more or different types of electronic equipment 8 involved, one uses a FLM, the other uses the Fujitsu FACTR, the 9 multi-host now, that also means that somebody is 10 11 going to have to come up with the cost of the remote digital 12 terminal. Whether the proposal is for you to do that or if the proposal is that the competitor is going to provide their own in 13 their own collocation arrangement, I don't think that's been a 14 part of this hearing, so I don't -- There's a lot of questions 15 out there just not -- that just have not been answered. 16

17 So my recommendation is CBT go back and kind of demonstrate 18 why your proposal is not the best proposal is by simply giving 19 us something else to compare it with, if that's a fair summary, 20 which I think it is.

21 Q. I think it is.

Now, let me add a little bit of complexity to this, in case there's not enough already.

You agree with me that UDLC, hair pinning and demulti-plexing using a D4 off a D4 channel bank, all of those

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1 produce a DS-0 loop?

2 A. That's my understanding, yes.

3 Q. If I used what you call multi-hosting with a DS-1 signal, I 4 don't have a DS-0 interface?

5 A. That's also my understanding, yes.

Q. Here is the problem. If I'm trying to price loops one at a
time, and I have a DS-1 signal that can produce anything from
one to 28, 24 or 28, I'm not sure which now, but let's say 24 -A. 24.

10 Q. -- and I don't know how many loops a given collocator is 11 going to request at a time, how do I build a cost study around 12 that sort of provisioning?

13 A. Well, that's a very good question. I don't think I'm 14 asking you to do that. I'm asking you to go and at least 15 compare the alternatives, and if one alternative is not doable, 16 then how do you do it?

So I think that -- If I may, I think that what I'm asking 17 is when we're looking at all the different electronic 18 components, the FLM factors, where they would be used, and what 19 you would use in one versus the other, in addition to what you 20 21 would have to do to change your inventory system, taking all 22 those into consideration, what would be the best way to provision this, what would be the most economical, efficient way 23 to provision this, this concerns me for the reasons I've already 24 25 stated, is that if the -- if the notion is that you can just run

1	this DS-1 off and drop it, and nothing else has to be done, then
2	that concerns me because I don't know what the parties have in
3	mind here. I don't know if they're just saying, "Okay. I'm
4	going to have a collocated spot, I'm going to put a remote
5	digital terminal, so I want you to price me out DS-1".
6	I'm not sure I heard that. I'm not sure I heard that. I
7	think I've heard everybody say, "Hey, I want a DS-0 and how much
8	does it cost, I want it to be the most efficient, I want
9	this and I want that".
10	But anyway, I think maybe excluding this, unless you can
11	come up with a way to cost that out on a DS-0 level, then I'm
12	not trying to be unreasonable. I'm just requesting CBT to
13	probably give the Commission some help in which is the most
14	efficient, least-cost way to provide unbundled loops to
15	competitors.
16	Q. Okay. You understand that if the multi-hosting option was
17	selected, that the very first loop requires the dedication of a
18	DS-1 channel through that whole feeder system to that one
19	collocator?
20	A. If I just understood you right, you're saying from here,
21	this is a DS-1?
22	Q. Well, this is an OC-3 system.
23	A. Yeah, the way you have it drawn, it's an OC-3 system.
24	Q. Which has 84 DS-1s on it. If I want to take one loop
25	through loop and do it through multi-hosting where I produce a

l	DS-1 signal and that DS-1 signal is dedicated to that one
2	collocator through that whole system
3	A. And you're saying what do you do with the other 83?
4	Q. Yeah, what do I do with the other 23 channels on the DS-1?
5	A. I'm suggesting I'm recommending that you tell me the
6	most economically efficient way to do this.
7	Q. Okay.
8	A. If you can demonstrate to me that that is not the way to do
9	it, then we'll look at it. And I guess we'll make that decision
10	or the Commission will make that decision, I should say.
11	Q. Okay. And you agree that each of these different methods I
12	need to put in all the parts that it takes to make that work?
13	A. It seems reasonable to me.
14	Q. Okay.
15	A. Of course, I would anticipate that when you're putting
16	those all those parts in, you say that you say that you
17	need to make it work, that you will support that and, you know,
18	whatever it is that you provide us.
19	Q. Now, you talk in your testimony about the ability of the
20	FACTR system to groom loops. Could you be a little more
21	specific about what that means?
22	A. I can I can try, but it's really from a really,
23	again, a nonengineering person's viewpoint. So from a layman's
24	viewpoint, I understand that it would be it would instead
25	of requiring you to send a technician out to the field to

.

1	configure loops or groom loops, that you would be able to do it
2	within the central office, because the FACTR system is a
3	computer-based system, it's a software-based system that you
4	would be able to do whatever you need to do out in the field,
5	you would now be able to do it in the central office.
6	Q. And that pertains to what's in my remote terminal site,
7	right?
8	A. Yes, that's correct.
9	Q. It doesn't extend onto the SAI or drop terminal?
10	A. It's my understanding that it's the remote digital terminal
11	site.
12	Q. Okay. On Line 21, you indicate that CBT argues that it
13	can't track loops through a universal DLC system. Did you mean
14	to say integrated there?
15	A. Page number, please.
16	Q. Page 37, Line 21.
17	A. Page 37.
18	Q. Yes.
19	A. Somehow I got ahead of you. And I I'm sorry, what line
20	again, please?
21	Q. It's Line 21.
22	A. Okay. Yes. That's That's a correction. It's my
23	understanding, according to Mr. Meier, that the inventory
24	tracking system is not capable of tracking and assigning loops
25	through the IDLC system, and that was one of the reasons why you

1	need to use the universal digital loop carrier system; so yes,
2	with that clarification, that's a
3	Q. Can we be more specific and say integrated digital loop
4	system using remote cross connect capability?
5	A. I I would prefer to keep it with just the one correction
6	because I'm not I'm not that familiar, other than what you
7	tried to explain to me about the inventory tracking system, I
8	don't know if that would be accurate or not to do that.
9	Q. That's fine.
10	A. I'm more comfortable just leaving it at the correction of
11	integrated versus the universal.
12	Q. Okay. Do you understand that Cincinnati Bell itself only
13	uses the integrated system for switched services?
14	A. Yes. Yes. For your bundled service, in particular, for
15	retail.
16	Q. Yes.
17	A. Yes.
18	Q. Have you reviewed the provisions in Cincinnati Bell's
19	interconnection agreements that pertain to the unbundling of
20	loops that happen to be on integrated systems?
21	A. I I have I'm going to say no because I haven't looked
22	at your interconnection agreement since after the arbitration.
23	Q. Okay.
24	A. And I I There's been so much that's happened since
25	then, I don't even recall what's in your interconnection

1 agreement and what's not.

Q. Okay. On Page 39, you have a discussion about using the Fujitsu system to provide ADSL service. Where does your understanding come from there?

I -- From -- Actually, I got the information from 5 Α. 6 Fujitsu's -- if I pronounce that correctly -- web site. I think 7 that there's quite a bit of information on the web site and 8 there's -- with the amazing new Internet and web sites, there's actually all kinds of information all over the web about ADSL 9 and how it can be used and so on and so forth, so a number of 10 sources, but the one that actually comes to my mind is the -- is 11 Fujitsu's web site. 12

13 Q. Okay. Do you know if Cincinnati Bell uses the Fujitsu 14 equipment for that purpose?

I think -- I think in my testimony I'm stating that I don't 15 Α. 16 believe that they do. In my testimony, I believe I wasn't the 17 staff person that worked on your ADSL application here, so I didn't get that -- I didn't get that opportunity to look at that 18 cost study or that design; however, it's my understanding that 19 20 your ADSL system as it's approved and tariffed here at the 21 Commission, and I believe that there's even tariff language that 22 says you only will be provisioning that service over copper 23 facilities, or at least copper facilities that can be equipped to handle ADSL, I believe that's what the tariff says, something 24 like that. So it's my understanding currently, no, you don't 25

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provide ADSL over -- over anything but compatible or capable 1 2 copper loops. 3 Okay. I -- I don't want to go too deep into this if it's Ο. 4 beyond your knowledge, but you understand that ADSL service in 5 the central office doesn't go into the regular circuit switch, it goes to an ATM switch? 6 7 It goes -- Well, it goes into the central office and it Α. 8 goes into an -- I'll mispronounce this as well. I won't even be 9 able to even spell what I'm pronouncing, but DSLAM. 10 Q. DSLAM? 11 Α. I think there are a lot of different pronunciations. Ι 12 think that what it is is a piece of a electronics similar to a 13 modem. 14 THE EXAMINER: Let's go off the record. 15 (Discussion held off the record.) 16 (Short recess taken.) THE EXAMINER: Okay. Back on the record. 17 Mr. Francis, you want to continue your answer? 18 19 THE WITNESS: Yes. I think I was describing the ADSL 20 system as I understand it, and I think I left off by describing 21 that at the central office there would be a DSLAM model or a 22 DSLAM model that would -- essentially is a modem, and that modem 23 essentially what it does is bifurcates a voice signal from the 24 data signal and the voice signal goes to the public switch network, as I understand it. That data signal then goes to the 25
data network, then they would be -- on the other end there would 1 be another modem at the customer's premise. So that's how I 2 З understand the technology. BY MR. HART: 4 Okay. That's an additional piece of electronics we haven't 5 Ο. 6 even talked about in our diagram. 7 Α. Yes, at both ends. 8 Let me go to another topic here on Page 40, Line 16. You 0. 9 raise a question about miscellaneous conduit and material costs. Yes, I see that. 10 Α. Is your issue whether the cost exists or whether they've 11 0. 12 been documented? I think it's -- Well, I guess it's -- it's the same 13 Α. 14 answer. I guess the answer is that unless it's supported, then I don't know it really exists, so are -- I'm not questioning 15 16 CBT's integrity. I'm assuming that if they think that there is 17 a cost that should be recovered, then there probably is some 18 level of cost that should be recovered. To the extent it's the 19 markup or the amount that they're -- they're saying, without the 20 analytical support that I think is necessary to verify it, then 21 I'm just -- I have to make the assumption that it's not -- it's 22 not a reasonable cost to include. 23 Okay. And with respect to miscellaneous conduit, you Q. 24 understand from discussions with Mr. Mette that that represents 25 things such as where cables come out of the ground to go up onto

1	a pole or where there's a pedestal, things of that sort that			
2	wouldn't necessarily be booked in a conduit account?			
3	A. Just to clarify now, we're talking about I have I have			
4	two recommendations associated with miscellaneous costs. One is			
5	the miscellaneous cost for conduit, the other is the			
6	miscellaneous markup of ten percent.			
7	Q. I'm not to the ten percent yet.			
8	A. We're not talking about the ten percent.			
9	Q. Yes.			
10	A. Okay. Yes, I understand that that is his testimony, but			
11	the difficulty that I have with that is trying to do a a			
12	review of that calculation, and in the in the cost studies or			
13	the support documentation that came in Data Request 52, which			
14	supports the cost study, there's an item down at the the cost			
15	study really makes up all of those things that are included in			
16	the cable investment. That's really what we're determining here			
17	is the cable investment.			
18	And after all those investments are calculated and			
19	determined, then at the bottom there is an additional			
20	calculation for miscellaneous conduit cost, and it's costed out			
21	in units of miscellaneous cost, which seems to me somewhat			
22	confusing because you're for an example, and I could actually			
23	go to the study, and I will if you would like me to, but just			
24	for an example, miscellaneous costs of \$250 per unit, and there			
25	may be a unit here for one type of conduit for Maybe I should			

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1 go to the cost study, but --

2 Q. If that would help you, feel free.

A. A miscellaneous unit or two miscellaneous units at \$250, so that's \$500. My point really is you develop a miscellaneous cost in units in any miscellaneous cost, it means it may be this or may be this because your calculating it in units. One time you have one unit and in another cable investment you may have two units; so it's not substantiated. I was just not able -- I was not comfortable with the way that you did it, so....

10 Q. So we need to document that or you're suggesting it has to 11 come out?

12 A. My recommendation as it stands is it comes out.

13 Q. Okay.

A. What the Commission decides to do based on the record couldbe totally something different.

16 Q. I take it the same general approach applies to the ten 17 percent markup?

18 A. That's correct.

19 Q. Okay. Now, do you recall in Mr. Mette's December 1997 20 testimony where he did some calculations with respect to 21 warehousing costs?

22 A. You know, I really don't.

Q. Okay. I, unfortunately, don't have that with me right at
this moment, but he, in response to criticisms of the ten
percent factor, attempted to do some calculations to quantify at

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l	least part of that related to warehousing. Does that refresh			
2	your recollection?			
3	A. It it rings a bell, but I I don't recall the details			
4	of the conversation. You say it was in his testimony?			
5	Q. It was an attachment, I believe.			
6	A. It escapes me.			
7	Q. Okay. I tell you what, why don't we come back to that when			
8	he finds this exhibit. For a moment, let's go on.			
9	A. Okay.			
10	Q. I think the next topic in your testimony is the network			
11	interface device or the NID?			
12	A. Yes.			
13	Q. I guess I'm not clear whether you're recommending that the			
14	NID remain in the loop or whether it become a separate element.			
15	A. Well, here's my problem with the with how you developed			
16	your cost, not necessarily how you developed your cost for the			
17	NID, but how you bundled the cost for the NID with the drop			
18	and and bundled it with the loop.			
19	The Commission's Local Service Guidelines clearly state			
20	that the NID should be a separate UNE. There's only certain			
21	UNE's that it states are, in fact, UNE's all by myself. As a			
22	matter of fact, I think that the FCC's order also says that the			
23	NID is a separate UNE and the Commission's guidelines would			
24	indicate that you would cost a NID separately.			
25	I have not heard a lot of objection from any of the parties			

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1	that what CBT's doing is necessarily something that they don't
2	want to have done. And if they do, I expect to hear about that
3	tomorrow morning. But I don't recall any objections to what
4	you've done and associated with the NID.
5	But I have a problem because I think that our guidelines
6	call for a NID to be a separate UNE. The example that would
7	come to my mind that may come into play sometime in the future
8	is that somebody outside of this proceeding, a competitive
9	carrier outside of this proceeding for one reason or another
10	would want to come into your your area and use your NID.
11	Q. Okay.
12	A. And then you don't have a separate element. So that's the
13	only reason I bring this up is because I think it's a
14	requirement and you're bundling it; so I just point that out.
15	Q. Okay. Let me walk through the permutations with you. If a
16	NEC would purchase an unbundled loop, would you generally expect
17	that it would want the NID along with that?
18	A. If the NEC purchases your unbundled loop?
19	Q. A Cincinnati Bell unbundled loop.
20	A. Well, logically it seems to me if that competitor
21	carrier wanted to come in and purchase your unbundled loop,
22	especially if it's an existing unbundled loop, it's probably
23	already connected to the NID. It makes sense to me that that
24	would be reasonable at that point, whether or not it's the
25	NID is bundled into the cost of the loop or you're just charging

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two different prices for -- for providing the same elements. 1 2 And there wouldn't seem to be any practical reason Okay. 0. why a competitor would want to go install its own NID and 3 connect Cincinnati Bell's loop to that NID, then connect the 4 inside wire to the NID. It would be a lot of work for something 5 6 that didn't need to be done at all. It may be cost prohibitive, but then again, I don't know 7 Α.

8 if -- if they happen to be in the area, if they're providing 9 some other service to that customer and/or if it's a new 10 development there in that area anyway, and they know that that 11 development is there, maybe they stick on their own NID.

12 And I guess there's a lot of different scenarios that you 13 could come up with. I don't know if -- I don't know how 14 reasonable each one would be or how likely each one would be, 15 which gives me some concern whether or not, you know, whether or 16 not the -- I guess I'm just trying to go strictly by the 17 guideline and that it's a requirement.

18 Q. Okay. And where the new entrant might need the NID without 19 the loop would be as if they were going to build their own 20 loops?

21 A. That would be -- Yes. That's correct.

Q. They might use the NID as a cross connect to the customer's inside wire?

A. Well, they might. But they might just use their own NID and especially if it's not an existing loop. If it's not an

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1 existing development, they may be out there before you. 2 Q. So they may not use Cincinnati Bell's loop or Cincinnati 3 Bell's NID? That's another possibility. 4 Α. 5 All right. Mr. Francis, I want to show you -- actually, Ο. why don't we start with the exhibit. It's Exhibit 3 to 6 Mr. Mette's December '97 testimony. And I think he has got 7 flagged the page of the testimony itself that goes with that. 8 9 Does that help refresh your recollection at all? If I could take a second and review it. 10 Α. Ο. Sure. 11 12 MS. SANDERS: What was the reference to the testimony, Mr. Hart. 13 14 MR. HART: December 1997. 15 MS. SANDERS: Thank you. 16 THE EXAMINER: Which page out of that exhibit are 17 you --18 THE WITNESS: The testimony itself is on Page 27 and 19 on Line 13 he is referencing Exhibit 3, Part 1. 20 I do recall reading this. And, unfortunately, I didn't bring my copy up with me because in most cases what I did 21 22 is went through the exhibits to -- and maybe I've made notes or 23 whatever, but yes, I do recall this. 24 BY MR. HART: 25 Q. Okay.

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1 But I don't recall necessarily doing an analysis on it. Α. 2 That's what I was going to ask you is when you made -- in 0. your testimony on, I guess, Page 41 where you said that the ten 3 percent hadn't been documented to your satisfaction, whether you 4 had taken into account Exhibit 3 to Mr. Mette's December 1997 5 б testimony? 7 Α. I did not.

8 Q. Okay.

9 A. The -- My testimony was based on the cost study itself, the 10 original cost study, not the supplemental testimony.

11 Q. Okay. So do you have any views now, I know you haven't had 12 much time to consider this, but as to whether that exhibit would 13 satisfy your need for some documentation of the miscellaneous 14 costs?

A. Well, I had a few minutes to refresh my memory, but my thought is from a -- from an analyst's viewpoint, to look at this, I would want to, as we all do, and it may be here as well, but I would -- what I would want to do is verify the numbers on this Exhibit 1. I see there's some additional exhibits behind that, which may very well be supporting these numbers, but I don't know that.

But from -- from an analyst's point of view, I would want to verify not only the numbers and where the numbers come from and calculations of the numbers, but also the reasonableness of what those numbers are supposed to support. I didn't -- I

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1	didn't do that, so I would be I would be reluctant to change
2	my testimony based on just reviewing this right now.
3	Q. I understand that. But would it also be fair to say that
4	your testimony didn't take that analysis into account either?
5	A. I did not take this analysis into account.
6	Q. All right. I think one final topic I want to talk to you
7	about and that's banding. It begins on Page 44.
8	A. Yes.
9	Q. As I read your testimony, you suggest that Cincinnati
10	Bell's approach could be reasonable or MCI's approach could be
11	reasonable or a four-band approach could be reasonable?
12	A. Yes, that's my testimony.
13	Q. Okay. And you didn't necessarily pick any one of those as
14	your recommendation?
15	A. I did not pick one of those as my recommendation.
16	Q. Okay. We've talked about the I think it's been coined
17	the issue a loop is a loop. Are you familiar
18	A. Yes.
19	Q with what we mean by that?
20	A. Yes. We've said that a few times over the years.
21	Q. Regardless of how we define the bands, would you agree that
22	we should weight the loops according to how they actually appear
23	as opposed to the artificial number of 80/20?
24	A. Well, here here's the problem that I would have with
25	just saying that. On the on its face, yes, that's probably

1 reasonable to do.

Here's the problem that I want to point out. Maybe not 2 necessarily a problem, but at least a concern that I would have. 3 Initially Cincinnati Bell proposed an 80 /20 split and I believe 4 5 it's within the response to Data Request 52 that that split was done based on a demand forecast, what CBT thought the market was 6 going to look like in a competitive environment. This was also 7 done at the same time with your -- your current and -- original 8 and current proposal of how you calculate the bands, how you 9 10 geographically designed the bands and that 80 /20 split went with those bands. 11

Now -- Now, your proposal is to take the actual split with those same bands. And so I -- I'm not sure exactly why then you came in originally with what you've forecasted as a demand, but now you want to -- as a forecast demand based on what you thought competitors were going to do to your market, but now you're backing off a forecast demand, now you want to use actual numbers again.

19 So I'm suggesting that I -- I have a concern that you're 20 backing off of your original demand. However, with the other 21 two options of breaking West 7th out and reconfiguring the 22 bands, I guess in a sense it may be a compromise that if you're 23 going to pull West 7th out and make the -- make it more of a 24 cost-causation type of deaveraging, then, okay. Well, maybe 25 it's also appropriate to use the actual numbers for your

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1 weighting, but if you're going to go back to -- and stay with 2 your original proposal, assume that your original proposal in your geographical bands -- your original proposal was also based 3 on your forward-looking environment, which you said was 80/20. 4 Let me probe that a little bit. Would you agree with me 5 0. б that the TELRIC cost methodology requires that you develop the 7 cost of the entire element? Α. 8 Yes. And when we talk about loops, that means the universe of 9 Ο. loops, not just the ones that we would expect to sell to new 10 entrants? 11 12 Α. Yes. 13 0. So we need to look at the loops that the new entrants might buy and the loops that Cincinnati Bell would be using for itself 14 as our population for our cost study? 15 16 Α. I think that's reasonable, yes. 17 So would you agree that the 80/20 might be a projection of Ο. 18 what the NECs would buy would be an inappropriate universe for 19 purposes of the TELRIC study? 20 Α. I'm just suggesting that that was your recommendation 21 originally. 22 That might have been a mistake, isn't it? Ο. I don't know if it's a mistake or not. You kind of told me 23 Α. 24 the reason you did it was based on a demand forecast and you 25 felt that your competitors were going to do that.

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1	Q. Because our competitors are mostly interested in business				
2	lines?				
3	A. Well, I think that was your notion, yes.				
4	Q.	Q. Okay. Now, are you familiar with the alternative			
5	regulation plan and the way it bands Cincinnati Bell's				
6	territory?				
7	A. No, I'm not. Your current plan?				
8	Q	Right.			
9	Α.	No.			
10	Q.	I'll represent to you that the bands are the same as what			
11	Cinci	nnati Bell has proposed here?			
12	Α.	Oh, I apologize yes. I wasn't a part of that proceeding,			
13	but you're asking me if is the band that you're using for				
14	your residential or for your retail services the same as you're				
15	propo	sing here.			
16	Q.	Yes?			
17	A.	Yes. I'm aware of that, yes.			
18	Q.	Okay. Are there good policy reasons why the bands ought to			
19	be de	fined the same way for retail services as for wholesale			
20	servi	ces?			
21	A.	There may be policy reasons to do that. I will In my			
22	testi	mony, I'm attempting to give alternatives to the policy			
23	maker	s. And I've given three I think three reasonable			
24	alter	natives. And I think that all three are based on the			
25	cost-	causation principle. And as I stated, I don't think the			

original proposal was in error, nor do I think that it would be 1 2 unreasonable if you would have even went further. 3 Ο. Okay. So there's three alternatives for consideration. 4 Α. 5 Okay. And the only one of those three that's the same as Ο. some existing regulatory plan is our three-band approach? 6 7 You're asking -- you're insinuating that the -- excuse me. Α. 8 Let me start over. Say it in more of a positive manner. 9 What you're -- what you're saying is all of your -- all the 10 central offices that are in Band 1 in the TELRIC study are the same central offices that are in Band 1 in the retail study? 11 12 Ο. Right. 13 Α. Is that what you're asking me? 14 Q. Right. 15 That's true, but I actually forgot the question that you Α. asked. 16 17 Ο. Well, my question is if we were to look at the three 18 alternatives you've outlined in your testimony, there's only one of those that matches up to an existing regulatory banding plan, 19 20 isn't that right? 21 Now I remember your question. Sure. That's true, but I Α. 22 think that perhaps for different reasons. And in your alt. req. 23 case, I believe there was a lot of stipulation going on probably 24 based on a lot of policy reasons that I may not be aware of. And here we're doing TELRIC studies, the -- What the true costs 25

1	should be for providing services. Where in your alt. reg. plan,					
2	I'm not sure how much of your alt. reg. plan and your pricing					
3	and your rate structure was based on cost.					
4	MR. HART: If I can have just a moment, I think I'm					
5	finished.					
6	(Discussion held off the record.)					
7	MR. HART: That's all I have. Thank you.					
8	THE EXAMINER: Okay. Thank you.					
9	Okay. Let's go off the record.					
10	· · ·					
11	(Thereupon, the hearing was adjourned at 5:10 o'clock					
12	p.m. on Wednesday, March 24, 1999, to be reconvened					
13	at 9:00 o'clock a.m. on Thursday, March 25, 1999.)					
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