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Case Number: 96-899-TP-ALT

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Exhibits from transcript for hearing held March 4, 1999, Volume IV.

ACC COMMON

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1	PUBLIC UTILITIES COMMISSION
2	STATE OF OHIO
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4	In the Matter of the) /6695. Application of Cincinnati Bell)
5	Telephone Company for Approval) of a Retail Pricing Plan Which) Case No. 96-899-TP-ALT
6	May Result in Future Rate) Increases and for a New)
7	Alternative Regulation Plan.)
8	
9	Hearing Room 11-D Borden Building
10	180 East Broad Street Columbus Objo 43215
11	Thursday, March 4, 1999
12	Met, pursuant to assignment, at 9:00 o'clock a.m.
13	BEFORE:
14	Dwight Nodes, Attorney-Examiner.
15	
16	VOLUME IV
17	00-0507
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- 1 (Confidential transcript under seal.)
- 2 BY MS. VAN DUZER:
- 3 Q. Mr. Mette, just to make it easier, I made copies of
- 4 diagrams that are located in your exhibit, your unbundled loop
- 5 exhibit. I believe they are located on the 35th page of Tab 3
- 6 and on the 35th page of Tab 7. I think the pages are not
- 7 numbered. So that's my manual count.
- 8 Can you describe for me what these diagrams depict?
- 9 A. These two pages are outputs of the LCAT model which in LCAT
- 10 are used to provide kind of a high-level block diagram of a
- 11 loop. Both of them -- I'll start from the central office side,
- 12 which is on the right-hand side of the page.
- 13 The first page that you handed out which has the Bates
- 14 No. 75 on it, that is for a copper loop, and that just shows --
- 15 I'm sorry, let me back up a second. These two pages are also
- 16 for business line, not residence lines.
- 17 But the first page again is a copper loop, and it shows
- 18 that the average loop length is 6,403 feet, and this also, to be
- 19 a little more specific is the Band 1 business loop.
- 20 Starting on the right-hand side where it says "end office",
- 21 the top line just shows a -- the feeder line going out and it
- 22 shows feeder at 5,765 feet, and that goes to a box that has a
- label below it of serving area interface and that would be the
- 24 point where the distribution starts.
- 25 And then it shows the distribution of 638 feet, going out

- 1 to really a drop terminal, it doesn't say drop terminal on here,
- 2 but that in effect is what it is. So this is a very high-level
- 3 block diagram of a copper loop on the first page.
- 4 The second page is a high-level block diagram of a digital
- 5 loop carrier loop, and in this case the average loop length is
- 6 15,677 feet. And again, starting on the right-hand side you
- 7 have the end office, and now it's the middle line there that has
- 8 the word "primary" above it indicating that there's 13,331 feet,
- 9 which in our case would be fiber cable, and that fiber cable
- would be going to a remote terminal which is the box that is
- 11 kind of in the middle of the page.
- 12 There's a short length of copper cable out of that remote
- 13 terminal because the remote terminal converts the optical signal
- 14 to an electrical signal, and that short length of cable, which
- 15 here is 300 feet, goes from the remote terminal to the serving
- 16 area interface; and then again, that's where the feeder ends and
- 17 it becomes distribution plant going towards the customer end on
- 18 the left-hand side of the page.
- 19 Q. And these are the two types of loop architectures that CBT
- 20 assumed for purposes of estimating TELRIC costs within this
- 21 case?
- 22 A. That is correct.
- 23 Q. Now, on the first page the number, and I think you
- 24 mentioned it already, 6,403 feet, that's the loop length, right?
- 25 A. That is correct.

- 1 Q. Can you tell me generally how that number was arrived at?
- 2 A. Yes, we took a sample of business loops, we broke the
- 3 sample down by the bands that are proposed. We identified the
- 4 length of all of those sampled loops.
- Since the forward-looking technology for providing a loop
- 6 was going to be two different technologies, a copper and a
- 7 digital loop carrier, the question becomes when should the
- 8 digital loop carrier technology be used. And the digital loop
- 9 carrier technology is used at a threshold which in Band 1 was
- 10 set at 12,000 feet.
- So from that sample we looked at all loops less than 12,000
- 12 feet, and we calculated the average of those loops and that's
- 13 the length of the loop. That's the length that developed there.
- 14 Conversely, we looked at all the loops over 12,000 feet
- 15 long, developed the average of those loops, and that is the
- 16 length there on the second page.
- 17 Q. So -- Sorry.
- 18 A. I'm sorry. I'm sorry. But we would probably consider
- 19 these loop lines confidential, and I know I've been speaking of
- 20 them.
- MR. HART: Do I need to go back to when you first
- 22 mentioned numbers?
- 23 THE WITNESS: Yes.
- 24 THE EXAMINER: Starting with the answer to this
- 25 question will be kept under seal.

1 I think we need to go back a few minutes MR. HART: 2 because he's been mentioning loop length and feeder and 3 distribution lengths. THE EXAMINER: Back to when the original question 4 5 regarding this document -- and, actually, why don't we mark this as an MCI exhibit even though it is part of CBT cost study. 6 7 think this is MCI 5, if I'm not --8. MS. SANDERS: Your Honor, we had one yesterday. THE EXAMINER: This would be 6, then? 9 MR. HART: And this would have to be a confidential 10 exhibit. 11 THE EXAMINER: Yes, MCI Exhibit 6 will be kept under 12 13 seal as well 14 15 Thereupon MCI Exhibit No. 6 was marked 16 for purposes of identification. 17 18 THE EXAMINER: Let's go off the record again. 19 (Discussion off the record.) 20 THE EXAMINER: Back on the record. Starting with what 21 was previously indicated, we're going to now maintain a 22 confidential record until further notice that we can open it up 23 into the public record.

Go ahead, Ms. Van Duzer.

24

25

MS. VAN DUZER:

- 1 Q. Mr. Mette, so CBT undertook a loop sample of all its
- 2 central offices in order to better understand its average loop
- 3 characteristics; is that correct?
- 4 A. That is correct.
- 5 MS. VAN DUZER: I'm going to ask the court reporter to
- 6 mark the loop sample that you provided to MCI in discovery as a
- 7 confidential exhibit, MCI No. 7.
- 8 - -
- 9 Thereupon MCI Exhibit No. 7 was marked
- 10 for purposes of identification.
- 11 - -
- 12 BY MS. VAN DUZER:
- 13 Q. Can you identify this document as the loop sample that CBT
- 14 undertook to arrive at the average loop lengths within Bands 1,
- 15 2 and 3?
- 16 (Pause.)
- 17 A. This looks like it contains the samples of -- some of the
- 18 pages are a little jumbled, but I think it contains everything
- 19 that was in those samples.
- 20 Q. Okay. Now, as I understand the samples, CBT sampled eight
- 21 different categories of loops; business lines in the West 7th
- 22 central office, and then in Bands 1, 2, and 3, and CBT did the
- 23 same for residential loops; is that correct?
- 24 A. That is correct. I'll just clarify something. When we
- 25 started this process, actually I think it was probably -- I

- 1 don't know if I want to say 1995, but it was at least as far
- 2 back as 1996, CBT was in the process of preparing not only --
- 3 probably wasn't actually starting the process for doing
- 4 unbundled elements, but was preparing for its Commitment 2000
- 5 alt. reg. filing which occurred the past couple years, so we
- 6 developed the samples at that time.
- 7 And there is a West 7th Street, and you said Band 1,
- 8 actually the second category is not the same as the Band 1
- 9 that's here because the Band 1 that's -- I'm sorry, the second
- 10 category is really the Band 1 that's proposed here less West 7th
- 11 Street, so there's just a minor distinction, and then the Band 2
- 12 and Band 3.
- 13 Q. So initially when you did the loop study, you had the West
- 14 7th Street office, and then you had a Band 1 that didn't contain
- 15 the West 7th Street office?
- 16 A. It's really the rest of Band 1 as it's defined today
- 17 without West 7th Street, yes.
- 18 Q. Okay. When did you take the loop sample?
- 19 A. That's where -- I can't recall the exact time. It was
- 20 sometime in, I believe, early '96, possibly late '95.
- 21 Q. So that's what you were referencing when you said we began
- this process, the process was the loop sampling?
- 23 A. Yes.
- 24 Q. Okay. In sampling the loops that eventually became the
- 25 basis for your Band 1 loop study, did you employ the same

- 1 sampling method that was used in Bands 2 and 3, or was Band 1
- 2 sampled differently?
- 3 A. All of the samples were random samples in the same way,
- 4 just random samples of the universe of loops in each of those
- 5 categories.
- 6 Q. So the only difference in your sampling of Band 1 really
- 7 was that you sampled the West 7th by itself and then all the
- 8 other Band 1 exchanges?
- 9 A. That is correct.
- 10 Q. And then ultimately you weighted the West 7th loops with
- 11 the other Band 1 loops to arrive at a composite average; is that
- 12 correct?
- 13 A. That is how the composite Band 1 average is developed, that
- 14 is correct.
- 15 Q. Why did you initially segregate the West 7th central office
- 16 from the other exchanges in Band 1?
- 17 A. When the process started, we had to develop a -- we had to
- 18 develop characteristics of loops. Unfortunately, these
- 19 characteristics are not mechanically or electronically stored
- 20 anywhere, it's a manual effort to gather this information.
- 21 Ideally I would have liked to have developed samples by all
- 22 of the wire centers; but practically speaking, that's
- 23 impossible. When we started the process, as I indicated, we
- 24 were more focused on our alt. req. filing. We decided to look
- 25 at West 7th Street because we did not know if -- we didn't know

- the final definition of the bands when the cost study started.
- We calculated a sample for West 7th Street, and we did the
- 3 remaining of what is now Band 1 and we did the Band 2 and we did
- 4 the Band 3.
- 5 Ultimately the decision was made to file only a combined
- 6 West 7th Street and remaining Band 1 as the Band 1; so we took
- 7 the samples and combined them so that we could match the way the
- 8 ultimate rate structure was developed.
- 9 Q. So did you believe that the West 7th central office might
- 10 have some unique cost characteristics that the other exchanges
- 11 in Band 1 might not reflect?
- 12 A. We focused on West 7th Street because -- because of the
- 13 nature of that office being the downtown office, the nature of
- 14 the customers with the possibility of our marketing organization
- 15 wanting to possibly separate that out. And, therefore, we
- 16 separated West 7th Street out because we didn't know what the
- 17 final structure was when we started.
- 18 That's kind of back to where I wish I could have done it by
- 19 wire center so I really would have had a little more flexibility
- 20 in terms of -- or, at least being able to provide more
- 21 flexibility in terms of creating the bands, but practical
- 22 considerations came into play and we weren't able to do that.
- 23 Q. So you did the West 7th Street office separate really
- 24 because it was the downtown office and it might be different
- 25 from the other offices, initially?

- 1 A. Yes; and again, we didn't know if our marketing
- 2 organization would want to have a rate structure separating West
- 3 7th Street out.
- 4 Q. After you took the loop sample, did you determine that the
- 5 West 7th Street central office did have some characteristics
- 6 that were unique when compared to the other exchanges?
- 7 A. The samples showed that the West 7th Street loops are, on
- 8 average, shorter than loops in other central offices.
- 9 Q. And the vast majority of the loops in the West 7th Street
- 10 central office serve business customers as opposed to
- 11 residential customers, correct?
- 12 A. It's not a hundred percent, but it's more than 50 percent.
- 13 I can't remember if the numbers are in the 75, 80, 85 percent
- 14 range, but the majority of business in that office.
- 15 Q. And because of the loop length differences, there are fewer
- 16 loops in the West 7th Street office that would require the
- 17 digital loop carrier architecture than in the other bands?
- 18 THE WITNESS: I'm sorry, can I hear that again?
- 19 (Question read back as requested.)
- THE WITNESS: Because the loops are shorter in the
- 21 West 7th Street office, that is correct, that the percentage of
- 22 loops on digital loop carrier would be less than in other
- 23 offices.
- 24 BY MS. VAN DUZER:
- 25 Q. Likewise, all things being -- all other things being equal,

- the cost of such a loop would be less than the cost of a loop in
- 2 Band 1 as you included it in your study?
- 3 A. The cost of a West 7th Street -- I would expect the cost of
- 4 a West 7th Street loop to be less than the cost of the average
- 5 loop in the rest of Band 1, but I haven't done any calculation
- 6 to quantify that.
- 7 Q. And it would also be less than the composite average loop
- 8 in the final Band 1 cost study, wouldn't it? Not just the other
- 9 loops in the cost study, but the composite average.
- 10 A. All right. Are you asking would the composite West 7th
- 11 Street loop costs be --
- 12 Q. No, the West 7th Street loop would be less than -- The cost
- of the West 7th Street loop would be less than the cost of the
- 14 Band 1 loop in your ultimate cost study?
- 15 A. The composite cost of the West 7th Street loop?
- 16 Q. Yeah,
- 17 A. Would be --
- 18 Q. Less than the composite cost --
- 19 A. -- of the rest of Band 1?
- 20 Q. The whole Band 1. West 7th Street versus the entire Band
- 21 1.
- 22 A. Where the entire Band 1 includes West 7th Street?
- 23 Q. Yes.
- 24 A. Okay. I would expect that to be the case.
- 25 Q. So if we were to do an unbundled loop study, just for the

- 1 average loop in the West 7th Street central office, we would use
- 2 less digital loop carrier equipment than what is assumed in the
- 3 current Band 1 study, correct?
- 4 A. I'll say it a little differently, but maybe it's the same
- 5 thing. The percentage of loops in the West 7th Street office on
- 6 digital loop carrier is less than the percentage of loops in the
- 7 remaining Band 1 on digital loop carrier.
- 8 Q. So when you average them all and put them into the final
- 9 Band 1 study, there's more DLC equipment used for -- or,
- weighted into the Band 1 study in its entirety than would be
- 11 weighted into just a West 7th Street loop study?
- 12 A. Yes.
- 13 Q. All other things being equal, less DLC lowers the cost of
- 14 the average loop, right?
- 15 A. That is probably true because DLC by its nature is the
- 16 technology of choice for longer loops; so since DLC is used on
- 17 longer loops, longer loops would have a higher cost. And the
- 18 same way if we were able to disaggregate the cost not by wire
- 19 center, but by length from CO, we would have a totally different
- 20 looking structure than an average of the two.
- 21 Q. Okay. Now, even though you developed a separate loop
- 22 sample specific to the West 7th central office, you didn't
- 23 construct an unbundled loop study specific to the West 7th
- 24 central office; is that correct?
- 25 A. That is correct, because the rate structure that we

- 1 developed for our retail services on -- from these samples has
- 2 three bands, the West 7th Street plus the remaining Band 1 as it
- 3 was done when the samples were taken -- I'm sorry.
- We decided to have three bands for our retail services so,
- 5 therefore, we believed it was appropriate to have the same
- 6 structure in the unbundled elements when we did those studies.
- 7 Q. You lumped the West 7th loops into the other Band 1
- 8 exchanges and arrived at a composite group average?
- 9 A. That is correct, so that we could be consistent with the
- 10 work that had been previously done.
- 11 Q. If I could direct your attention to Page -- or, the 36th
- 12 page of MCI Exhibit No. 7, which is the loop sample, and I'm
- 13 going to describe where this is because I think these page
- 14 numbers are not marked. It's more than halfway through the
- 15 study, it's the page directly following the page marked
- "Development of Geographic Bands", and it's the page right
- 17 before the map, basically.
- 18 On this page you've listed all the CBT exchanges and the
- 19 square miles that they serve, the number of residential and
- 20 business loops served by each exchange, and the loops per square
- 21 mile: is that correct?
- 22 A. That is correct.
- 23 Q. Now, the West 7th Street central office serves a total of
- 24 72,267 loops; is that correct?
- 25 A. As of 1-1-95, that is correct.

- 1 O. And CBT serves 932,225 loops in total in Ohio; is that
- 2 correct?
- 3 A. Actually, this piece of paper here is not solely an Ohio
- 4 document. There are Kentucky loops on this piece of paper.
- 5 They weren't part of any of the studies or anything in terms of
- 6 the Ohio, but the way this piece of paper was put together,
- 7 there are Kentucky loops here.
- 8 Q. So CBT serves something less than 932,225 loops in Ohio?
- 9 A. That is true, as of 1-1-95 when this was put together.
- 10 Q. So the West 7th central office serves nearly 8 -- or
- actually more than 8 percent of all CBT's Ohio groups?
- 12 A. That is correct
- 13 Q. Is loop density a factor that influences the cost of a
- 14 loop?
- 15 A. Yes, it is.
- 16 Q. Now, can I gather from this page that the West 7th central
- office serves approximately 11,712 loops per square mile?
- 18 A. That is correct.
- 19 Q. And is that the top line "West 7th" under the bold section
- 20 at the top, the very last number on the right?
- 21 A. That is correct.
- 22 Q. And then going down one line, the next most densely
- 23 populated exchange is the Avondale exchange with 4,459 loops per
- 24 square mile?
- 25 A. That is correct.

- 1 Q. Now, there are two bold lines across the page; do you see
- 2 those?
- 3 A. Yes.
- 4 Q. They separate the bands?
- 5 A. Yes.
- 6 Q. Okay. And the exchanges listed from Bethel to Falmouth are
- 7 all of the exchanges that CBT is classifying as Band 3
- 8 exchanges, and that were sampled to arrive at the average loop
- 9 characteristics for Band 3; is that correct?
- 10 A. Again, in that band there's Kentucky offices listed; so
- 11 when we sampled in Ohio, those offices weren't part of that
- 12 process, but the Ohio offices that are below that line are the
- 13 Ohio Band 3.
- 14 Q. Okay. So if I add up all the access lines underneath the
- 15 lower of the two bold lines and I add up all the access lines in
- 16 Band 3 and I come up with a total number of loops of 62,171,
- 17 that's actually more than is in Band 3 in Ohio? That would be
- 18 the entire number of Band 3 loops, correct?
- 19 A. I'm sorry, was your 62,000 number, totally just Band 3
- 20 loops?
- 21 Q. Yes.
- 22 A. I haven't done the calculation. I'd have to check, but I'm
- 23 assuming that's correct in that column.
- 24 Q. You can accept it subject to check. I think all of Band 3
- 25 loops add up to about just over 62,000. So it's safe to say

- 1 that Band 3 is actually smaller in terms of the total loops than
- 2 the West 7th Street central office taken alone, which has more
- 3 than 72,000 loops; is that correct?
- 4 A. That's correct.
- 5 Q. Let me turn your attention back now to MCI Exhibit 6 which
- 6 is the diagram of the two loops.
- 7 And I understand now how loop length is calculated and why
- 8 it's relevant, and now I'd like to turn to the second page which
- 9 is the -- which depicts a loop using fiberoptic cable and
- 10 digital loop carrier electronic equipment.
- There's been a lot of discussion in this case about the
- 12 Fujitsu FACTR system. Is the Fujitsu FACTR system a digital
- 13 loop carrier system?
- 14 A. Yes, it is.
- 15 Q. Can you describe for me briefly what a DLC system is and
- 16 what its purpose is in the loop?
- 17 A. A digital loop carrier system, another term is a pair gain
- 18 technology. What it does is it utilizes electronics that are
- 19 located in the central office and out in the field, and in the
- 20 central office the electronics will multiplex multiple
- 21 individual loops or channels together to a higher speed signal,
- 22 and then it will transport that signal from the central office
- 23 electronics over fiberoptic cable out to the remote terminal
- 24 site where the remote terminal also acts as a multiplexing
- 25 function to break down that high-speed channel into individual

- 1 channels for termination to individual loops.
- 2 Q. Thanks.
- 3 Are you familiar with the term "general requirement 303",
- 4 or "GR303"?
- 5 A. I've heard the term, yes.
- 6 Q. Can you explain what your understanding of it is?
- 7 A. I cannot provide a detailed explanation. My understanding
- 8 is GR303 is a -- I don't know if I want to say a set of
- 9 standards, but for digital loop carrier GR303, my understanding
- 10 is only applicable to integrated DLC. And I probably need to
- 11 back up and distinguish integrated from universal, which I did
- 12 not do.
- 13 Integrated DLC -- Let me back up a little bit more.
- When the digital loop carrier remote terminal in the field
- 15 combines individual loops together, transports that to the
- 16 central office on a fiberoptic cable, in the central office that
- 17 cable has to terminate on a piece of electronics.
- 18 In the integrated case, that electronics converts that
- 19 optical signal to electrical signal, but out of that electronics
- 20 is a T-1 level signal, it's still not taken all the way down to
- 21 the individual channels, and those T-1 signals can terminate
- 22 directly on a central office switch. That is an integrated DLC.
- 23 The universal DLC is different in that there is additional
- 24 equipment that is located in the central office that not only
- 25 takes the optical signal on the fiber to electrical, but also

- 1 takes it down to the individual DSO-level signals, and that's a
- 2 universal DLC.
- 3 And those DSO-level signals could be terminated on the
- 4 switch also.
- 5 Q. Okay. To your knowledge, is the Fujitsu FACTR system
- 6 compliant with the GR303 standard?
- 7 A. That is my understanding, yes.
- 8 Q. Now, can you show me or describe for me in this diagram,
- 9 the second page of MCI Exhibit 6, where I would find the Fujitsu
- 10 FACTR equipment?
- 11 A. In this diagram, the Fujitsu FACTR equipment would be
- 12 located at the remote terminal site, which is just about right
- in the middle of that diagram in the middle where it says
- 14 "Remote Terminal".
- 15 Q. Right.
- 16 A. That's Fujitsu FACTR equipment.
- 17 The fiber -- I'm sorry, the box to the right of that that's
- 18 labelled "Fiber Hub" would also be Fujitsu FACTR equipment in
- 19 the case of a universal DLC system.
- 20 Q. Okay. Would there be any -- Would there be FACTR equipment
- 21 located in the end office?
- 22 A. Well, actually this diagram's -- Can I correct my previous
- 23 answer? I misinterpreted this diagram.
- 24 Q. Sure.
- 25 A. This diagram is a generic diagram created out of LCAT. I

- 1 believe there's a possibility where out in the field you could
- 2 have fiber hubs where you send fiber out, and there's hubbing
- 3 equipment and then it's sent other directions, I guess. That's
- 4 what that fiber hub box in that diagram is meant to depict.
- 5 That is not in any of the studies.
- When I looked at this, I was thinking that was in the
- 7 central office, and that's incorrect.
- 8 The Fujitsu FACTR equipment is back in the end office, and
- 9 I should have explained it that way.
- 10 Q. That's fine. Thank you.
- Mr. Mette, do you have what -- Do you have MCI Exhibit 5 in
- 12 front of you? Do you even have a copy of it?
- 13 A. I don't know what it was.
- 14 Q. It was used yesterday when they were discussing integrated
- 15 and universal DLC. I don't know if we have an extra copy. We
- 16 handed them out yesterday.
- 17 THE EXAMINER: Off the record.
- 18 (Discussion held off the record.)
- 19 BY MS. VAN DUZER:
- 20 Q. Now, this diagram gives a little more detail about IDLC and
- 21 UDLC than the other diagram we've been working from, correct?
- 22 A. That is correct.
- 23 Q. And on this diagram, is it safe to say, moving from the top
- 24 to the bottom, all of the equipment located above the area
- 25 entitled "OSP Fiber" and the line entitled "LDC" is equipment

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- located in the central office?
- 2 A. Well, the LDC is located in the central office.
- 3 Q. Okay. So the --
- 4 A. But the L- -- The LDC and above is in a central office.
- 5 Q. And so from the LDC up on this diagram is what's located in
- 6 the central office; is that correct?
- 7 A. That is correct.
- 8 Q. Okay. And all of the equipment below the area entitled
- 9 "OSP Fiber" is housed in what you referred to as the remote
- 10 terminal; is that correct?
- 11 A. That is correct.
- 12 Q. And if I'm reading the document correctly, the integrated
- 13 DLC system on the left and the universal system on the right
- 14 really only differ with respect to the equipment that's located
- 15 in the central office, correct?
- 16 A. That is correct.
- 17 Q. And as I see it, the integrated system includes a FLM-150
- 18 in the central office, whereas the universal system includes an
- 19 NBS and CMS; is that correct?
- 20 A. That is correct.
- 21 Q. And the NBS stands for narrow band shelf and CMS stands for
- 22 common shelf?
- 23 A. I'm not sure that CMS stands for common shelf, but it --
- 24 common -- I'm not so sure that the "M" is part of common or not,
- 25 but it's generally some type of common shelf.

- 1 Q. It also looks like the integrated system requires the use
- 2 of two DSX1 pieces of equipment where the universal system
- 3 requires dummy coils; is that correct?
- 4 A. That is correct, because the -- the integrated system out
- 5 of the FLM-150 towards the No. 5ESS is a DS1 signal, so it
- 6 terminates on a DSX cross-connect panel; whereas out of the
- 7 narrow band shelf towards the central office switch is actually
- 8 individual channels at that point, or loops.
- 9 Q. Okay. Do the cost studies that you've provided in this
- 10 case for retail bundled loops include investments for the LDC,
- 11 FLM-150 and the DSX1 pieces of equipment?
- 12 THE WITNESS: Can I hear that again? I'm sorry.
- 13 (Question read back as requested.)
- 14 THE WITNESS: I get hung up in this case because in
- 15 the proceeding today the only cost studies that we've put forth
- 16 are for unbundled elements, so there were no cost studies for
- 17 retail services. The cost studies -- they may still be in this
- 18 case and I'm not sure -- for the CBT's retail services were
- 19 based on integrated technology.
- 20 BY MS. VAN DUZER:
- 21 Q. And those cost studies included those pieces of equipment
- 22 that I asked about in the prior question, the --
- 23 A. Yes, they did because that -- when the services -- CBT's
- 24 retail service, it's possible to provide it on integrated,
- 25 whereas for the universal it's -- it's not possible to provide

- 1 it in that fashion.
- 2 Q. And is that your understanding, that it's impossible to
- 3 provide an unbundled loop using IDLC?
- 4 A. I think the -- I don't know if it was yesterday or the day
- 5 before, it has -- there's hairpinning technology that will allow
- 6 a DSO to be hairpinned through the switch, which brings other
- 7 costs with it; so that would be a way to get to an individual
- 8 channel.
- 9 Beyond that, my understanding, it is not possible to
- unbundle a DS -- at a DSO level out of a FLM-150, it is not
- 11 possible at that level to unbundle a loop.
- 12 Q. And like Mr. Meier yesterday, have you also not heard of
- 13 multi-hosting?
- 14 A. I have not heard -- besides hearing it there, I have not
- 15 heard of multi-hosting, no.
- 16 THE EXAMINER: Let's go off the record.
- 17 (Recess taken.)
- 18 THE EXAMINER: Back on the record.
- 19 Ms. Van Duzer.
- 20 MS. VAN DUZER: Thank you.
- 21 BY MS. VAN DUZER:
- 22 Q. Mr. Mette, generally, is the integrated or the universal
- 23 DLC system more expensive to deploy?
- 24 A. The universal system would be more expensive generally than
- 25 the integrated system.

- 1 Q. And, in fact, the universal DLC systems used in the
- 2 unbundled studies are more expensive than the integrated systems
- 3 used in your retail studies; is that correct?
- 4 A. The cost of the equipment in the universal scenario is more
- 5 expensive than the integrated, but it's -- I don't know that you
- 6 can compare the two in the sense that since you can't unbundle a
- 7 DS0 out of a FLM-150, I don't know that the comparison is a
- 8 straight comparison. You can't -- The cost of that equipment in
- 9 total is more in one than the other, but the services being
- 10 provided are different; so there's not a one-for- -- a
- 11 one-for-one comparison in that sense.
- 12 Q. If it were possible to use IDLC to provision an unbundled
- 13 loop, and let's put hairpinning aside and the associated
- 14 problems that you see with that, so putting hairpinning aside,
- if it were possible to provision an unbundled loop using IDLC,
- 16 wouldn't you want to do that?
- 17 MR. HART: Object to the question on foundation. It
- 18 hasn't been demonstrated how that would occur. I don't know how
- 19 he can answer.
- 20 THE EXAMINER: Do you want to ask hypothetically or
- 21 possibly?
- 22 MS. VAN DUZER: That -- Thank you, your Honor.
- 23 BY MS. VAN DUZER:
- 24 Q. Hypothetically --
- MR. HART: That's exactly my objection, your Honor, is

- 1 that he's said that to his knowledge it can't be done and she's
- 2 saying assume that it can be done. That, I think, calls for
- 3 some additional information that's not available to Mr. Mette.
- 4 I don't know how he can answer whether or not they would want to
- 5 do that without knowing exactly how she envisions it's going to
- 6 be done.
- 7 MS. VAN DUZER: He's an expert in this case, correct?
- 8 THE EXAMINER: I'll overrule the objection. If he
- 9 wants to qualify his answer under the hypothetical, he can.
- 10 THE WITNESS: I'm sorry, but can I just ask to hear
- 11 the question or --
- 12 BY MS. VAN DUZER:
- 13 Q. Putting aside hairpinning, if it were possible to provision
- an unbundled loop using integrated DLC, wouldn't you want to do
- 15 that rather than using universal DLC?
- 16 A. I'm assuming you're talking about unbundling at a DSO-level
- 17 loop when you ask the question. And that would be something
- 18 that should be considered, but that would be dependent on what's
- 19 required to allow that unbundling to occur.
- 20 Q. I'm sorry, I couldn't hear the end of the answer.
- 21 A. I'm assuming that you're talking about unbundling a
- 22 DSO-level loop. And if that were possible somehow, that would
- 23 be a scenario to be examined or studied; but whether it should
- 24 be the one to be used would be dependent on how that unbundling
- 25 would occur in that integrated situation. And I use the word

- 1 "how" in the sense of what additional equipment is needed to
- 2 make that work because the equipment as it exists today does not
- 3 allow DSO-level unbundling.
- 4 Q. So if there were no additional equipment needed, and
- 5 putting hairpinning aside, would you prefer to provision an
- 6 unbundled loop using an integrated DLC system rather than a
- 7 universal DLC system?
- 8 A. I don't know how I can answer that question because
- 9 there -- there is no way to unbundle a loop without additional
- 10 equipment.
- 11 Q. It is a hypothetical. I'm asking it as a hypothetical.
- You use integrated DLC for your retail loops, correct?
- 13 A. That is correct, because our retail service doesn't need to
- 14 be unbundled outside of the switch.
- 15 Q. So is IDLC more efficient, is it better?
- 16 A. It is more efficient in that scenario where the service is
- 17 bundled with the switch. It eliminates the need to separate
- 18 those individual channels outside of the switch because that can
- 19 occur in the switch.
- 20 Q. So in light of that, given my hypothetical, wouldn't you
- 21 choose to provision an unbundled loop using IDLC?
- 22 A. Again, as -- as IDLC exists today, one cannot choose that
- 23 because you can't unbundle it -- a DSO-level loop out of an IDLC
- 24 piece of equipment.
- 25 Hypothetically if it could, I guess I need to know

- 1 hypothetically how that occurs in order to decide whether that's
- 2 the appropriate way to provide an unbundled loop.
- 3 Q. Let's go to the DS1 level. If you want to provision an
- 4 unbundled DS1, would you do that using IDLC or UDLC?
- 5 A. I really don't know. I'm not sure -- I have not looked at
- 6 how you unbundle a DS1 out of a universal versus an integrated
- 7 and haven't made any comparisons of DS1 out of a universal
- 8 versus an integrated.
- 9 Q. Do you know whether you can unbundle a DS1 loop from an
- 10 integrated system?
- 11 A. I have a general understanding that there is an ability to
- 12 provide some form of DS1 hand-off out of an integrated system;
- 13 so whether that is an unbundled DS1 or not, I'm not exactly
- 14 sure, but there is an ability for some type of a DS1 hand-off.
- 15 Q. I'm going to ask this in a slightly different way.
- 16 Assume that there is no additional cost of equipment in
- 17 unbundling a DSO loop from an integrated DLC system. Would you
- 18 want to use the more efficient IDLC system to provision the
- 19 unbundled loop -- the unbundled loop as you did in your retail
- 20 cost studies?
- MR. HART: Your Honor, I'm going to object to the
- 22 question, again, on foundation.
- But I have a second objection, and that is that the
- 24 purpose of this hearing originally was to determine the rates
- 25 for unbundled elements that would be provided to MCI pursuant to

- 1 an interconnection agreement which was arbitrated before this
- 2 Commission.
- 3 Specifically in Schedule 9.5 of that agreement that
- 4 has been approved by the Commission, it provides that if a loop
- 5 that's requested is on integrated digital loop carrier, that the
- 6 loop will be moved to either a spare copper loop or, in the
- 7 alternative, demultiplexed from the integrated system. There is
- 8 nothing in the contract that says MCI is entitled to have an
- 9 unbundled loop provisioned on an integrated digital loop carrier
- 10 system.
- 11 So this entire line of questioning is irrelevant to
- 12 determining the prices that are to be paid under the MCI
- 13 agreement.
- 14 THE EXAMINER: Ms. Van Duzer.
- 15 MS. VAN DUZER: Your Honor, if I may respond, I
- 16 believe the pricing from this case will survive that agreement,
- 17 I believe that agreement expires in October of this year, and I
- 18 don't know if we want to come back again that soon to do this.
- 19 THE EXAMINER: I don't know that it would be possible
- 20 given how long this one took, but --
- MS. VAN DUZER: And if I may continue, I think
- 22 Mr. Mette has said that other than hairpinning, he is unaware of
- 23 any other way to groom a DSO loop on an I- -- using an IDLC
- 24 system, but I don't think Mr. Mette can testify that there isn't
- 25 another way to do that.

- THE EXAMINER: Well, I think he has, in his opinion,
- 2 testified to that fact, but I have allowed the hypothetical that
- 3 you have asked him to assume to go forward over the objection of
- 4 Mr. Hart.
- 5 MR. PETRILLA; Your Honor, I'd like to object
- 6 because -- or at least interject because Mr. Hart's objection
- 7 affects the other parties in this case. This case is not just
- 8 about MCI, it may have --
- 9 MR. HART: Well, I have CoreComm's agreement here, as
- 10 well, which has the identical provision in Schedule 9.5,
- 11 Section 2.1.2; so it applies to CoreComm, as well.
- 12 THE EXAMINER: What about AT&T?
- MR. HART: AT&T has no interconnection agreement.
- 14 THE EXAMINER: Okay. Well, so you wouldn't object if
- 15 they asked the same question?
- 16 MR. HART: I would because there is no basis upon
- 17 which they're even entitled to have an unbundled element at this
- 18 point; we have no interconnection agreement, they haven't asked
- 19 to negotiate one.
- 20 So they don't have -- I'm kind of frankly puzzled as
- 21 to their presence in the case at all since they have no
- 22 agreement, but I don't think that it's -- it's an unbundled
- 23 element that we're required to provide under the existing
- 24 agreements that we have.
- THE EXAMINER: Okay. Well, I'm going to -- Hold it,

- 1 Mr. Petrilla -- I'm going to overrule the objection.
- 2 And I'm sure you're going to need to have the question
- 3 restated or reread, one or the other, and I will ask you to
- 4 assume as if it were a hypothetical question. If you need to
- 5 qualify your answer, you're free to do so, but try to answer the
- 6 question if you can.
- 7 THE WITNESS: I do need it either reread or restated.
- 8 MS. VAN DUZER: I think having it read is better at
- 9 this point.
- 10 (Question read back as requested.)
- 11 THE WITNESS: Since I'm not aware how we would do
- 12 this, I have to say assuming all other factors the same, if
- 13 there was no additional cost in unbundling out of an integrated,
- 14 that would definitely be a scenario to be looked at in terms of
- unbundling a DSO-level loop.
- 16 BY MS. VAN DUZER:
- 17 Q. Okay. Thank you.
- Now turning your attention back to MCI Exhibit 5. The
- 19 FLM-150 that's included in the integrated diagram, that's a
- 20 multiplexer, correct?
- 21 A, That is correct.
- 22 Q. And the investment associated with that was included in
- 23 your cost studies associated with the retail bundled loop; is
- 24 that correct?
- 25 A. The cost of that piece of equipment would have been

- 1 included in our cost studies for our retail services, that is
- 2 correct.
- 3 Q. And because the NBS and CMS are included in the universal
- 4 architecture, you have included the investment associated with
- 5 that equipment instead of the investment associated with the
- 6 FLM-150 in your cost studies for the unbundled loops; is that
- 7 correct?
- 8 A. The NBS CMS is included in the unbundled because the -- an
- 9 unbundled loop cannot be provided at a FLM-150, so it wouldn't
- 10 be appropriate to include that cost in an unbundled loop cost
- 11 study.
- 12 Q. Now, all of this equipment that we've been talking about to
- 13 this point, the Fujitsu FACTR system, the FLM-150, the NBS and
- 14 the common shelves, all of this equipment is manufactured by the
- 15 Fujitsu Corporation; is that correct?
- 16 A. That is correct.
- 17 Q. In fact, the majority of the digital circuit equipment that
- 18 you assumed within the loop study and your interoffice transport
- 19 studies is manufactured by Fujitsu, correct?
- 20 A. The transmission equipment is generally manufactured by
- 21 Fujitsu because there's -- there's a lot of other equipment, but
- 22 they -- all the transmission equipment is Fujitsu equipment.
- 23 Q. I'm going to turn your attention to Page 35 of your
- 24 supplemental testimony filed on September 28th, 1998, beginning
- 25 at Line 18.

- You described here the extent to which you have used
- 2 discounts for the prices of the Fujitsu equipment in the
- 3 original cost studies and the extent to which you have now
- 4 modified your position in that respect; is that a fair
- 5 characterization of your testimony?
- 6 A. That is correct.
- 7 Q. When you refer to the discounts associated with the
- 8 purchase of the Fujitsu equipment, are you talking about the
- 9 prices and discounts included in the master agreement between
- 10 Cincinnati Bell Telephone Company and the Fujitsu Network
- 11 Transmission Systems, Inc. for products and services which CBT
- 12 provided in response to MCI Data Request 3.21?
- 13 A. I'm not familiar with the exact title of that agreement,
- 14 but it is the contract between Fujitsu and Cincinnati Bell
- 15 Telephone.
- 16 MS. VAN DUZER: May I approach the witness, your
- 17 Honor?
- 18 THE EXAMINER: Yes.
- 19 MS. VAN DUZER: I'm going to ask the court reporter to
- 20 mark this as MCI Exhibit 8.
- 21 -
- Thereupon MCI Exhibit No. 8 was marked
- 23 for purposes of identification.
- 24 - -
- 25 BY MS. VAN DUZER:

- 1 Q. Do you recognize the first document in this exhibit?
- 2 A. The first page?
- 3 Q. Yes, the document.
- 4 A. Yes.
- 5 Q. The first document, which I think is the entire master
- 6 agreement between Cincinnati Bell Telephone Company and Fujitsu,
- 7 and I believe CBT provided it to MCI in response to MCI Data
- 8 Request 3.21.
- 9 A. Yes.
- 10 Q. And is this the agreement that sets forth the discounts
- 11 associated with the purchase of Fujitsu equipment that you're
- 12 talking about on Page 35 of your testimony?
- 13 A. Yes, it is.
- 14 Q. You also include Exhibit 7 to your supplemental testimony,
- 15 and it contains several tables comparing the discounts provided
- 16 over a number of years under various circumstances; is that
- 17 correct?
- 18 A. That's correct.
- 19 Q. Now, you constructed those tables, correct?
- 20 A. I personally didn't construct them, but they were
- 21 constructed for me.
- 22 Q. And they're not in the master agreement, the tables?
- 23 A. I don't believe they are, no.
- Q. Now, looking at your testimony on Page 35, Lines 1 through
- 25 3, you state that your original studies included the base year

- 1 19 96 discounts; is that correct?
- 2 A. That is correct.
- 3 Q. Do you remember what that discount was? Or let me ask that
- 4 differently.
- If you were to include in your Exhibit 7 a column for the
- 6 discount given in 1996, would the figure that would go into that
- 7 column be zero percent?
- 8 A. I believe it would.
- 9 Q. Now you're advocating that CBT apply the discounts included
- in the 1999 column within your table on Exhibit 7; is that
- 11 correct?
- 12 A. That is correct.
- 13 Q. Had you reviewed the contract between Fujitsu and CBT
- 14 before you constructed the original studies?
- 15 A. No, I had not.
- 16 Q. Turning your attention back to MCI Exhibit 8, the first
- 17 document of which is the master agreement, turning to Page 3 of
- 18 the master agreement, it's clear that that agreement was
- 19 effective January 1st, 1994; is that right?
- 20 A. That is correct.
- 21 Q. And the next document in MCI Exhibit No. 8 is Amendment
- 22 Number One to the Master Agreement for Products and Services
- 23 between CBT and Fujitsu. Can you identify that document?
- 24 A. I see an Amendment Number One in here, yes.
- 25 Q. Do you recognize that?

- 1 A. Yes.
- 2 Q. And the amendment was effective December 1st, 1995?
- 3 A. I'm sorry, did you say December 1st, 1995?
- 4 Q. Right.
- 5 A. Yes.
- 6 Q. Finally, the last document in MCI Exhibit 8 is the
- 7 Amendment Number Two to CBT-864 Master Agreement for Products
- 8 and Services from Fujitsu Network Transmission Systems, Inc.
- 9 Do you recognize that document?
- 10 A. Yes, I do.
- 11 Q. And CBT signed the amendment -- signed that amendment on
- 12 August 20th, 1997 and Fujitsu signed it on September 8th, 1997;
- 13 is that correct?
- 14 A. That's correct.
- 15 Q. So the original master agreement has been amended at least
- 16 twice; is that right?
- 17 A. That is correct.
- 18 Q. Now, let's take an example of a piece of Fujitsu equipment
- 19 and follow it through the master agreement and the two
- 20 amendments to get a sense of how prices for this type of
- 21 equipment have changed over time.
- 22 For example, let's look at the pricing schedule which is in
- 23 Appendix II of the original master agreement and focus on the
- 24 FLM-150.
- Now, is that the same multiplexing piece of equipment that

- we were talking about earlier?
- 2 A. The FLM-150? Yes.
- 3 Q. Let's focus on the shelf that houses that particular piece
- 4 of equipment. Do you see it there? It's part FC9612SF11-103?
- 5 A. Yes.
- 6 Q. It's the top -- Well, it's row A1, and the last column on
- 7 the page reflects an original price for that piece of -- for
- 8 that shelf for -- as \$1,830; is that correct?
- 9 A. That's correct.
- 10 Q. Let's go to the first amendment. And looking at the
- 11 pricing schedule set forth in Appendix II again, we find the
- 12 price for the same piece of equipment in the last column of the
- 13 row entitled "FLM-150", and we can see that as of January 1st,
- 14 '97 that piece of equipment cost CBT only \$1,386; is that right?
- 15 A. That's correct.
- 16 Q. So between 1994 and 1997, the price to CBT to purchase a
- shelf to house the FLM-150 fell by \$444, or approximately 25
- 18 percent of the original purchase price?
- 19 A. That is correct.
- 20 Q. And tracing that same piece of equipment through to the
- 21 second amendment, Appendix II -- well, I guess Appendix II B in
- 22 this amendment, I apologize -- third column of the row entitled
- 23 "Shelf" reflects a base price of \$1,492 and the next two columns
- 24 to the right -- right reflect the price of \$1,386 for the years
- 25 1997 and 1998, correct?

- 1 A. That is correct.
- 2 Q. If we move out to the year 2001, which is set forth in the
- 3 column on the far right, the price is \$1,328, correct?
- 4 A. That's correct.
- 5 Q. So it's fair to say, again, that CBT can expect to pay less
- for this type of equipment in the year 2001 than it did in 1997;
- 7 is that right?
- 8 A. That is correct.
- 9 Q. Now, at the top of this page next to the box entitled "CBT
- 10 Base Price" and under the box entitled "Minimum" there is an
- 11 explicitly identified discount for each year; do you see that?
- 12 For example, the discount in '97 is 7 percent.
- 13 A. Yes.
- 14 Q. In the year 2001 the discount becomes 11 percent; is that
- 15 correct?
- 16 A. That is correct.
- 17 Q. And these are the minimum discounts, correct?
- 18 A. That is correct.
- 19 Q. And Pages 2 and 3 of Appendix II B show the discounts
- 20 associated with large purchase commitments; is that correct?
- 21 A. Two and 3 show discounts for \$20 million over two years and
- 22 \$30 million over two years respectively.
- 23 Q. Now, the FLM shelf under the \$30 million discount structure
- 24 has a total price of \$1,238 and the contract identifies that as
- 25 a 17 percent discount off the base price?

- 1 A. I'm sorry, I didn't hear the first part of what you said.
- Q. Under \$30 million in the year 2001 there's a 17 percent
- 3 discount for a price of \$1,238.
- 4 A. Yes. Sorry.
- 5 Q. So from our original agreement to the second agreement,
- 6 assuming the largest discount structure, which is \$30 million
- 7 over two years, would you agree that the contract shows a price
- 8 decrease from \$1,830 to \$1,238?
- 9 A. If CBT meets the requirements of the \$30 million purchases,
- 10 yes.
- 11 Q. And that's a reduction of \$592, or close to 33 percent; is
- 12 that correct?
- 13 A. Subject to check on the calculations, that's correct.
- 14 Again, assuming we meet the purchase requirements.
- 15 Q. So just to summarize this, in your original cost studies
- 16 you advocated that the appropriate price to assume for CBT's
- 17 purchase of Fujitsu equipment was the 1996 undiscounted base
- 18 year price, and your new revised position now is that you're
- 19 recommending a discount of 11 percent; is that correct?
- 20 A. The original cost studies did not have any discount in
- 21 them, that is correct, and I am currently recommending the 11
- 22 percent, yes.
- 23 Q. Thank you.
- 24 Mr. Mette, I've got a few questions about some
- 25 miscellaneous inputs that you used in your loop studies and

- 1 described in your testimony.
- In the same supplemental testimony on Page 6 you describe
- 3 how CBT contracts for a number of its cable trenching and
- 4 placing functions.
- 5 A. Yes.
- 6 Q. Specifically you describe the extent to which CBT uses at
- 7 least two different contracts, depending upon the extent to
- 8 which it is contracting for the replacement of feeder or
- 9 distribution cable versus the placement of service entrance
- 10 cable; is that correct?
- 11 A. That is correct.
- 12 Q. Then in Exhibit 6 to your supplemental testimony you set
- 13 forth the 1998 and 1999 minimum trenching cost per-foot values
- 14 from the J. Daniel contract; is that correct?
- 15 A. That is correct.
- 16 MS. VAN DUZER: May I approach the witness, your
- 17 Honor?
- 18 THE EXAMINER: Yes.
- 19 MS. VAN DUZER: I'm going to ask the court reporter to
- 20 mark this as MCI Exhibit 9.
- 21 - -
- 22 Thereupon MCI Exhibit No. 9 was marked
- 23 for purposes of identification.
- 24 - -
- 25 BY MS. VAN DUZER:

- 1 Q. I believe this is a copy of the J. Daniel contract that CBT
- 2 provided to MCI on October 15th, 1998 in response to MCI Data
- 3 Request 4.15. Do you recognize this --
- 4 A. Yes.
- 5 O. -- Mr. Mette?
- 6 A. Yes.
- 7 Q. Can you show me where, within this contract, I would find
- 8 the \$2.45 and \$2.72 figures that you included in Exhibit 6 to
- 9 your supplemental testimony?
- 10 A. The 2.45 was the composite of several components. You
- 11 won't find the 2.45 in the contract.
- 12 I'm having difficulty recalling the -- I believe there
- 13 was --
- 14 (Pause.)
- THE EXAMINER: Do you want to look that up over the
- 16 lunch break, perhaps, and report back on how you derived the
- 17 figures?
- 18 THE WITNESS: That might be helpful.
- 19 THE EXAMINER: Okay.
- 20 BY MS. VAN DUZER:
- 21 Q. Now, I understand -- Sorry, I didn't mean to take you by
- 22 surprise.
- 23 A. No, that's okay.
- 24 Q. I understand in your cost study you used \$2.10 as the cost
- 25 per foot for trenching, placing cable and restoring cable; is

- 1 that correct?
- 2 A. I believe that is correct, yes.
- 3 MS. VAN DUZER: May I approach the witness, your
- 4 Honor?
- 5 THE EXAMINER: Yes.
- 6 MS. VAN DUZER: I'm going to ask the court reporter to
- 7 mark this MCI Exhibit 10.
- 8 - -
- 9 Thereupon MCI Exhibit No. 10 was marked
- for purposes of identification.
- 11 - -
- 12 BY MS. VAN DUZER:
- 13 Q. Do you recognize this, Mr. Mette?
- 14 A. Yes, I do.
- 15 Q. Is this a document provided to the staff by CBT in
- 16 discovery, I believe it was in response to Staff Data Request
- 17 No. 52?
- 18 A. I don't recall the exact data request, but it was provided
- 19 to the staff, yes.
- 20 Q. And is it the document CBT used to support -- Let me reask
- 21 that.
- Is this the document that supports CBT cable costs that are
- 23 included in the loop study?
- 24 A. That is correct.
- 25 Q. Let's turn to what's Bates stamped as 000004. The page is

- 1 entitled "Buried (45C) Feeder Cable Costs". Looking about a
- 2 third of the way down the page, am I right that in order to
- 3 calculate the \$2.10 figure for trenching, placing and restoring
- 4 cable as assumed within the CBT loop study, I would need to add
- 5 the \$1.70 figure with the 10 cent figure with the 30 cent figure
- 6 that are set forth in the second column on that page in the rows
- 7 entitled "Trenching Unit Rate", "Placing Unit Rate" and
- 8 "Restoration Unit Rate"?
- 9 A. That is correct.
- 10 Q. And those numbers are added to get \$2.10; is that right?
- 11 A. That is correct.
- 12 Q. Can you tell me what the unit is that we're talking about
- 13 here with respect to a unit rate?
- 14 A. It's per foot.
- 15 Q. So does the study assume that for every cable CBT will dig
- 16 a trench, place the cable and restore the open trench to its
- 17 previous condition at a rate of \$2.10 per foot?
- 18 THE WITNESS: I'm sorry. Could you repeat it?
- 19 (Question read back as requested.)
- 20 THE WITNESS: For the buried cable, that -- that is
- 21 correct, yes.
- 22 BY MS. VAN DUZER:
- 23 Q. So the study doesn't assume that two cables would ever be
- 24 placed in the same trench?
- 25 A. At the same time initially? I'm -- Two CBT cables?

- 1 Q. First two CBT cables.
- 2 A. CBT would -- if they're placing cables, they will place the
- 3 appropriate-size cable in the trench, there won't be two cables
- 4 going in the trench.
- 5 Q. And it doesn't assume that it would be a CBT cable and
- 6 somebody else's cable, does it? Because then it would be cut in
- 7 half, presumably, right?
- 8 A. Well, that -- On this particular page, that won't occur.
- 9 We're talking about feeder cable and we won't be sharing
- 10 trenching in the feeder plant.
- 11 Q. So it doesn't assume that two cables would ever be put in
- 12 the same trench, these numbers?
- 13 A. Since this is feeder and we would only be putting one cable
- in and not sharing that with anyone else, that is the assumption
- 15 on this page.
- 16 Q. Okay.
- MS. VAN DUZER: May I approach the witness, your
- 18 Honor?
- 19 THE EXAMINER: Yes.
- 20 MS. VAN DUZER: I'm going to show you CBT's response
- 21 to MCI's Data Request No. 1.46. It is attached to Mr. Starkey's
- 22 testimony and does not need to be marked or admitted into the
- 23 record at this time necessarily.
- 24 THE EXAMINER: Okay.
- 25 BY MS. VAN DUZER:

- 1 Q. This document is attached to Mr. Starkey's supplemented
- 2 direct testimony as Exhibit No. 2.
- 3 Mr. Mette, you responded to this data request on behalf of
- 4 CBT; is that correct?
- 5 A. That is correct.
- 6 Q. Do you recognize this document to be a copy of your -- Is
- 7 this -- Is this a correct copy of your response?
- 8 A. Yes.
- 9 Q. Can you read for me Question A there?
- 10 A. I'll start at the very beginning. "Regarding CBT's
- 11 trenching costs, please provide the following (include the
- 12 source of this information and all relevant documentation).
- 13 "A. Does CBT include any trenching costs in its unbundled
- 14 element cost studies? If so, please identify the amount of
- 15 trenching costs (both embedded and forward looking) that are
- 16 included in the cost studies".
- 17 Q. Can you now read Question D?
- 18 A. "In its cost studies" -- I'm sorry. "In its cost studies
- 19 has CBT taken into account trenching costs that are shared by
- 20 affiliates and other entities?" If so, please -- I'm sorry --
- 21 "If so, explain and provide all documentation regarding how the
- 22 cost studies incorporated this sharing of trenching costs. If
- 23 not, please explain why CBT has not incorporated this into its
- 24 cost studies".
- 25 Q. Can you now read me the response to Question A?

- 1 A. "Objection, CBT considers the information contained in its
- 2 cost of service studies to be confidential and proprietary. The
- 3 disclosure of this information could be damaging to the
- 4 marketing position of the Company. MCI has been provided copies
- 5 of all cost studies and support materials through the various
- 6 data requests of other parties, pursuant to the Stipulated
- 7 Protective Agreement between CBT and MCI".
- 8 Q. In fact, CBT didn't provide the J. Daniel contract to MCI
- 9 until October 15th of 1998, after MCI requested it in MCI's
- 10 Fourth Set --
- 11 MR. HART: I don't think he's finished reading the
- 12 answer.
- 13 THE WITNESS: There's more on the second page.
- 14 BY MS. VAN DUZER:
- 15 Q. Oh, sorry. Continue.
- 16 A. The answer continues, "Yes, CBT does include the trenching
- 17 costs in its unbundled element loop studies. The trenching
- 18 costs are shown in the development of the buried cable
- 19 investments. These were provided in response to PUCO Data
- 20 Request 52.0, Question 6, Tab 4, item 6".
- 21 Q. Mr. Mette, I apologize for interrupting you.
- In fact, CBT didn't provide the J. Daniel contract to MCI
- 23 until October 15th, 1998; is that correct?
- 24 A. I don't know when it was exactly provided, but I believe it
- 25 was not provided as part of the Data Request 52 referenced in

- 1 the answer to A.
- 2 Q. Does October 15th, 1998 sound about right to you?
- 3 A. It was some part -- sometime during that time frame, yes.
- 4 Q. And it was after MCI requested it in MCI's Fourth Set of
- 5 Data Requests; is that correct?
- 6 A. I don't know when MCI's Fourth Set of Data Requests came.
- 7 Q. Would you like to see a copy of the entire response, would
- 8 that refresh your recollection?
- 9 THE EXAMINER: For what purpose do you need to have
- 10 these dates admitted into the record? It seems to me like
- 11 October to March is probably a sufficient time to have analyzed
- 12 it. I -- You may have had a discovery dispute, but I don't
- 13 think we need to burden the record at this point with it.
- 14 MS. VAN DUZER: That's fine. I'll move on.
- 15 BY MS. VAN DUZER:
- 16 Q. So even though the contract was the sole source of support
- 17 for CBT's proposed trenching costs, CBT didn't submit it to MCI
- in response to MCI Data Request 1.46?
- 19 MR. HART: Objection. I think that's what you just
- 20 told her to skip over.
- 21 THE EXAMINER: If you've got the information and
- 22 you're able to prepare your case, I would prefer that we not at
- 23 this point delve into timing issues, especially related to
- 24 discovery. So I would ask that you move on for some substantive
- 25 area.

- 1 MS. VAN DUZER: Thank you, your Honor.
- 2 BY MS. VAN DUZER:
- 3 Q. Could you read the response to Question D of MCI's Data
- 4 Request No. 1.46?
- 5 A. The response is: "Shared trenching costs were taken into
- 6 account by CBT when developing buried cable costs. CBT, in most
- 7 cases for which it participates in trenching, does not do or
- 8 contract the trenching. Thus, when CBT considers trenching
- 9 costs, CBT is billed for its share of the trenching costs. An
- 10 average trenching cost was provided in CBT's buried cable cost
- 11 which reflects any savings due to shared trenching. Also
- 12 included in the buried cable costs are non-shared costs such as
- 13 the cable, closures, terminals and the labor to install these
- 14 items".
- 15 Q. So not only doesn't CBT do the trenching itself, but CBT
- 16 doesn't even generally contract for the trenching; is that true?
- 17 A. The response to this data request doesn't do a good job of
- 18 distinguishing feeder versus distribution.
- 19 If we are trenching in a distribution situation where we
- 20 would be sharing with power or cable TV, that is true. We, I
- 21 believe, work through the electric company, generally is where
- 22 the contracting of the trenching occurs. If CBT is placing new
- 23 feeder cable where there would be no sharing, CBT would be doing
- 24 that contracting to have that work completed.
- 25 Q. Okay. Let's move back to MCI Exhibit 10, which is the

- 1 support for CBT's cable costs included in its loop studies. And
- 2 let's turn to what's Bates stamped as Page 2. It's entitled
- 3 "Urban 1 Underground (5C) Feeder Cable Costs". Three lines
- 4 from the bottom of the page there is a cost category entitled
- 5 "Miscellaneous Costs (10 percent)". Do you see that?
- 6 A. Yes, I do.
- 7 Q. And on Page 24 of your supplemental testimony filed
- 8 December 23rd, 1997, Line 18 --
- 9 A. I'm sorry, I -- could you --
- 10 O. Line 18.
- 11 A. I missed the page number.
- 12 Q. Oh, I'm sorry. Page 24.
- 13 A. Okay.
- 14 O. Line 18.
- 15 A. Yes.
- 16 Q. Is that the same 10 percent miscellaneous factor that
- 17 you're talking about?
- 18 A. That is correct.
- 19 Q. And your testimony on Pages 24 and 25 indicates that CBT
- 20 used the 10 percent gross-up to account for a lot of different
- 21 costs that it couldn't identify or that were as to small to
- 22 count because it was practically impossible to identify every
- 23 single item of cost on an itemized basis?
- 24 A. That is correct. When we did the cable cost development,
- 25 we worked with engineers to identify times and materials that

- are needed to install cable, and they identified those, but they
- 2 also expressed concerns that they could not realistically
- 3 quantify every nut and bolt and small thing that could occur, so
- 4 they -- they recommended some type of addition to capture those
- 5 costs.
- And at the time, we, working with them, concluded that 10
- 7 percent was a reasonable number; and that's why that is put in
- 8 the study.
- 9 Q. Why did you arrive at the 10 percent figure as opposed to,
- 10 say, 5 percent or 20 percent; is there any scientific
- 11 calculation assigned to that figure?
- 12 A. There were no special studies done at that time. We talked
- 13 with the engineers. Actually, the first number we were using
- 14 was 15 percent, based -- based on their general comments about
- 15 what they expected, but I don't believe they -- they did any
- 16 detailed analysis. We decided to move it to 10 just to attempt
- 17 to be a little more conservative in the process, and we left it
- 18 at 10 percent at that time. But I cannot provide any detailed
- 19 studies because if I -- if I could, I would have just included
- 20 those costs in the cable cost development to begin with.
- 21 Q. So you couldn't say with confidence that the number
- 22 shouldn't be 11 percent or 9 percent or some other number?
- 23 A. I don't have a study to quantify that it is exactly 10
- 24 percent. In this testimony we did go back and identify costs
- 25 associated with easements and warehousing, and quantified 5

- 1 percent -- 5.2 percent in this testimony on Page 27, but I have
- 2 not done anything to come back exactly to 10 percent, no.
- 3 Q. Okay. Let's move on, then. Let's talk about ADSL.
- 4 They talked yesterday about CBT's deployment of an ADSL
- 5 product to its retail customers. To your knowledge, are there
- 6 particular loop characteristics that must be met in order to
- 7 provision ADSL?
- 8 A. Yes, there are.
- 9 Q. Could you explain those?
- 10 A. I can give a general understanding; I don't know the
- 11 detailed engineering parameters. I know that there are loop
- 12 length restrictions for ADSL. There's transmission
- 13 characteristics of the loop that will also come into play
- 14 regardless of length.
- For instance, if there's a -- maybe the quality of the
- 16 loop, maybe there's a lot of splices in it because splices could
- 17 cause problems. There -- There cannot be load coils on the
- 18 loop. Those are things that come to mind, but I -- I won't
- 19 claim that that's an exhaustive list.
- 20 Q. That's fair.
- 21 Can you describe for me what a load coil is?
- 22 A. A load coil is a piece of equipment that is put on a copper
- 23 loop for long copper loops to ensure that there's an adequate
- 24 quality signal for -- primarily for voice communications. I
- 25 don't know physically what it is. I know it's there to

- 1 counteract the inductance on the loop, but I don't know what it
- 2 physically is.
- 3 Q. And you can't provide ADSL over a loop that has a number of
- 4 load coils?
- 5 A. That is my understanding.
- 6 Q. To your knowledge, does CBT charge its retail customers for
- 7 load coil removal?
- 8 MR. HART: Objection. Irrelevant.
- 9 THE EXAMINER: What's the basis?
- 10 MR. HART: Retail rates have no bearing on TELRIC
- 11 costs.
- 12 THE EXAMINER: Ms. Van Duzer.
- MS. VAN DUZER: CBT's proposing to charge the CLECs
- 14 for load coil removal, and I think it's very relevant to know
- 15 whether or not they're charging their retail customers;
- 16 otherwise, how could we ever compete or try to compete?
- 17 THE EXAMINER: Do you wish to respond, Mr. Hart?
- 18 MR. HART: Well, I've got several responses. First,
- 19 there's no foundation to establish whether or not CBT removes
- 20 load coils; and, secondly, how it recovers that cost is a retail
- 21 rate issue that is for a different case and time, not this case.
- The purpose of this case, as I understand it, is
- 23 strictly to determine what the TELRIC costs are of certain
- 24 unbundled elements or other activities, and if she's developing
- 25 what that cost is, that's fine, but I don't see how CBT's retail

- 1 rate has any bearing at all on what the TELRIC cost of that is.
- THE EXAMINER: I assume you're going to move to strike
- 3 parts of their -- the intervenor testimony on removal of load
- 4 coil costs, then?
- 5 MR. HART: I may very well. I don't have an objection
- 6 to discussing what the cost of removing them is. The objection
- 7 I have is to what Cincinnati Bell's retail rates may or may not
- 8 be with respect to that. And we've went through a discovery
- 9 dispute over this very issue where they requested a copy of the
- 10 retail cost study and you denied that motion to compel; I assume
- on the same ground that it wasn't relevant to the TELRIC cost.
- 12 THE EXAMINER: I have to hear the question read back
- 13 again.
- 14 (Question read back as requested.)
- 15 THE EXAMINER: Do you have any additional response? I
- 16 am --
- 17 MS. VAN DUZER: I do.
- 18 THE EXAMINER: I'm inclined to sustain the objection
- 19 unless I hear a good reason to the contrary.
- 20 MS. VAN DUZER: Your Honor, I think that imputation
- 21 and discrimination are issues in a TELRIC proceeding.
- MR. CHORZEMPA: Your Honor, I would only add that the
- 23 Ohio Revised Code indicates that for similar services, you have
- 24 to provide similar prices, you can't -- and I think that the
- 25 relation of that fact, just because a retail customer might be

- 1 purchasing the particular asset and in another case a carrier
- 2 might be, I think you have to charge them a similar price for
- 3 that -- for that particular service.
- 4 THE EXAMINER: Mr. Petrilla?
- 5 MR. PETRILLA: I would also add, your Honor, that the
- 6 question is asking if they charge their customers at all. If
- 7 they don't charge their customers at all, that has some bearing
- 8 on whether or not they experience a cost for it. Now, perhaps
- 9 there is a retail rate structure explanation for that and maybe
- 10 Mr. Hart has an objection to exploring how the retail rates are
- 11 structured; but I think we at least deserve to know whether they
- 12 charge their customers at all because if they don't, that has
- 13 some bearing on whether they experience any costs. And while
- 14 TELRIC costs and retail rates may be different, I think we can
- 15 all agree that if there is some cost, we should know if they're
- 16 experiencing it.
- 17 THE EXAMINER: All right. I'll overrule the objection
- 18 at this point and we'll see --
- 19 MR. HART: Your Honor, if I could respond to these
- 20 additional points made by people who haven't asked the question.
- 21 Whether or not the retail rate includes a particular cost or not
- 22 is irrelevant to whether the cost is incurred. And I envision
- 23 that if you're going to allow this question, then we're going to
- 24 be here for perhaps days debating about whether Cincinnati
- 25 Bell's retail residential rates are the same as what would be

- 1 charged on a TELRIC basis.
- And we've been through an alt. reg. case where all of
- 3 our retail rates were open for hearing and parties stipulated as
- 4 to what those rates would be. And to the extent we're now
- 5 attempting to reopen that and justify whether TELRIC rates are
- 6 correct or not, I think, is an entirely irrelevant process.
- 7 And if we looked at the FCC order, I don't think
- 8 you're going to find a word in there that says a retail rate of
- 9 an existing telephone company has any bearing on what the TELRIC
- 10 cost is. So I think we're starting down a very slippery slope
- 11 here.
- 12 THE EXAMINER: Well, I'll -- I'll allow this question
- and let's see where we go from there.
- 14 THE WITNESS: Can I ask that the question is reread,
- 15 please?
- 16 (Question read back as requested.)
- 17 THE WITNESS: I'm not aware of any rate element to
- 18 charge for that because a retail customer can't call up and
- 19 request us to take load coils off, so....
- 20 BY MS. VAN DUZER:
- 21 Q. In order to provision ADSL, Cincinnati Bell would have to
- 22 remove any load coils. So let me rephrase the question just
- 23 slightly. Maybe I didn't phrase it this way before.
- 24 Does CBT charge its retail customers for load coil removal
- 25 if they order ADSL?

- 1 MR. HART: Same objection. And it's also lack of
- 2 foundation for the premise of this question.
- 3 MR. CHORZEMPA: For what?
- 4 MR. HART: For -- There's lack of foundation for the
- 5 premises in the question.
- 6 MR. CHORZEMPA: On this --
- 7 THE EXAMINER: Which is that load coils have to be
- 8 removed in order to provide ADSL?
- 9 MR. HART: Yes.
- 10 MS. VAN DUZER: I believe --
- 11 THE EXAMINER: I can -- Unfortunately, I wasn't here
- 12 yesterday. Ms. Van Duzer is indicating that that was brought up
- 13 on the record yesterday.
- 14 MS. VAN DUZER: I believe Mr. Mette just testified to
- 15 that a couple of questions ago.
- 16 THE EXAMINER: I think he --
- 17 BY MS. VAN DUZER:
- 18 Q. Can you provide ADSL over a loop that has load coils?
- 19 A. My understanding is that ADSL will not function over a loop
- 20 with load coils.
- 21 THE EXAMINER: Okay.
- 22 MR. HART: But this question presumes that any order
- 23 for ADSL requires load coil removal, and that is not a correct
- 24 premise; so that's my objection.
- 25 THE EXAMINER: Okay.

- 1 MS. VAN DUZER: I could re- --
- 2 THE EXAMINER: Assume there are load coils and a
- 3 customer orders ADSL where load coils exist. Can you answer the
- 4 question based on that foundation?
- 5 THE WITNESS: I believe I can, yes.
- 6 THE EXAMINER: All right. Go ahead.
- 7 THE WITNESS: My understanding today is if a customer
- 8 orders ADSL and a loop has load coils, we will not provide the
- 9 service.
- 10 BY MS. VAN DUZER:
- 11 Q. How does CBT know that a loop serving a particular customer
- 12 includes load coils or meets the specific conditioning
- 13 requirements necessary to provision ADSL?
- 14 A. That, I don't know. Are you asking me what process we go
- 15 through to determine that?
- 16 Q. Pardon?
- 17 A. Are you asking me what --
- 18 Q. Yes. Is there a process?
- 19 A. I'm sure there is, but I don't know what it is.
- 20 Q. But you're sure that Cincinnati Bell knows whether or not a
- 21 particular loop would qualify for ADSL?
- 22 MR. HART: Objection. No foundation for that either.
- 23 THE EXAMINER: Overruled.
- 24 THE WITNESS: I'm not sure what you're asking me.
- 25 BY MS. VAN DUZER:

- 1 Q. Well, you said if the customer calls up to order ADSL and
- 2 they have load coils, that Cincinnati Bell wouldn't provision
- 3 ADSL to that customer. So presumably CBT knows that that
- 4 customer has load coils on their loop.
- 5 A. My understanding is today if a customer has load coils, we
- 6 won't provide ADSL. If when that customer -- How we find that
- 7 out, that's what I don't know, how that process works.
- 8 Q. So that process, whatever that process is, is that the same
- 9 or different from qualifying a loop -- and that's a quote,
- 10 "qualifying a loop" -- as you use that term in your nonrecurring
- 11 studies?
- 12 A. I don't know if that process is the same or different. I'm
- 13 just not familiar with what process they go through for ADSL.
- 14 Q. Does CBT ever remove load coils from its loops?
- 15 A. I believe we do.
- 16 Q. And when you do that, do you charge the customer, the
- 17 retail customer?
- 18 MR. HART: Objection. Irrelevant.
- 19 THE EXAMINER: Overruled.
- 20 THE WITNESS: I'm not aware of any rate element for
- 21 load coil removal. I am aware that costs associated with doing
- 22 that function have been included in cost studies for services
- 23 where that might be relevant.
- 24 BY MS. VAN DUZER:
- 25 Q. Now, you talk a little bit about load coil removal on Page

- 1 25, Lines 16 and 17 of your supplemental testimony. And you're
- 2 asked -- Let me be more specific.
- 3 I believe that was your supplemental testimony filed
- 4 September 28th, if I'm not mistaken.
- 5 THE EXAMINER: What page is that?
- 6 MS. VAN DUZER: Page 25 on his supplemental testimony
- 7 dated September 28th, 1998.
- 8 BY MS. VAN DUZER:
- 9 Q. Starting on Line 9 you talk about load coil removal, and on
- 10 Lines 16 and 17 you're asked, "Do CBT's unbundled loop TELRIC
- 11 cost studies assume that load coils will be used to provision
- 12 these loops?" And on Line 18 you answer, "No", that the TELRIC
- 13 studies you're proposing in this case don't assume the use of
- 14 load coils.
- Is it fair to say that this results from the fact that the
- 16 way you've designed the forward-looking loop in your studies
- 17 doesn't require the use of load coils?
- 18 A. That is correct.
- 19 Q. So if all of CBT's loops were built consistent with the
- 20 TELRIC models you've provided in this case, CBT would never have
- 21 to send a technician to the field to remove a load coil because
- 22 they wouldn't have been used in the first place; is that
- 23 correct?
- 24 A. If CBT could somehow magically replace its existing network
- instantaneously with the assumptions that are in the cost

- 1 studies, there would not be load coils in the network, that's
- 2 correct.
- 3 Q. And Page 26, Line 9 of your testimony, you suggest that
- 4 load coil removal costs are forward-looking costs because
- 5 "...CBT will continue to incur costs for any loop having load
- 6 coils and for which a NEC requires that these load coils be
- 7 removed".
- 8 Can you define for me what you mean by the term "cost" in
- 9 that sentence?
- 10 A. The cost of the technician going out to remove the load
- 11 coil, the costs a- -- the costs associated with that person's
- 12 time, materials, et cetera, to remove that load coil.
- 13 Q. Out-of-pocket costs?
- 14 A. They are out-of-pocket costs, yes.
- 15 O. TELRIC costs?
- 16 A. I consider them TELRIC costs, but the cost of this element
- 17 is something that has been explicitly recognized by the FCC in
- 18 its order where it introduced TELRIC, and said that it is
- 19 appropriate that a NEC would pay for removal of -- load coil
- 20 removal.
- 21 Q. So the TELRIC costs include that cost, the TELRIC cost of a
- 22 loop?
- 23 A. No, the TELRIC costs of a loop does not include that.
- 24 MS. VAN DUZER: Your Honor, I'm going to move on to
- 25 another cost study, I don't know if that -- we can just keep

1	going.							
2		THE	EXAMI	NER:	Let's	go off	the	record.
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1	PROCEEDINGS							
2								
3	Thursday, March 4, 1999							
4	Afternoon Session							
5	` 							
6	THE EXAMINER: Ms. Van Duzer?							
7	MS. VAN DUZER: Thank you, your Honor.							
8								
9	CROSS-EXAMINATION (continued)							
10	BY MS. VAN DUZER:							
11	Q. Mr. Mette, you were going to get some information regarding							
12	where within the J. Daniel contract I would find the \$2.45							
13	figure and the \$2.72 figure that you would included in your							
14	Exhibit 6 to your supplemental testimony dated September 28th,							
15	1998.							
16	A. Yes, and I don't have an answer yet. I received that							
17	information from Mr. Meier. He's out of the office when I							
18	called back, and he and I have traded voicemail. He said it was							
19	trenching, placing and restoring, but until he got back into the							
20	office this afternoon he wouldn't be able to give me specific							
21	numbers, so I'm still waiting for those numbers.							
22	Q. Okay. That's fine. All I'm trying to figure out is where							
23	they came from, those numbers came from.							
24	A. I understand.							
25	Q. Thank you.							

- Now, Mr. Mette, let me direct your attention to the
- 2 collocation cost study that you prepared this in this
- 3 proceeding. On Page 9 of your supplemental testimony dated
- 4 September 28, 1998 you introduced your collocation cost study;
- 5 is that correct?
- 6 A. Page 9 discusses the collocation cost study and
- 7 methodology. All of the cost studies weren't completed at that
- 8 time when that testimony was filed, though.
- 9 Q. Now, could you explain how you made this study a TELRIC
- 10 study?
- 11 A. There were numerous collocation studies so are you talking
- 12 all of them or -- are you talking a particular one?
- 13 Q. I mean all of the collocation cost studies, and we can go
- 14 through them one by one or if you have an overview as to how you
- 15 made them TELRIC studies.
- 16 A. The collocation cost studies identify the forward-looking
- 17 incremental costs of providing collocation. I'm having
- 18 difficulty with the term "made them" as opposed to they existed.
- 19 Q. How did you perform the cost studies?
- 20 A. Well, there was numerous collocation cost studies. For
- 21 each cost study -- or each service, I should say, we
- 22 identified -- like power distribution, we identified what
- 23 equipment or labor was required to provide the power equipment,
- 24 identified those dollars for a power plant, the forward-looking
- 25 cost, and we calculated those costs on a per unit of demand

- 1 basis for that particular element.
- 2 Maybe we need to go through them one by one, I don't know
- 3 if I --
- 4 Q. That's probably fine for now.
- 5 On Lines 12 and 13 of Page 9 you list some of the rate
- 6 elements of the collocation studies, and the elements you list
- 7 are floor space occupied, splicing, cable pulling and space
- 8 reservation charges; is that correct?
- 9 A. That is correct.
- 10 Q. And on Page 10 of your testimony you list several other
- 11 rate elements, and those are conduit/entrance facility,
- 12 rise/cable space, power consumption, power delivery, security,
- 13 access, entrance door and cage, cage construction and materials,
- 14 core drill floor in cages for diverse route, central office
- 15 build-out charges and cross-connects; is that correct?
- 16 A. That is correct.
- 17 Q. Are there any other collocation rate elements?
- 18 A. I don't believe so, no.
- 19 Q. Let's talk about the floor space. The floor space cost
- 20 study is set forth in Exhibit 8 of your supplemental testimony;
- 21 is that correct?
- 22 A. That is correct.
- 23 Q. And you have used the R.S. Means Building Construction Cost
- 24 Data Guide as the foundation for that study, correct?
- 25 A. That is correct.

- 1 Q. In fact, from that guide you have taken a cost figure of
- 2 \$135 per square foot for a telephone exchange, correct?
- 3 A. That is correct.
- 4 Q. Let me turn your attention to the last page of Exhibit 8.
- 5 Is this a copy of the relevant page from the R.S. Means Building
- 6 Construction Guide?
- 7 A. That is the page out of that guide that I obtained the \$135
- 8 from.
- 9 Q. And is that \$135 circled on your copy?
- 10 A. Yes, it is.
- 11 Q. Okay. And you've used the \$135 figure to calculate the
- 12 recurring monthly rent for floor space; is that correct?
- 13 A. That is correct. The \$135 represents R.S. Means' estimate
- 14 of building costs -- the building on a per square foot basis.
- 15 Q. And is it your understanding that the R.S. Means figure
- 16 represents some compilation of cost data that is sent by
- 17 telephone companies to R.S. Means?
- 18 A. That is my understanding, yes.
- 19 Q. Turning your attention to Page 7 of Exhibit 8.
- THE EXAMINER: Let's go off the record a minute.
- 21 (Discussion held off the record.)
- THE EXAMINER: Back on the record.
- 23 BY MS. VAN DUZER:
- 24 Q. Turning your attention to Page 7 of Exhibit 8, this is a
- 25 copy of Page 443 of the R.S. Means guide; is that right?

- 1 A. That is correct.
- 2 Q. That's the, I think, the second-to-last page of that
- 3 exhibit. And Lines 8 through 10 of the first column explains
- 4 that the \$135 square foot figure is a ten-year rolling average
- 5 of newly constructed central offices, correct?
- 6 A. The description of -- I'm sorry, let me start over.
- 7 The sentence that is there on Lines 8 through 10 is a
- 8 generic description of how R.S. Means calculates the cost. I
- 9 don't believe there is a lot of recent data in the R.S. Means
- 10 for telephone exchange buildings, but that's their general
- 11 description of how they calculate that cost.
- 12 Q. When you say you don't believe there is recent information,
- 13 why is that? What is your understanding of that?
- 14 A. Because of all the discussions on this, we contacted
- 15 R.S. Means probably after the depositions that occurred a couple
- 16 weeks ago, and we -- the person at R.S. Means told us that they
- 17 have not received any recent data from telephone companies on
- 18 central office buildings. The number she told us was, at best,
- 19 early '90s, and they are considering dropping this piece from
- 20 the R.S. Means thing in the future because they have a difficult
- 21 time getting data on telephone company exchanges.
- 22 Q. Did she know exactly when the earliest information was
- 23 obtained?
- 24 A. I don't believe she gave us an exact date. I did not
- 25 personally talk to her. What I was told was that she said early

- 1 '90s, or late '80s.
- 2 Q. And is that all of the specific information about the cost
- 3 data and the compilation of this \$135 square foot figure that
- 4 you have obtained from R.S. Means?
- 5 A. When we had the conversation with them, we were just trying
- 6 to find out what type of data they had been receiving, and that
- 7 was just the general discussions that occurred.
- 8 Q. Now, even though you are proposing to charge each
- 9 collocator rent based on \$135 per square foot investment, will
- 10 CBT actually be adding additional floor space to its existing
- 11 central offices to accommodate collocators?
- 12 A. At this time I'm not aware of us adding additional space to
- 13 our buildings.
- 14 Q. So it won't be making its central offices larger?
- 15 A. I'm not aware of us -- I'm not aware of us expanding a
- 16 central office, no.
- 17 Q. And won't be adding extra floors?
- 18 A. No.
- 19 Q. And the \$135 R.S. Means figure is the square foot
- 20 investment for newly constructed central office space; is that
- 21 correct?
- 22 A. That is correct.
- 23 Q. But CBT will actually use its existing central office space
- 24 for collocation, correct?
- 25 A. That is correct, because the purpose of the study is to

- 1 identify a forward-looking cost of that space, and we use the
- 2 R.S. Means data to identify that cost for the TELRIC studies.
- 3 Q. And the economic life CBT proposes for its central office
- 4 buildings is 40 years?
- 5 A. I believe that's the life that we propose.
- 6 Q. Do you know how many central offices CBT has in Ohio,
- 7 ballpark?
- 8 A. Thirty to 40.
- 9 Q. Thirty to 40?
- 10 A. Yes. I can't remember exactly.
- 11 Q. That's fine.
- Do you know the vintage of the central offices, when they
- 13 were constructed?
- 14 A. I haven't done a study to find out what that is, no.
- 15 Q. So you couldn't tell me how many of the buildings are older
- 16 than 40 years?
- 17 A. No, I could not.
- 18 Q. Do you think some probably are?
- 19 A. I would not be surprised if some are older than 40 years.
- 20 Q. Now, if MCI were to collocate in a building that was older
- 21 than 40 years, would it get a discount on the rent?
- 22 A. No.
- 23 Q. Would anybody who chose to collocate in a building that was
- 24 older than 40 years get a discount on the rent?
- 25 A. I'm not aware of any discounts like that.

- 1 Q. Now, moving on to the common space in the floor space
- 2 study. The amount of common space varies from central office to
- 3 central office; is that correct?
- 4 A. That is correct.
- 5 Q. Referring your attention to Page 2 of Exhibit 8 to your
- 6 supplemental testimony. On that page you've set forth the floor
- 7 space of the Avondale office, correct?
- 8 A. We calculate the per square foot floor space cost on that
- 9 page, yes.
- 10 Q. And you've used a common area factor of 2.7; is that
- 11 correct?
- 12 A. That is correct.
- 13 Q. That's the second -- That's at the top of the Page 2,
- 14 common area factor, right?
- 15 A. That is correct.
- 16 Q. Do you know what the inverse of 2.7 is?
- 17 A. I can calculate it, but --
- 18 Q. I could tell you, I think it's .37.
- 19 So your 2.7 common area factor indicates that for a
- 20 particular space, roughly 37 percent will be used and 63 percent
- 21 will be generally open space for engineers to come and go; is
- 22 that correct? Is that what that means?
- 23 A. The 2.7 -- I'm sorry, the common space represents areas,
- 24 common aisle ways to get in and out of the building, as well as
- 25 the area around the cages in that particular central office,

- 1 that is correct.
- 2 Q. Okay. So that's generally a correct statement that about
- 3 37 percent will be used for the collocation space, and 63
- 4 percent will be used to come and go and things of that nature?
- 5 A. In that particular central office, that is -- that is
- 6 correct. In order to get the collocations -- the collocation
- 7 cages in that central office, that was the area that was
- 8 available and that was the common area that resulted to put
- 9 those cages in that central office.
- 10 Q. And you did not review the engineering building design to
- 11 know if 2.7 -- if a 2.7 common factor for the Avondale office is
- 12 the lowest possible common factor that could have been used for
- 13 the Avondale office?
- 14 A. When I talked to the building engineers, they said that
- 15 there was only certain limited areas to put the collocation
- 16 cages in the Avondale office and they put them in the best way
- 17 they could, and that's how the 2.7 factor came out.
- 18 MR. CHORZEMPA: I object and move to strike the answer
- 19 based on hearsay.
- 20 THE EXAMINER: Let me have the answer read back,
- 21 please.
- 22 (Answer read back as requested.)
- THE EXAMINER: Motion is denied.
- 24 BY MS. VAN DUZER:
- 25 Q. I actually don't think the answer answers the question --

- 1 A. It probably --
- 2 Q. -- so I'll ask the question again.
- 3 A. Okay.
- 4 Q. You didn't review the engineering building design to
- 5 determine if a 2.7 common factor for the Avondale office is the
- 6 lowest possible common factor that could have been used for the
- 7 Avondale office, did you?
- 8 A. Although I saw the final blueprints of the design, I did
- 9 not do a review to question their decisions on how to put it in
- 10 that office.
- 11 Q. Okay. Now, it's true that CBT is already recovering its
- 12 existing central office floor space through its retail rates; is
- 13 that correct?
- 14 MR. HART: Objection. Irrelevant.
- 15 THE EXAMINER: Overruled.
- 16 THE WITNESS: Can I hear the question?
- 17 (Question read back as requested.)
- 18 THE WITNESS: When CBT does a cost study for a retail
- 19 service, CBT will also allocate floor space cost to that service
- 20 and, therefore, the cost of the floor space used for that
- 21 service is included in the cost study.
- 22 So that when retail rates are set for that service,
- 23 those retail rates, in theory, should be recovering the cost of
- 24 the floor space used for that service.
- 25 BY MS. VAN DUZER:

- 1 Q. What about the floor space that isn't used for that
- 2 particular service, what about the common areas, because -- and
- 3 maybe I'm making an assumption here. If you're building out a
- 4 collocation space today, presumably that space was either used
- 5 for another service, or it was a common area, and either way it
- 6 would be recovered through your retail rates?
- 7 A. My understanding of the space that was used, first it
- 8 wasn't there being used by another service and now we have
- 9 vacated some stuff and made collocation available, that's not
- 10 what happened.
- 11 Q. So CBT does not recover its common area -- the costs for
- 12 its common areas from its retail rates?
- 13 A. The reason I'm hesitating is that when we do a cost study
- 14 for our -- most retail services and even a lot of the services
- 15 that are in these studies, we have a situation where we're
- 16 utilizing a piece of equipment, say a central office switch or a
- 17 FLM-150, and we have to assign floor space cost to that piece of
- 18 equipment. We do that, which I'm sure you've seen in many
- 19 studies, through a building factor that basically allocates
- 20 floor space cost to that equipment. So the process there
- 21 doesn't go at it in terms of identifying a square foot and
- 22 considering common areas.
- 23 Q. How does CBT -- Go ahead.
- 24 THE EXAMINER: Wait, I think the question is: Are you
- 25 recovering through base rates the central -- anything that's in

- 1 rate base, the floor space of the central offices? And I think
- 2 that's the basic premise underlying the question; is that right?
- 3 MS. VAN DUZER: Yes.
- 4 THE EXAMINER: Theoretically, you are recovering
- 5 through base rates anything that is in the company's rate base,
- 6 which would include the central offices, including all the floor
- 7 space?
- 8 THE WITNESS: That is true, but theoretically
- 9 everything -- I'll just say that everything is in our rate base
- 10 in a sense.
- THE EXAMINER: That's why I asked it, trying to
- 12 shortcut some of this, because I think maybe you're missing --
- MS. VAN DUZER: That's exactly the point, that's all
- 14 I'm asking.
- 15 BY MS. VAN DUZER:
- 16 Q. So upon the arrival of a collocator, you're not aware of
- 17 any adjustment downward that CBT has made or intends to make to
- 18 its retail rates to avoid a double recovery; is that correct?
- MR. HART: Objection again, irrelevant, what our
- 20 retail rates are.
- 21 THE EXAMINER: Overruled.
- 22 THE WITNESS: I'm not aware of any adjustment downward
- 23 that will occur, but I don't see why there is a need to do a
- 24 downward adjustment. The TELRIC cost methodology is to identify
- 25 the forward-looking cost of -- you know, of the element

- 1 provided, and that's what we're doing in the study.
- 2 BY MS. VAN DUZER:
- 3 O. So the answer is no?
- 4 A. There is no downward adjustment, that is correct.
- 5 Q. Okay. Turning your attention to a separate and distinct
- 6 collocation rate element, the central office buildout charge,
- 7 which I'll refer to as the COBO charge.
- 8 Q. Let me turn your attention Tab A of the COBO study, which
- 9 is Exhibit -- I guess it's Exhibit --
- 10 MS. VAN DUZER: Doug, Exhibit 3 of --
- 11 MR. HART: It's Exhibit 9-3,
- MS. VAN DUZER: 9-3, that's what it is.
- 13 BY MS. VAN DUZER:
- 14 Q. Here it lists the COBO costs including common costs for
- 15 four CBT central offices. For example, on Line 4 of Page 1, the
- 16 study states that the COBO cost in the West 7th Street office is
- 17 \$290,560; is that correct?
- 18 A. That's correct.
- 19 Q. Now, the way in which CBT proposes to apply this COBO
- 20 charge is by charging the first collocator the entire COBO cost;
- 21 is that correct?
- 22 A. That is correct.
- 23 Q. So conceptionally the first collocator at the West 7th
- 24 Street office would be charged just in excess of \$290,000 for
- 25 the first 100 square feet of collocation space?

- 1 A. That is correct. I'll just add that because we have
- 2 already have collocators, that process has already started for
- 3 several collocators, and when it started, these numbers weren't
- 4 available so it wasn't based on this 290,000. But if we never
- 5 had any collocation until it cost study was done, it would have
- 6 occurred as you just said.
- 7 Q. So the first collocator would pay basically \$2,900 per
- 8 square foot?
- 9 A. Well, the first collocator would still pay the hundred
- 10 square foot floor space cost. If they paid the 290,000 and you
- 11 divide by a hundred, you would get the number that you just
- 12 quoted, yes.
- 13 Q. Now, you testified earlier that the cost per square foot
- 14 for building a brand-new central office, according to R.S. Means
- 15 Building Construction Cost Data Guide, is \$135 per square foot,
- 16 and this is about 22 times as expensive; is that correct?
- 17 A. The R.S. Means number is the cost of building a central
- 18 office building. This cost is the cost to make the central
- 19 office ready for collocation, or to build out the office so that
- 20 collocation can occur in it.
- 21 Q. To really retrofit the office so collocation can occur?
- 22 A. They are two different things.
- 23 Q. Now, I think you told me all of the specific information
- 24 you knew about the \$135 cost figure from R.S. Means, so I guess
- 25 you're not certain the difference between what this collocation

- 1 charge is and the \$135 charge is for; is that correct?
- 2 A. I think I am certain that especially based on their
- 3 information that there's no recent data in the \$135, that
- 4 there's no cost in there to have an office ready for
- 5 collocation.
- 6 Q. But what the difference between what's covered by the \$135
- and what's covered by the \$2,900 per square foot you wouldn't be
- 8 able to speak to the exact differences?
- 9 A. The COBO costs are costs that are basically not in the
- 10 \$135.
- 11 Q. But the \$135 is to build a brand-new central office,
- 12 correct?
- 13 A. That is correct.
- 14 Q. Okay.
- 15 THE EXAMINER: Well, this seems to be a little
- 16 confusing. I think he's saying they have to -- the \$290,000 is
- 17 to prepare the central office for collocation, and as I
- 18 understand, the 135 is essentially just rent on the floor space.
- 19 Is that, in essence, what you're saying?
- THE WITNESS: Let me clarify. The 135 builds the
- 21 building, but it doesn't include things like security access for
- 22 collocators, cages, you know, bringing electrical grounding into
- 23 the area, all the things that are in the COBO. So these are
- 24 items that needed to be done to make the area ready for
- 25 collocation, and those things are not in the \$135.

- THE EXAMINER: Okay. Can you give an exhaustive list
- 2 of everything that's included in the \$290,000 figure that is in
- 3 the study?
- 4 THE WITNESS: I can give a list on Tab B, will kind of
- 5 give a category of those costs. Architectural engineering
- 6 services; card readers; constructing the area, which would be
- 7 like racking, what's coming down from the ceiling so you can
- 8 mount equipment.
- 9 There is environmental construction because with
- 10 additional equipment going in you need to, you know, obviously
- 11 account for the heat, so you have to have air conditioning
- 12 considerations. There was just cost we incurred just to
- 13 contract out for people to bring equipment in so we could do
- 14 this; building the area -- building the walls to separate that
- 15 area from the rest of the central office. I've got the cable
- 16 ready --
- 17 THE EXAMINER: Okay. The question I thought
- 18 Ms. Van Duzer was asking was what's the difference between why
- 19 you're saying that the elements of the \$135 figure are not
- 20 included in that, that they are separate and distinct, as I
- 21 understood it.
- 22 And I thought that's what she was asking why it --
- 23 what is different between the two figures, because they are
- 24 so -- there is such a huge difference in magnitude between the
- 25 two figures.

- 1 MS. VAN DUZER: Yes. \$135 is the cost to construct
- 2 the new central office building, and that's what concerns me.
- 3 THE EXAMINER: Right. I'm just trying to get an
- 4 explanation also why is there such a difference in magnitude
- 5 between the two figures if, in fact, the 135 is to build new
- 6 collocation.
- 7 THE WITNESS: You said to build new for collocation,
- 8 is that -- the \$135 is an R.S. Means cost to build a central
- 9 office, it's their estimate. That cost, I don't believe, will
- include any of the costs that are necessary to make that central
- 11 office, in effect, a multi-tenant arrangement.
- 12 Central offices are typically built in the past as a
- 13 single-tenant arrangement, so the COBO is dealing with all those
- 14 multi-tenant issues. Like in the 7th Street situation, for
- instance, we had to tear a hole in the wall to make access
- available into the collocation area, and those wouldn't be in
- 17 the \$135.
- 18 So that it's the cost to make the building a
- 19 multi-tenant arrangement so collocation can exist in the
- 20 building.
- 21 THE EXAMINER: More of a preparatory nature as opposed
- 22 to actually collocation readiness for a specific tenant?
- 23 THE WITNESS: That is correct. It's not a specific
- 24 tenant, it's to make that area available, in effect, for
- 25 multi-tenants to go into that area.

- 1 BY MS. VAN DUZER:
- 2 Q. And that costs 21 or 22 times as much as building a new
- 3 central office space?
- 4 A. If I take the \$290,000 and I believe you divided that by
- 5 100, you get the 2,900. If I divide that by \$135, that is
- 6 almost 22 times. Obviously the space that we built is not just
- 7 for one 100-square-foot area, but doing those calculations gets
- 8 a number of 22, 21-1/2.
- 9 Q. At the West 7th Street office you presently have four
- 10 collocators, right?
- 11 A. I believe so, yes.
- 12 Q. And they are each using 100 square foot of space?
- 13 A. There have been several data requests on this.
- 14 Q. And I think they are paying, then, just shy of \$400 a
- 15 square foot; and I think that's your point, that that \$2,900 is
- 16 divided between four?
- 17 A. If you take that into account, yes, it would be 400. I do
- 18 know they have asked for more space also, and my understanding
- is we're probably going to come near -- or we may exhaust the
- 20 space that was built because of additional requests from those
- 21 four plus other carriers who have requested it.
- 22 Q. And I think that the space in the West 7th Street office
- 23 can accommodate six collocators, 600 square feet; is that
- 24 correct?
- 25 A. I was thinking it was greater than that.

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- 1 Q. Maybe I did my math wrong. If there's six collocators,
- 2 they would pay \$500 a square foot.
- 3 MR. HART: Could I ask for a clarification? Are you
- 4 talking about the cage square foot, or entire collocation square
- 5 feet?
- 6 MS. VAN DUZER: I'm talking about how many collocators
- 7 can be housed in the collocation space that costs \$290,000, and
- 8 I believe the maximum is six, and I believe it comes from
- 9 CBT's --
- MR. HART: What I'm asking is, are you just counting
- 11 the hundred square feet of the cage when you're calculating
- 12 these rates per square feet?
- MS. VAN DUZER: Yes.
- 14 MR. HART: Okay.
- 15 BY MS. VAN DUZER:
- 16 Q. We can go on, Mr. Mette.
- 17 A. I've just got the data request, I just kind of want to look
- 18 real quick.
- 19 Q. Sure.
- 20 (Pause.)
- 21 A. Data Request 125 -- PUCO Data Request 125 there was a
- 22 question asked about documentation on all physical collocation
- 23 requests submitted to CBT. This indicates that we have six
- 24 requests in the West 7th office for a total of 1,200 square
- 25 feet.

- 1 What I don't recall is if that 1,200 is available or if
- 2 there was -- if that would indicate a need to build out more
- 3 space. So I guess I'm not answering your question, I don't
- 4 know.
- 5 Q. No, let me show you your response to MCI's Data Request
- 6 5.37. This might refresh your recollection.
- 7 MS. VAN DUZER: May I approach the witness?
- 8 THE EXAMINER: It looks like he's got a copy of it.
- 9 BY MS. VAN DUZER:
- 10 Q. You supplemented your response --
- 11 MR. HART: Your Honor, there's an update to this data
- 12 request that may take a few minutes to locate.
- 13 THE EXAMINER: All right. Ms. Van Duzer, you want to
- 14 show the witness? Apparently he doesn't have the updated one,
- 15 so just show it to him and see if it refreshes his recollection.
- 16 BY MS. VAN DUZER:
- 17 Q. I think in the response you indicated that there are four
- 18 collocators at the West 7th Street office presently, and that
- 19 they are each using 100 square foot of space, correct?
- 20 A. That is correct.
- 21 Q. So that's 400 square feet of occupied space, and I think
- 22 under D you indicated that there's an additional 200 square feet
- 23 available?
- 24 A. That is correct.
- 25 Q. So I assumed that meant that there was 600 square feet of

- 1 space available -- total space available for collocation at the
- 2 West 7th Street office, and that there could be six collocators
- in the space that you have built out for \$290,000.
- 4 A. That's what it indicates, yes.
- 5 Q. So on a square foot basis, each of them would pay
- 6 approximately \$500 per square foot per collocation space; is
- 7 that correct?
- 8 A. That's correct, calculated on a per square foot basis, yes.
- 9 Q. Now, the cost of building out the space is set forth in the
- 10 COBO cost study, and in your supplemental testimony I think you
- 11 refer to it twice on Page -- once on Page 10 and once on
- 12 Page 11, and other than that I'm not sure you mentioned it in
- 13 your narrative testimony; is that correct?
- 14 A. That's probably correct.
- 15 O. I think that's correct.
- 16 Now, the study is about one-and-a-half inches thick, and
- 17 there's a one-page description of the study and then there are
- 18 tabulations of invoices and the rest of the study is the
- 19 invoices that were submitted to CBT by outside vendors; is that
- 20 correct?
- 21 A. That is correct.
- 22 Q. I'm going to try to explain which involce I'm looking at
- 23 here. After you look past the tabulations, the invoices have, I
- 24 guess, big dark numbers in the bottom right-hand corner, and I'm
- 25 looking at the first number, 24, and it reflects that this was

- 1 for labor and material to install a 400 amp 3PH208VV to PBSC
- 2 No. 2 in the basement of Avondale central office, correct?
- 3 A. That is correct.
- 4 Q. And it's for \$12,891?
- 5 A. That is correct.
- 6 Q. Is the collocation space in the basement?
- 7 A. No, the collocation space is not in a basement, but the
- 8 power plant is.
- 9 Q. Okay. So do you know what this invoice represents or what
- 10 the work reflected in this invoice represents, or was for?
- 11 A. I did not specifically investigate this invoice in detail.
- 12 From the description here I believe that what this is -- what
- 13 this is describing is that there's a power distribution area in
- 14 the collocation area that would actually be in kind of CBT's
- 15 space, so to speak, where power gets distributed out to cages.
- 16 And it's necessary to bring the power from the power plant,
- 17 which is in the basement, into that area so it then is able to
- 18 be dispersed or distributed throughout the collocation area.
- 19 And this would be work done by an outside contractor to
- 20 bring that power from the basement up into that area.
- 21 Q. How are you able to discern that from this invoice,
- 22 exactly?
- 23 A. Based on my general understanding of how or central offices
- 24 are laid out, where the power plant for the central office is
- 25 typically located, and how power is delivered to the collocation

- 1 cages.
- 2 Q. If I didn't know your central office layout, would I be
- 3 able to understand what this work was for?
- 4 A. You probably would not.
- 5 Q. And moving forward, there's a -- this first set of invoices
- 6 ends, and then we are looking at numbers at the bottom again
- 7 that start over 1, 2, 3, and I'm just looking at No. 4.
- 8 It doesn't reflect any information that I can understand
- 9 about what work was done, it's for \$11,512 but it doesn't
- 10 contain any work description that I can see, and I'm wondering
- 11 if you know what this is for.
- 12 A. The \$11,512, I believe you're referring to Page 11.
- 13 Q. Page 4.
- 14 A. I'm sorry, 4.
- 15 Q. Okay.
- 16 A. On Page 4 it is for the Evendale central office. The
- 17 detail that I have is on Page 6.
- 18 We subcontracted out to the Beischel Building Company to do
- 19 the construction work in the office, and they subcontracted out
- 20 to various parties or purchased materials from various parties
- 21 to do that work. They provided the invoice on Page 6 that lists
- 22 the parties who did that work, it includes themselves at the
- 23 top, and then there's various supplies that are needed ranging
- 24 from hardware stores to drywall companies to painters.
- Those companies were contracted to do work in the central

- 1 office. I don't have invoices on those particular individual
- 2 companies who did the work for Beischel.
- 3 Q. So Page 6 actually lists invoices by company name, and over
- 4 to the side it lists the amount that that company billed
- 5 Beischel Building Company; is that correct?
- 6 A. That is correct.
- 7 Q. But there is no description of what those companies did on
- 8 this invoice; is that correct?
- 9 A. There is no detailed description besides, you know, the
- 10 company name, which some of it implies, I know we had to do
- 11 drywall work, so I suspect the Endless Drywall Company did the
- 12 drywall work, but there's no itemization from that company.
- 13 Q. Would you agree that it's fair to say that looking at these
- 14 invoices, one cannot tell what work specifically was performed
- 15 to build out the COBO space?
- 16 A. One cannot tell, like I'll just take drywall, exactly what
- 17 walls were built from this information, that is correct.
- 18 Q. Mr. Mette, where did you get the invoices?
- 19 A. Well, Cincinnati Bell built out the central offices,
- 20 Cincinnati Bell established -- we call them estimate numbers for
- 21 each central office. The estimate number is a means within our
- 22 internal accounting system that you can basically charge the
- 23 cost of a project -- cost of a project to so that you can cost
- 24 the -- you can track the cost of that project.
- These invoices would come in to the company and would be

- 1 reviewed by the various engineering people who worked with these
- 2 vendors to get the work done. They would review the invoices
- 3 and they would process them through the internal accounting
- 4 system, charge them to the estimate number that was established
- 5 for each central office.
- When we did the study, I went to the accounting
- 7 organization, we knew the estimate numbers, and they said, "Yes,
- 8 we can tell you the invoices, or the charges to each estimate
- 9 which would identify each central office", so they gave us a
- 10 printout of all the invoices.
- The documents in the study, I'm just looking at Tab E, for
- instance, that looked kind of like this with all the lines, this
- 13 was created from all the information they gave to us. So this
- 14 told us the dollars, but in order to provide support behind what
- these dollars were, we then went back to the accounting
- organization, and this report enabled us to go back basically
- into the files and pull out all these invoices.
- 18 THE EXAMINER: Are you saying then these are just the
- invoices are estimates, not the actual expenditures?
- THE WITNESS: No, these are the actual expenditures,
- 21 we just used the term "estimate" because that's for a project
- 22 tracking number, because typically that number is taken out when
- 23 somebody is developing the initial estimate of the project. By
- 24 then, as the work occurs, they are tracking the actual dollars
- 25 of the project. We just call it an estimate number.

- 1 So we obtained after the fact this listing of the
- 2 invoices. Again, went back to the accounting organization to
- 3 pull the invoices out of their files.
- 4 When we did the study, because of the volume of
- 5 invoices, and some of the invoices are very small, we focused on
- 6 the majority -- or, the major dollars in that process. That's
- 7 what is included in the COBO study.
- 8 I believe at the time we accounted for, I'm going to
- 9 say approximately 80 percent of the total dollars that were
- 10 charged to the project through the invoices. There was a
- 11 subsequent PUCO data request basically asking us to go back and
- 12 get more invoices, which we did, and I think we then accounted
- 13 for 95 percent plus of the total costs that were charged to the
- 14 estimate through the invoices. So we got the invoices by going
- 15 back basically into the accounting files where they are kept.
- 16 BY MS. VAN DUZER:
- 17 Q. And what is reflected in the invoices is really your only
- information about the work that was done, and in conjunction
- 19 with your understanding of your central offices sometimes you
- 20 can understand a little more; is that correct?
- 21 A. That is correct. And I have had discussions with the
- 22 collocation project manager as well as various engineers to
- 23 understand more about the -- about the actual work that was done
- 24 in that process.
- 25 Q. Okay. And these are the invoices supporting, for example,

- 1 the \$290,000 COBO charge for the West 7th Street, and the other
- 2 offices, that translates into a square foot charge of something
- 3 between 500 and \$3,000 for a collocator.
- 4 Let me ask you, Mr. Mette, if you were to design a central
- office today, would you do it in a way that it could accommodate
- 6 and house multi tenants?
- 7 A. If CBT had to build a central office today, I guess it
- 8 would depend on what central office it is, but that would
- 9 probably be a consideration in the building of the central
- 10 office.
- 11 Q. And based on your understanding of this information, would
- 12 you expect the cost to be less for building a collocation space
- in a new central office than retrofitting an existing central
- 14 office?
- 15 A. I haven't done a study to determine that.
- 16 Q. That's fine. Okay. Moving on to the cross-connect study.
- 17. I'll be talking about the revised cross-connect study.
- 18 (Pause.)
- 19 Mr. Mette, could you describe for me what a cross-connect
- 20 is?
- 21 A. In general, a cross-connect is the connection from the
- 22 collocation cage back to CBT's portion of the central office,
- 23 either at the mainframe or at a piece of transport equipment.
- Q. Can you get a cross-connect at a DSO level a DS1 level and
- 25 a DS3 level?

- 1 A. That is correct.
- 2 Q. Let me turn your attention to the revised cross-connect
- 3 study that you prepared in response to PUCO Data Request 115.0,
- 4 which is marked as CBT Exhibit 9-21.
- 5 A. Okay.
- 6 Q. In this study you presented two sets of results, one set is
- 7 for the West 7th office and the other set is for the three other
- 8 offices combined, correct?
- 9 A. That is correct.
- 10 Q. Approximately how many -- You've already answered that.
- 11 You've got 30 to 40 offices in your serving area; is that
- 12 correct?
- 13 A. That is correct.
- 14 Q. Is it possible you might have as many as 50?
- 15 A. Offices? Not in Ohio. The question before was Ohio, but
- 16 not in Ohio.
- 17 Q. In your serving area?
- 18 A. Yes.
- 19 Q. Okay. So for your cross-connect study, you studied four of
- 20 those offices --
- 21 A. Those are the --
- 22 Q. -- four Ohio offices?
- 23 A. Those are the offices where collocation has been requested.
- 24 Q. So you didn't choose them because you thought they were
- 25 representative of all of CBT's central offices?

- 1 A. No. They were chosen because that's where collocation has
- 2 been requested.
- 3 Q. I don't think the pages are marked so this is going to take
- 4 me one minute.
- 5 Okay. Mr. Mette, I'm looking at a page in the middle of
- 6 this exhibit, I guess these pages are numbered, they begin 1
- 7 through 20 in Tab A, and then going to Tab B, I'm looking at
- 8 Page 2, okay?
- 9 A. Okay.
- 10 Q. And these are the cross-connect totals for the Rossmoyne,
- 11 Evendale and Avondale central offices, correct?
- 12 A. That is correct.
- 13 Q. One DSO cross-connect in one of these offices would cost
- 14 about 48 cents; is that correct?
- 15 A. The DSO cross-connect is being offered on a per hundred
- 16 pairs, and if you take the cost divided by 100, you get 48
- 17 cents.
- 18 Q. Okay. And a DS1 cross-connect costs \$2.24 in one of these
- 19 offices?
- 20 A. That is correct.
- 21 Q. And a DS3 cross-connect costs \$25.25?
- 22 A. That is correct.
- 23 Q. Now, turning to the West 7th Street office, which is set
- 24 forth in Tab A, and going to page -- Page 1 and 2 the same? --
- 25 Page 1 or 2, it doesn't matter.

- A DSO cross-connect on a DSO basis costs 64 cents; is that
- 2 right?
- 3 A. If you divide the total number there by 100, it's 64 cents,
- 4 yes.
- 5 Q. And that's roughly 30 percent more than in the other
- 6 offices; is that true?
- 7 A. Roughly, yes.
- 8 Q. And a DS1 cross-connect costs \$47.48, which is 20 times as
- 9 expensive as in the other three offices, correct?
- 10 A. That is correct.
- 11 Q. And a DS3 cross-connect costs 553.77, which is 14 times as
- 12 expensive as in the other offices?
- 13 A. That is correct.
- 14 Q. So clearly there's something very different about the West
- 15 7th Street office, am I correct?
- 16 A. That is correct.
- 17 Q. And what is it that makes the cross-connects so much more
- 18 expensive in that office?
- 19 A. The difference about the West 7th Street building is that
- 20 because of the existing building, the collocation area, in order
- 21 to give access to that area, is -- could not be placed near the
- 22 CBT mainframe and CBT transport area, so the -- within that
- 23 building there -- in effect, almost different ends of the
- 24 building, and the difference between the collocation area and
- 25 the transport area exceeds the distance parameters on how far

- 1 can you transport a DS1 and DS3 signal.
- 2 As a result, CBT had to put in transmission equipment in
- 3 order to transport the DS1s and DS3s from the collocation area
- 4 back to the transport area, and the cost of that equipment is
- 5 reflected in these numbers.
- 6 Q. And that's called a SONET configuration; is that true?
- 7 A. The equipment that is used is SONET equipment, yes.
- 8 Q. Do you know how long the distance is between a collocation
- 9 space and the main distribution frame in the West 7th Street
- 10 office?
- 11 A. I believe in a data request we indicated that 700-plus
- 12 feet, I don't remember exactly the feet, but it was over 700
- 13 feet.
- 14 Q. I think that's right.
- Now, in the other offices, the cross-connect is provided on
- 16 copper facilities; is that correct?
- 17 A. The DSO is provided on copper facilities. The DS1 and DS3,
- 18 I believe, are provided on coaxial facilities.
- 19 Q. And the SONET configuration in the West 7th uses fiber and
- 20 expensive electronics?
- 21 A. It uses fiber and electronics, yes.
- 22 Q. And that's -- And correct me if I'm wrong, but actually are
- 23 there two buildings in the West 7th Street office? I know
- 24 there's an older building and is there a newer building that
- 25 you're connecting to.

- 1 A. In effect, it's one building. They built it -- two
- 2 buildings were built at two different times and they are kind
- 3 of, I quess, joined together.
- 4 Q. Joined together?
- 5 A. Yeah, so it's --
- 6 Q. And that's what causes the cost of the West 7th Street
- 7 cross-connects to be as much as 20 times more expensive than the
- 8 other offices, correct?
- 9 A. The need for that equipment is what causes the cost on West
- 7st Street to be higher, yes.
- 11 Q. Does a collocator have a choice on where it wants their
- 12 collocation cage to be located within your industrial office
- 13 building?
- 14 A. Are you asking within the collocation area if there are six
- 15 cages can they pick which of the six?
- 16 O. No.
- 17 A. I didn't think so.
- 18 Q. Does CBT decide where it builds the collocation cages?
- 19 A. CBT does decide that because it has to build the cages
- 20 where there is space, and also to meet the needs of the
- 21 collocators to want to have access in and out of the buildings.
- 22 CBT chooses to build that space out, my understanding is we
- 23 don't have to build that space out if we chose not to, but CBT
- 24 chooses the area the best that we can find to build this space
- 25 out.

- 1 Q. So CBT chooses it?
- 2 A. Yes, that is correct.
- 3 MS. VAN DUZER: I have -- Let's go off the record a
- 4 minute.
- 5 (Recess taken.)
- 6 THE EXAMINER: Back on the record.
- 7 Ms. Sanders.
- 8 MS. SANDERS: Thank you, your Honor.
- 9 - -
- 10 CROSS-EXAMINATION
- 11 BY MS. SANDERS:
- 12 Q. Good afternoon, Mr. Mette. I'm Judi Sanders. I'm here on
- 13 behalf of MCI, as well as Ms. Van Duzer.
- To begin this afternoon I'd like to just briefly discuss a
- 15 little bit of your testimony regarding fill factors. And you
- 16 have a paragraph in your supplemental testimony that was filed
- in December of 1997 on Page 20, about the middle of the page, I
- 18 just have a couple questions there.
- 19 Your testimony there, you state that there may be a
- 20 competitive -- or, an impact on fill factors due to competition
- 21 in CBT's service territory; is that correct?
- 22 A. That is correct.
- 23 Q. And I believe you state there that as alternative -- or,
- 24 competitors come into the area, that CBT's facilities will
- 25 become less utilized; is that your testimony?

- 1 A. That is correct.
- 2 Q. Now, just so that that bit of testimony is clear, that
- 3 assumes a facilities-based carrier, correct?
- 4 A. That is correct.
- 5 Q. And, indeed, it assumes that the carrier would be building
- 6 the loops, right?
- 7 A. That is correct.
- 8 Q. So until that time, it's likely that any kind of
- 9 competition in the CBT service territory would be either through
- 10 the resale of your services or through the leasing of loops,
- 11 correct, the purchase of unbundled loops or elements, correct?
- 12 A. Until a facilities-based competitor comes to Cincinnati, my
- 13 understanding is resale or purchasing of unbundled loops would
- 14 be the only alternative.
- 15 Q. And due -- You mention that -- the carrier of last resort
- obligation here too, and I just want to be clear, are you
- 17 referring in a retail context, correct?
- 18 A. Well, retail, but also my understanding is that if a NEC
- 19 wanted unbundled loops, we'll have to provide them to them,
- 20 also.
- 21 Q. So it's your understanding that if a NEC required the
- 22 provision of a loop that wasn't currently available or
- 23 facilities that were not currently in place, that you would have
- 24 an obligation to provide those facilities under carrier of last
- 25 resort requirements?

- 1 A. I guess I really don't know. When this was written, it was
- 2 written in terms of retail, so that if -- if a CBT customer went
- 3 to a competitor, we would still have to be ready to provide
- 4 service to that customer if they chose to come back to us. I am
- 5 not sure of the requirements on us in terms of providing
- 6 unbundled loops to a NEC.
- 7 Q. Just as a follow-up, do you think that the obligation to
- 8 provide facilities that aren't currently in existence might be
- 9 covered under interconnection agreements?
- 10 A. I would suspect that it is, yes.
- 11 Q. All right. Then in your supplemental testimony you filed
- in September of this year, you also have a discussion of fills,
- 13 fill factors. And you provide in Exhibit 4 to your supplemental
- 14 testimony a little discussion called the impact of growth on
- 15 fill factors, correct? I guess we'll just go straight to
- 16 Exhibit 4.
- 17 A. Yes.
- 18 Q. Okay. And at Page 2 of Exhibit 4 you have two lists of --
- or, two columns of numbers there, and those are labeled "Current
- 20 Fill Factor" and "Adjusted Fill Factor"; do you see those?
- 21 A. Yes.
- 22 Q. Now, the figures under the first column, they don't really
- 23 correspond to any fill factors that are proposed in your
- 24 studies, do they?
- 25 A. That was not the intent of that column, no.

- 1 Q. Well, I guess this example has been provided to us because
- 2 the logic of the example could be applied to your proposed fill
- 3 factors: is that correct?
- 4 A. The reason that the exhibit was provided was that it was to
- 5 demonstrate that if all facilities remained static, no new
- 6 facilities were put in, this would identify kind of a maximum
- 7 increase in the fill under those assumptions. I hopefully made
- 8 those assumptions clear, there's a bulleted sentence on the
- 9 first page, but that was the purpose of the exhibit.
- 10 Q. And, indeed, I -- really the purpose that you provided us
- 11 with this little calculation was to -- was to show us that
- 12 growth really has a very limited impact on fill factors; is that
- 13 correct?
- 14 A. That would be one conclusion, yes.
- 15 Q. Okay. Well, let's step us through a little bit -- through
- 16 your calculation here.
- Now, it's true that CBT has proposed a fill factor of 35
- 18 percent for underground copper cable, correct?
- 19 A. For distribution copper cable, that is correct.
- 20 Q. Right. Yes
- Now, you don't have 35 percent in your column under current
- 22 fill, but we could just apply the math to the 35 percent,
- 23 couldn't we?
- 24 A. Yes, we could.
- 25 Q. Okay. And once again, if we just -- we use your 4 percent

- 1 growth assumption here, and taking it over five years and taking
- 2 the mid point we would end up with a 10 percent growth rate.
- 3 Let's apply that -- applying that to your 35 percent fill for
- 4 copper distribution cable, would you agree with me that you
- 5 would have an adjusted fill of 38.5 percent?
- 6 A. Applying those calculations to 35 would give 38.5, yes.
- 7 Q. And those are the calculations that are on the first page
- 8 of the exhibit, right?
- 9 A. That is correct.
- 10 Q. Okay. Now, just so that I understand what that means, if
- 11 CBT had a million underground copper distribution loops and the
- 12 fill factor is 35 percent, then that means that 350,000 of them
- 13 are actually working facilities? As you describe them in your
- 14 exhibit.
- 15 A. That is correct.
- 16 Q. I'm sorry, I didn't hear you.
- 17 A. That is correct. I'm sorry.
- 18 Q. Okay. Now, you used 4 percent in your exhibit because
- 19 that's an annual growth factor; is that correct? I mean, I'm
- 20 sorry, it's -- it's an actual growth factor that you based on
- 21 historical growth in the CBT system; is that where you got that
- 22 number?
- 23 A. I think 4 percent was used to represent growth that's
- 24 comparable to what we have seen. I think the actual growth has
- 25 been somewhat less because I just recall the discussion

- 1 yesterday in Mr. Meier's testimony where he talked about those
- 2 numbers over the -- I forget the time period exactly. It seemed
- 3 like I remember -- I don't know if Mr. Petrilla did the
- 4 calculations -- it came up to like 3.2 or something. But the 4
- 5 was just used as a -- something close to what has been
- 6 occurring.
- 7 Q. So you based the 4 percent on -- basically on the same
- 8 period that Mr. Meier was looking at when he was determining his
- 9 fill factors; is that -- is that correct?
- 10 A. When I did the 4 percent -- I don't want to convey today I
- 11 did a detailed study to come up with the 4 percent. I wanted to
- 12 have a number that was reasonable, and 4 percent was considered
- 13 reasonable, but it wasn't really based on too much detailed
- 14 analysis in terms of what growth has been.
- 15 Q. And you're using it to show us something here in your --
- 16 A. Yes.
- 17 Q. -- formula, correct?
- Okay. Well, let's go on with that, then.
- 19 It's my understanding that CBT's proposed economic life for
- 20 underground copper distribution facilities is 15 years; is that
- 21 correct?
- 22 A. I believe that's correct, yes.
- 23 Q. Now, if we use the 15-year period in your equation here and
- 24 we assumed that there was a 4 percent annual growth as you used
- in your equation, would you agree with me that over 15 years

- there would be a 60 percent growth in the working facilities,
- 2 using your equation?
- 3 A. Are you saying that if there is a growth of 4 percent a
- 4 year for 15 years?
- 5 Q. There would -- Yes. Yes. There would be a 60 percent
- 6 growth, multiplying 15 by 4 percent, right?
- 7 A. That's true; 15 by 4 percent is 60.
- 8 Q. Okay.
- 9 A. Sorry.
- 10 Q. That's what -- That's what your equation, right, shows us?
- Okay. Now, let's assume that at the beginning of the
- 12 15-year period your fill factors for copper distribution cable
- 13 are 35 percent. Now, if we applied the equation on the first
- 14 page of your -- of your Exhibit 4 here, we would basically
- increase the 35 percent fill factor by 60 percent, correct,
- 16 because that would be total growth over -- of working facilities
- 17 over 15 years, correct?
- 18 A. If one was to assume that all the -- all the growth -- Let
- 19 me back up a second.
- If one was to assume that no additional facilities are put
- 21 in and all growth occurs where existing facilities exist and
- 22 customers exist, that would be the conclusion to come to. I
- 23 just don't believe that when you go to that length of time, it's
- 24 reasonable to make those assumptions. But if you make those
- assumptions, that is the number you would get, yes.

- 1 Q. Well, your -- your equation makes the assumption that
- 2 there's no additional growth in lines, right? I mean, it --
- 3 those are the assumptions that are -- that are in your equation,
- 4 correct?
- 5 A. That are the -- That is the assumption, that is correct.
- 6 Q. Okay. We're just working through your equation here.
- 7 All right. When you multiply 35 percent by 60 percent and
- 8 add it to the 35 percent fill factor that we started out with,
- 9 would you agree with me that we would come up with a 56 percent
- 10 fill factor at the end of 15 years?
- 11 A. If the growth continued at that level under all the
- 12 assumptions of this calculation, you would get 56 percent at the
- 13 end of that point in time, but it wouldn't be 56 percent over
- 14 the life of that plant by any means.
- 15 Q. Well -- Well, going back to the premise that we started
- 16 with, if after 15 years, if CBT still has a million lines
- 17 underground, distribution loops at a 56 percent fill factor,
- 18 there would only be 560,000 working facilities, correct, under
- 19 your equation?
- 20 A. That is correct. Under the assumptions here of no new
- 21 facilities, no new customers in new areas, that's what the
- 22 equation shows. I was just trying to clarify that the fill at
- 23 the end is not going to be the same number throughout the life
- 24 of that plant. I mean, it's not 56 at the beginning all the way
- 25 through; so the fill over that period of time is not 56 percent.

- 1 Q. But it is --
- 2 A. That's just the end point of that process.
- 3 Q. Okay, I understand. But the high at the end of the 15
- 4 years of your economic life of these -- of this loop, you're --
- 5 the highest your fill would ever be unbundled, your equation
- 6 would be 56 percent, correct?
- 7 A. Under these assumptions, that is correct.
- 8 Q. So by the time the loop has been fully depreciated under
- 9 your proposal, all your million loops, you still would have
- 10 had -- you still would have had 440,000 of them never been
- 11 used -- having never been used under your equation?
- 12 A. Under all the assumptions we have been making, that -- that
- 13 would be the end point of that calculation, that is correct. I
- 14 don't want to portray that as being the real world, but those
- 15 are the assumptions in this example here.
- 16 Q. Okay. Let's shift gears here a minute, Mr. Mette. And I'd
- 17 like to turn to the -- to the entrance facility study.
- And you discuss a little bit about that study on Page 21 of
- 19 your supplement testimony that you filed in September.
- Now, first of all, let me just ask you this: Why don't you
- 21 describe briefly what entrance facilities are under the terms of
- 22 your study.
- 23 A. An entrance facility is the facility from a NEC to the
- 24 serving central office, that -- that facility.
- 25 Q. I'm sorry, I didn't hear you.

- 1 A. An entrance facility is the -- the facilities from a NEC's
- 2 location to the NEC's serving central office, that connection,
- 3 providing a termination at both ends.
- 4 Q. And as I understand your study, the results of the study is
- 5 that NECs can purchase entrance facilities at various levels,
- 6 the DS1 level, DS3 level and higher; is that correct?
- 7 A. That is correct.
- 8 Q. Okay. And I think you told us in your testimony there that
- 9 an entrance facility is really more analogous to a loop
- 10 connection; is that correct?
- 11 A. I use that term to explain it's the connection from a -- a
- 12 NEC to a customer, so it could be called a loop in that sense
- 13 since it's from the NEC as a customer to their serving wire
- 14 center, as opposed to interoffice between central offices.
- 15 Q. Did you conduct -- Did you conduct the study the same way
- 16 that you conducted the loop study?
- 17 A. The un- -- The unbundled loop study which we were talking
- 18 about this morning for unbundled loops was for DSO loops to end
- 19 user customers and we talked about the loop samples. Those
- 20 samples were not part of the entrance facilities since the
- 21 entrance facilities are typically provided on fiberoptic
- 22 facilities or fiber -- with electronics.
- 23 So the methodology is generally the same in terms of
- 24 identifying length of the cable, coming up with the investments
- of the cable, applying the annual charge factors, but we didn't

- 1 use the same samples that were in the unbundled loop study that
- 2 we talked about this morning. But the general methodology is
- 3 the same.
- 4 Q. What kind of sampling did you use to develop your study?
- 5 A. In the entrance facility situation, we're dealing with
- 6 services -- DS1, DS3 services that are typically provided to
- 7 customers using SONET-based equipment. So we identified the
- 8 SONET rings that the company has to provide those services. We
- 9 also looked at whether SONET rings -- and there's also
- 10 point-to-point type arrangements to provide those services -- so
- 11 we identified those rings and point-to-point circuits to come up
- 12 with the characteristics in terms of the amount of fiber in
- 13 those different scenarios when we costed them out.
- 14 Q. Now, you did assume SONET technology for all -- for all of
- 15 the scenarios that you -- that you developed in your cost study,
- 16 didn't you?
- 17 A. That is correct. It's SONET -- SONET-based electronics on
- 18 all of them.
- 19 Q. And you developed costs for the fiber portions of the
- 20 studies based on OC3-level SONET electronics, didn't you?
- 21 A. Well, there was different entrance facilities. Some were
- 22 OC3, some were OC12.
- 23 Q. I'm sorry?
- 24 A. There were different entrance facilities, and some were OC3
- and some were OC12, so it wasn't all just OC3.

- 1 Q. Okay. Now, the TELRIC rates that you developed for
- 2 entrance facilities are a flat rate, correct? Is there a
- 3 mileage charge for a portion of an entrance facility?
- 4 A. There's no distance-sensitive piece to the -- to the costs
- 5 that we developed.
- 6 Q. All right. If you would turn for a moment to your -- let's
- 7 look at your DS1 entrance facility study.
- 8 And the very first sheet is a summary page. Can you
- 9 describe what -- what's depicted on that page?
- 10 A. As your very first sheet it says "DS1 Entrance Facility
- 11 Summary, Ohio Weighted Cost", and there's three columns?
- 12 Q. Correct.
- 13 A. On this sheet there's three columns representing three
- 14 different serving methods. One column says -- The first column
- 15 says 1CO-2CP. "CP" is a -- stands for customer premises. The
- 16 second column says two central offices, two customer premises,
- 17 and then the third says -- stands for point to point.
- This page lists percentages that are used to weight those
- 19 together, which is in the first line. The second line has
- 20 monthly costs for each of those scenarios. The third line is a
- 21 multiplication of the first and the second line. The fourth
- 22 line is the sum of the third line. And then the 13 percent
- 23 common overhead loading is added on.
- 24 Q. Okay. What are the -- What do the three columns represent,
- 25 the 1CO-2CP, et cetera? Could you describe those three

- 1 scenarios for us, please?
- 2 A. Yes. When we provide entrance facilities and it's based on
- 3 a SONET structure -- I'll start on the right -- point to point
- 4 just covers a situation where it goes from the central office
- 5 direct to the customer and that's the only location where there
- 6 is equipment.
- 7 Often, however, in order to fully utilize the equipment, we
- 8 also will provide equipment not only in the central office, but
- 9 attempt to get different locations so that we can add -- add
- 10 services to that ring and better utilize the equipment.
- The first two columns are dealing with those situations
- 12 where in one case it -- there's equipment only in one central
- office, in the second column is where there is equipment in two
- 14 central offices.
- 15 Q. Okay. Now, what you mean -- I believe what you were just
- 16 telling us is that you designed your study for three scenarios,
- one of them the point-to-point scenario, is where there is one
- 18 customer premises, which would be the NEC location, and the
- 19 central office location, correct?
- 20 A. Yes.
- 21 Q. Okay. And then moving to the left, the middle column is
- 22 a -- is a configuration where there would be two customer
- 23 premises, which would those both be NECs on that ring, or --
- 24 well, let me finish. -- two customer premises and two central
- 25 offices; correct?

- 1 A. That is correct.
- 2 Q. Now I'll ask my next question. Would those both be NECs on
- 3 that ring?
- 4 A. When we did the study -- At least one of them has to be a
- 5 NEC location.
- 6 Q. Sure.
- 7 A. But it's possible, in order to more fully utilize the ring,
- 8 one of those -- the other location might be a NEC, it might not
- 9 be a NEC location. It could be an end user location.
- 10 Q. Okay. And then that one assumes two central offices,
- 11 correct?
- 12 A. That is correct.
- 13 Q. And then the -- the very last one, of course, is the same
- 14 thing, two customer premises, one of which has to be a NEC, and
- 15 one central office, correct?
- 16 A. That is correct.
- 17 Q. Okay. And you developed a cost for each scenario, and then
- 18 weighted them, correctly -- correct?
- 19 A. Yes.
- 20 Q. How did you develop the weighting?
- 21 A. Correctly.
- 22 (Laughter.)
- 23 (Pause.)
- 24 The study, in Tab -- it's towards the back of the study,
- 25 there's a Tab B and there's page numbers at the top right-hand

- 1 column, Page 5, 6 and 7. If you look at Page 7 --
- 2 Q. I'm sorry, Tab B?
- 3 A. Bas in boy.
- 4 Q. We're in the -- Oh.
- 5 A. It's -- In the DS1 it's toward the very end. Actually,
- 6 this page numbering is probably not ideal.
- 7 There's a page, it says "DS3 IXC nonSONET ring samples", it
- 8 has a "Tab B, Page 7" at the top right-hand column.
- 9 Q. Uh-huh.
- 10 A. At the bottom of that page there's DS3 SONET, DS3 non-
- 11 SONET, and then the nonSONET says .274.
- 12 Q. Okay.
- 13 A. That point -- The terminology here, SONET and nonSONET, is
- 14 a little confusing. The nonSONET is really meant to be point to
- 15 point. So that .274 is what's carried over to the point to
- 16 point on the first page. You see the 27.4 percent?
- 17 Q. Okay.
- 18 A. So that left the 72.6 percent as being a true SONET ring
- 19 scenario.
- 20 If you turn to the previous page back in the back --
- 21 Q. Page 6?
- 22 A. Yes. About in the middle of the page there's "Total 1CO,
- 23 Total 200 or more", and you see a 68.54 and 31.46?
- 24 Q. Yes.
- 25 A. Since we accounted for 27.4 percent on Page 7 and left --

- 1 had that 72.6 remaining, we applied the 68.54 to the 72.6. So
- 2 if you multiply 68.54 times 72.6, which is the 1CO situation,
- 3 you get 49.76, which shows up on the summary page at the
- 4 beginning of the study.
- 5 Q. Okay. So in a nutshell, you -- you took a look at your IXC
- 6 entrance facilities and basically used that information to
- 7 develop your model?
- 8 A. Yes.
- 9 Q. Okay. So in what way is that a forward-looking cost study?
- 10 A. Well, we did not have any forecast information from any --
- 11 NEC-specific forecast information. We knew that many of the
- 12 IXCs are NECs, and we use this as a surrogate to estimate what
- 13 we would expect the types of facilities to be used to provide
- 14 those services.
- 15 Q. Okay. And I think you told me, then, though, that in your
- 16 cost study you did use all fiberoptic technology, correct?
- 17 A. That is correct.
- 18 Q. And just at the OC3 and the OC12 level, we established that
- 19 earlier? I believe that's what you told me.
- 20 A. I did say that. I think when I said that, I don't know
- 21 that I looked back at OC entrance facilities. There's actually
- 22 OC48 in there which I forgot about when I gave that answer
- 23 before. But for DS1s and DS3s it's only OC3 and OC12.
- 24 Q. Okay. Let me back up a minute. I was just talking about
- 25 the OC -- I'm sorry, the DS1 entrance facility study is what

- 1 we're looking at here.
- 2 Didn't you just assume OC3 --
- 3 A. Yes.
- 4 Q. -- technology for the DS1 study, right?
- 5 A. For the DS1 study it's solely OC3.
- 6 Q. Just for clarification purposes, so that everyone can
- 7 follow along as we finish this up, at the deposition do you
- 8 recall drawing me some diagrams for the three scenarios for the
- 9 entrance facility?
- 10 A. Yes, I do.
- 11 Q. Okay.
- MS. SANDERS: Your Honor, I'd like to mark as MCI
- 13 Exhibits -- I quess we're on 12, 13 and 14, is that right?
- 14 EXAMINER NODES: Bleven, I believe.
- MS. SANDERS: -- some diagrams that I'll have
- 16 Mr. Mette identify.
- 17
- 18 Thereupon MCI Exhibit Nos. 11, 12 and 13
- 19 were marked for purposes of identification.
- 20 - -
- 21 BY MS. SANDERS:
- 22 Q. All right. Let's do these one at a time.
- 23 I'm going to hand you what I have marked for identification
- 24 purposes as MCI Exhibit 11. And it's a little diagram that has
- 25 "Pt-Pt" written down at the bottom. Could you identify that

- 1 diagram for us and just give us a brief description of it?
- 2 A. This was a block diagram that I drew in deposition to
- 3 indicate what a point-to-point entrance facility would look
- 4 like.
- 5 Q. Can you identify the blocks on each side and tell us --
- 6 describe those pieces of electronics for me?
- 7 A. I'll start from the left, which is central office side.
- 8 The DSX1 is a digital cross-connect panel. " 3/1 DCS" is 3/1
- 9 DCS, which is a software cross-connect piece of equipment,
- 10 allows test access. Then there's another DSX1. The FLM is
- 11 the -- if we were talking DS1 only, that would be a FLM-150
- 12 multiplexer.
- 13 Up until we got to the FLM multiplexer, everything was at
- 14 an electrical level. The FLM equipment converts the electrical
- 15 signal to an optical signal.
- So going to the right of the FLM equipment is fiberoptic
- 17 cable, which terminates in the LGX panel, which is a fiber
- 18 cross-connect piece of equipment.
- 19 We -- At that point we're still in the central office. We
- 20 leave the central office on fiberoptic cable and there's four
- 21 lines drawn there because there would be four cables.
- When we get to the customer premises, we again terminate in
- 23 an LGX panel and we kind of reverse the process. We also
- 24 terminate into an OC3 multiplexer if this was a DS1 entrance
- 25 facility, and out of there it terminates at an optical level

- into a DSX1 cross-connect panel.
- 2 Q. Okay. I think I'll shorten my walking back and forth. I'm
- 3 going to give you two more diagrams that I have marked for
- 4 identification purposes as MCI 12 and 13. MCI Exhibit 12 has
- 5 jotted down at the bottom "1CO-2CP", MCI Exhibit 13 has jotted
- 6 down at the bottom 2CO-2CP*.
- 7 All right. You can go ahead, Mr. Mette. Why don't you
- 8 start with Exhibit 12 and give us a brief description, and why
- 9 don't you tell us -- describe what you're showing in this
- 10 diagram.
- 11 A. The intent of this diagram -- Actually, the intent of all
- 12 three of these was to depict the three different scenarios for
- 13 the entrance facilities.
- 14 Q. And just for clarification purposes, those are the three
- 15 scenarios that we just talked about in the -- on the sheet of
- 16 the DS1 entrance facility, just for demonstration purposes,
- 17 correct?
- 18 A. That is correct.
- 19 Q. Okay.
- 20 A. Do you want me to talk through the piece parts on here?
- 21 Q. You don't have to go through each piece part. Could I --
- 22 Could we summarize -- Well, why don't you describe both 12 and
- 23 13.
- 24 A. Okay.
- 25 Q. Just briefly.

- 1 A. Twelve and 13 show -- Well, 12 shows one central office,
- 2 two customer premises; 13 is two central office, two customer
- 3 premises. And in both of those it depicts the equipment that is
- 4 in the central office where the entrance facility terminates.
- 5 And you have the same type of equipment that I explained
- 6 with the point to point with the DSX1, the 3/1 DCS, the DSX1,
- 7 the FLM multiplexer and the LGX. And you have the same
- 8 equipment which would be at the NEC location where you have the
- 9 LGX, the FLM and the DSX.
- 10 Since this -- these two rings also have equipment in other
- 11 locations, those are also depicted on these diagrams with the
- 12 FLM and the LGX.
- I just want to point out that in the Exhibit 12, we must
- 14 have been having some discussion at the time about collocation,
- 15 so there's some diagram at the bottom of there where it says
- "Cage" and "DSX1", that really doesn't relate to the entrance
- 17 facility but probably was drawn just because of our discussions
- 18 at the time.
- 19 Q. Thank you. All right. Now, so basically just to
- 20 summarize, what you did in your cost study was you calculated
- 21 the costs associated with each of the three scenarios, and then
- 22 you averaged those costs together to determine a flat rate for
- 23 the DSX entrance facility, correct?
- 24 A. That is correct.
- 25 Q. A flat cost. And then you grossed it up for common costs

- 1 to come up with the --
- 2 A. That's correct.
- 3 Q. -- price?
- Okay. Now, I think we can see from the three columns on
- 5 this summary page there that the -- and as is obvious from your
- 6 cost study, that the more locations on the ring, the higher the
- 7 monthly cost per DS1; is that correct?
- 8 A. The way the cost study was developed, the cost per DS1 is
- 9 higher on the one central office, two customer premises, than
- 10 the point to point, and the 2CO-two customer premises is higher
- 11 there also.
- 12 Q. It's the highest one of all, isn't it?
- 13 A. Yes.
- 14 Q. Tell me again why you included the ring technology with
- 15 more than -- or, the ring configuration with more than the two
- 16 locations on it, more than point to point; why did you include
- 17 the other two scenarios in your cost study?
- 18 A. The reason I include that is that is the serving
- 19 methodology that is used more frequently, and it's used for a
- 20 couple reasons. One is customers often want that type of
- 21 arrangement because it provides greater security for their
- 22 traffic.
- The one thing I didn't point out about the point to point
- 24 is that there is no route diversity on the cable. So if somehow
- 25 somebody cuts through that cable, although it is SONET

- 1 equipment, the service is dead; whereas on the other two
- 2 scenarios, since it is a ring configuration, there is diversity
- 3 in those configurations and that is what -- primarily IXC
- 4 customers want that because their customers are getting to them
- 5 over that and it would be -- it would be critical for them to
- 6 keep service up all the time. So the expectation is that is
- 7 what customers will want on a go-forward basis.
- 8 The study -- The way the study was done, we used an average
- 9 fill factor across all three scenarios. We didn't have
- 10 additional information that would indicate utilization of one
- 11 serving technology versus the other.
- 12 The reason I --
- 13 Q. Go ahead. I'm sorry.
- 14 A. The reason I want to point that out is that the multiple --
- 15 the multiple location scenarios are used because that increases
- 16 the utilization of that equipment.
- The study as we performed it using an average doesn't
- 18 convey that, but I just wanted to convey that that was really
- 19 the reason you do that, because you want to better utilize the
- 20 equipment, and that's what those scenarios attempt to do.
- 21 Q. But by better utilizing your equipment, as you say, you're
- increasing the costs to the -- the customer on the ring, are you
- 23 not, using your configuration of the two -- the two rings?
- 24 A. What I wished I would have been able to do would have been
- 25 to get information on utilization of point to point versus the

- 1 other scenarios. My expectation is the utilization of the other
- 2 scenarios would have been higher than the point to point because
- 3 point to point is only going to one location.
- 4 And I think if I would have had that information, it would
- 5 have showed -- I can't -- I really can't predict how drastic it
- 6 would have changed the relationship between these numbers, but I
- 7 think it would have changed the relationship to depict that a
- 8 higher utilization of the equipment would lower the cost.
- 9 Q. Well, so are you talking about that there would -- you're
- 10 thinking that there might have been higher fill factors, is that
- 11 what you're talking about, higher utilization factors on the --
- 12 the ring scenarios rather than the point-to-point scenarios; is
- 13 that what you just told me?
- 14 A. That's what I would expect or --
- 15 Q. Okay. What fill factors did you use for the purposes of
- 16 the entrance facility study?
- 17 A. We used a 70 percent fill factor for the electronics.
- 18 Q. And where did that come from?
- 19 A. We had obtained information from our engineering department
- 20 about the utilization of our SONET rings. We had that
- 21 information at a -- both an OC3 and an OC12 level. The
- 22 utilization of those rings was approximately 50 percent.
- From discussions with our engineers and with our marketing
- 24 people, the expectation was that that would not be what would be
- 25 expected over the life of that equipment. I recall the

- 1 discussions more in an OC3 context because they're thinking of
- 2 three DS3s, and their expectation was that over the life that at
- 3 least two DS3s -- I'm sorry, DS1s, I should say -- DS3s, I was
- 4 correct the first time -- the expectation was that at least two
- 5 would be utilized, which would be two-thirds or 67 percent. For
- 6 purposes of these studies we just basically rounded to 67 to 70
- 7 percent in these calculations.
- 8 Q. Would it have been more cost effective for you to use, say,
- 9 a DC3-level fiber rather than the OC -- OC3 since these are DS1
- 10 circuits that are being ordered? Would it have been cheaper on
- 11 a per-D1 basis?
- 12 A. I'm sorry, I don't -- I'm not sure I understand what you
- mean by use a -- a D\$3.
- 14 Q. Never mind. Back up. I'm sorry, I went the wrong way.
- 15 If you had used a higher ring technology, would it have
- 16 been cheaper for DS1?
- 17 A. I wouldn't expect it to because that's where, yes, if you
- 18 take the -- I'll take an OC48, I'll go to that extreme, an OC48
- 19 has more capacity than, say, an OC3. So if you take the total
- 20 cost of an OC48, which is going to be much higher than the cost
- of an OC3, I would expect on a per-DS1 basis, just dividing by
- 22 the number of DS1s, you would get a closer number. But if you
- 23 don't have the demand there to utilize all that capacity, you're
- 24 going to be -- end up having a higher cost per DS1 for the DS1s
- 25 that are actually utilized.

- 1 Q. Okay. So for a higher level, it would be a question of
- 2 utilization, is that what you just told me?
- 3 A. That is correct.
- 4 Q. Now let's go back to our three scenarios. Would it have
- 5 been possible for you to have costed out a -- just a
- 6 point-to-point entrance facility separately and a ring scenario
- 7 separately, and offer NECs a choice?
- 8 A. I mean, we did cost them out separately here.
- 9 Q. No, but I mean then you averaged them together.
- 10 A. Right.
- 11 Q. Instead of averaging them, could you have -- could you have
- 12 established two sets of prices?
- 13 A. Two separate costs could have been developed just -- I
- 14 mean, just from looking at the point to point or the ring. I
- 15 believe because of the expectation and what customers are asking
- 16 us for, that they want the diversity, we chose to come up with a
- 17 single rate.
- 18 Q. Well, on the diversity issue, you could add diversity to
- 19 the point-to-point scenario by just creating a ring between the
- 20 two nodes, couldn't you, or between the two locations?
- 21 A. There's different ways diversity could be added. It could
- 22 be added by providing cable diversity also.
- 23 Q. So that could have been added into the separate study and
- 24 charge for the point-to-point scenario, correct? If a customer
- 25 wanted diversity, that could be --

- 1 A. If a customer wanted to require us to provide diversity, I
- 2 would expect that there would have to be some additional charges
- 3 to cover that case relative to a point-to-point scenario.
- 4 Q. But you still would not have all the additional electronics
- 5 for the other points on -- included in the costing of the
- 6 point-to-point scenario, right, if you only had the two points?
- 7 A. Well, if you were going to make it diverse, you've then
- 8 added electronics to make it diverse.
- 9 Q. At the two points?
- 10 A. Well, there's going to have to be more points if you're
- 11 adding something someplace else, then, to make it diverse.
- Maybe I'm not understanding.
- 13 Q. Well, I thought we had established that you could make a
- 14 point-to-point scenario entrance facility diverse by just making
- 15 a ring between the two -- those two locations, correct?
- 16 A. I'm sorry, so --
- 17 Q. Assuming that for the purpose of your cost study, anyway,
- 18 that's one way that diversity could be provided to a customer,
- 19 correct?
- 20 A. If you're saying could we -- could a customer request us to
- 21 install fiber to make sure that the point-to-point scenario had
- 22 two diverse routes --
- 23 O. Yes.
- 24 A. -- that would be additional cost that's not included here.
- 25 Q. Okay. I understand.

- 1 And I -- In your last answer, would those additional costs
- 2 include additional electronics, is that what you're telling me?
- 3 A. The example I portrayed was a -- just a situation where we
- 4 make the cable facilities diverse but we don't include
- 5 electronics on that --
- 6 Q. Okay.
- 7 A. -- situation.
- 8 Q. Now, you didn't develop your entrance facility study by
- 9 rate band, did you?
- 10 A. No, we did not.
- 11 Q. Could it have been done by rate band?
- 12 A. The reason it was done this way is we did not see any --
- 13 for the foreseeable future, have not seen any -- or, expect any
- 14 demand for entrance facilities, say, in the Band 3 offices.
- 15 Everything that we're seeing would expect the NECs to be located
- 16 in our Band 1 locations.
- 17 Q. So that was just an assumption that you made in your study
- 18 that -- not to -- not to look at the costs separately by band
- 19 because there would be little demand in the Band 3 area; is that
- 20 what you're saying?
- 21 A. Today we have no entrance facility interexchange carriers
- 22 in Band 2 or Band 3 either, and there was no basis to come up
- 23 with some estimate of those costs because there's no demand for
- 24 that today either.
- 25 Q. All right. I think we'll move on to your next study, which

- 1 is the interoffice transport study.
- 2 And as I understand it, you developed -- the purpose of the
- 3 interoffice transport study is to develop a charge for unbundled
- 4 interoffice transport paths between two CBT wire centers,
- 5 correct?
- 6 A. That is correct.
- 7 Q. And as I understand it, these transport paths can be
- 8 ordered at -- once again, at various levels of transmission
- 9 capacity, and such as the DSO level, the DS1 level, DS3 level,
- 10 et cetera, up to the OC48 level, correct?
- 11 A. That is correct. The only thing I want to clarify is the
- 12 DSO level interoffice transport was really only provided for the
- 13 loop transport combination. I don't believe there is an ability
- 14 to order DSO transport independent of that combination.
- 15 Q. Okay. Now, for each of the studies that you performed,
- 16 there are two recurring rate elements, correct?
- 17 A. I'm assuming you're referring to there is a fixed --
- 18 O. Yes.
- 19 A. -- recurring charge and then there's a per mile. It's -- I
- 20 just want to clarify that the fixed is calculated by band, so
- 21 there's -- there's three different fixed charges but only one
- 22 would apply for a given circuit.
- 23 Q. Right. You didn't develop the mileage charge by band, as I
- 24 understand it.
- 25 A. That is correct.

- 1 Q. And the mileage-sensitive charge covers the costs of the
- 2 outside plant -- the interoffice outside plant facilities, and
- 3 that would be the fiberoptic cable and the support structures of
- 4 poles and conduits; is that --
- 5 A. That --
- 6 Q. -- right?
- 7 A. That is correct.
- 8 Q. Okay. And then the second fixed charge is the transmission
- 9 equipment charges?
- 10 A. That is correct.
- 11 Q. Your electronics.
- 12 A. All the electronics in the various offices, that is
- 13 correct.
- 14 Q. Now, to perform this study, you assumed that CBT's
- 15 interoffice network is constructed on a forward-looking, least
- 16 cost technology basis, correct?
- 17 A. That is correct.
- 18 Q. And for the purposes of this study, that meant that you
- 19 used fiberoptic transmission equipment and SONET rings, right?
- 20 A. That is correct.
- 21 Q. Now, in your studies you actually provided an inventory of
- 22 all of the actual circuits that are in CBT's actual interoffice
- 23 network; is that correct?
- 24 A. The DS1s and DS3s, that's correct.
- 25 Q. Okay. But those circuits are not all provided over SONET

- 1 rings, correct?
- 2 A. Today's interoffice network is not all SONET based.
- 3 Q. So -- I'm sorry.
- 4 A. Today's interoffice network is not all SONET based.
- 5 Q. Okay. So the redesign of the interoffice network that you
- 6 did, it doesn't reflect CBT's actual network, right?
- 7 A. No, it does not.
- 8 Q. Okay. And in developing this interoffice transport study,
- 9 I assume that you were guided by some of the TELRIC principles
- 10 that you and Ms. Van Duzer went over this morning -- early this
- 11 morning; is that a safe assumption?
- 12 A. Safe assumption.
- 13 Q. Okay. For example, the two that I'm -- there's a couple
- 14 that I'm interested in here.
- For example, can I assume that one of the TELRIC principles
- 16 that guided you during your development of this cost study was
- 17 that the increment that forms the basis for a TELRIC study shall
- 18 be the entire quantity of the network provided?
- 19 A. That is --
- 20 Q. Network -- I'm sorry, I left a word out. Network element
- 21 provided.
- 22 A. That is correct.
- 23 Q. Okay. And I think one of the other basic principles in
- 24 conducting a TELRIC study was that the TELRIC costs should be
- 25 measured based on the most efficient telecommunications

- 1 technology currently available and the lowest cost network
- 2 configuration given the existing location of CBT's wire centers?
- 3 A. That is correct.
- 4 Q. Okay. So at a minimum, when the Commission reviews your
- 5 interoffice transport study to see if it's compliant with TELRIC
- 6 principles, it should determine that the redesigned network that
- 7 you have created accommodates the total usage on CBT's
- 8 interoffice network and that your redesign of the network
- 9 facilities reflects a least cost, most efficient network
- 10 configuration, correct?
- 11 THE WITNESS: Can I have it again? I'm sorry.
- 12 MS. SANDERS: Better read it back.
- 13 (Question read back as requested.)
- 14 THE WITNESS: I apologize to answer this way. I
- 15 believe that our study is that way. I don't know what I should
- 16 say at a minimum the Commission should do. But I believe that
- 17 our study does meet those two things.
- 18 BY MS. SANDERS:
- 19 Q. Those were the principles that guided you in creating your
- 20 study; is that -- is that what you're telling me?
- 21 A. Well, those are two of the things that our study is
- 22 consistent with. There's a lot of things to this study besides
- 23 just those two things, but yes.
- 24 Q. I understand. But you would agree that those two are ones
- 25 that you had in mind when you redesigned your interoffice

- 1 transport network, correct?
- 2 A. Yes.
- 3 Q. Okay. Now, let me just ask you a few background questions
- 4 about your interoffice study.
- Now, you personally conducted this study and remodelled
- 6 CBT's interoffice network, didn't you?
- 7 A. I didn't personally remodel our entire network. I mean,
- 8 there was --
- 9 O. Go ahead.
- 10 A. -- a person in my organization who worked on this study, we
- also worked with the engineers to deal with situations where
- 12 SONET equipment didn't exist. We got that input from them. So
- 13 I didn't personally remodel that.
- 14 Q. Okay. What I meant by "personally" was you and the folks
- 15 at CBT created and designed this cost study, did you not?
- 16 A. That is correct.
- 17 Q. Okay. And as you indicated, this involved redesigning
- 18 facilities for hundreds of circuits, didn't it?
- 19 A. The design of the network isn't really done at a circuit
- 20 level. I mean, the design of the network, as I have explained
- 21 here, is there is a sector/node concept where offices home in on
- 22 node offices and then there's a network to interconnect the node
- 23 offices. So there really wasn't a circuit-level redesign of the
- 24 network.
- 25 Q. What I meant by "redesign the network", you assumed all

- 1 SONET technology, correct?
- 2 A. That is correct.
- 3 Q. Okay. You left the wire centers in place, correct?
- 4 A. That is correct.
- 5 Q. And then you made some decisions about the ring technology,
- 6 the SONET ring technology and where that would be in your new
- 7 interoffice network --
- 8 A. That is correct.
- 9 0. -- correct?
- 10 Okay. So that's a lot of work?
- 11 A. That is correct.
- 12 Q. And, I mean, you have -- I think you established this
- 13 morning you have 50 central offices?
- 14 A. I think it's approximately 56 in the total company.
- 15 Q. And just for clarification purposes, so everybody can
- 16 follow along, I believe at the very back of your interoffice
- 17 studies, and maybe you could direct me there, you have a map of
- 18 your network locations --
- 19 A. (Indicating).
- 20 Q. -- showing where your central office -- Thank you. Yes.
- 21 A. Yes.
- Q. Does that give us an idea of where -- how you designed the
- 23 network; I mean, what you were using to design your network?
- 24 A. Yes. This -- This map shows our sector/node relationships.
- In this picture that the -- the boxes, for instance, in the top

- left-hand corner there's a box with a "HM" in it which stands
- 2 for the Hamilton central office. Those boxes are the node
- 3 offices. Around the node offices there's two -- two-digit
- 4 indications of the offices that are sector offices off of that
- 5 node.
- So, for instance, there's a "SM" above the "HM" box which
- 7 means that the Seven Mile office homes in on the Hamilton
- 8 office, and the rest of this diagram is basically indicating the
- 9 same thing for all of the offices.
- 10 This is a total company map, it's more than just Ohio in
- 11 this picture.
- 12 Q. I think we indicated this morning that the 50 central
- 13 offices that you had were -- included Kentucky.
- 14 A. That is correct.
- 15 Q. Now, how long did it take you to complete the task --
- MR. HART: Just a minute. I want to give the
- 17 Attorney-Examiner a copy.
- MS. SANDERS: I wanted to do that. I may be finished,
- 19 but I have one here. Your Honor,
- THE EXAMINER: Is this the only document you're going
- 21 to use out of the study?
- MS. SANDERS: I may refer to -- Does he have the whole
- 23 study?
- 24 THE EXAMINER: Yes. Thank you.
- 25 BY MS. SANDERS:

- 1 Q. I think I had asked you how long it took you to do the
- 2 study.
- 3 A. I believe the study was filed in the middle of October with
- 4 the Commission. I believe the study was started probably in
- 5 the -- sometime in the summer. I can't remember exactly when it
- 6 was started. A lot of the underlying support to the study, like
- 7 the investments on the SONET equipment, et cetera, had already
- 8 existed from previous work in other studies. So there's a lot
- 9 of things that support it that maybe didn't get done when the
- 10 final study was done; but I would say it was probably sometime
- in the summer to the October time frame to get all of the study
- 12 done.
- 13 Q. And you constructed the Excel spreadsheets that calculate
- 14 the TELRIC cost in the study, didn't you?
- 15 A. I played a large part in the construction of those
- 16 spreadsheets, yes.
- 17 Q. Okay. And just as -- just to familiarize myself, I believe
- 18 you testified you're not an engineer, are you?
- 19 A. I don't have an engineering degree, no.
- 20 Q. And have you ever actually worked as an engineer, designing
- 21 SONET rings or any other interoffice facilities?
- 22 A. When you use the term "designing SONET rings", I think of
- 23 that as designing the equipment in terms of what goes in the
- 24 equipment, where -- where to place the equipment, et cetera. I
- 25 have not done that, no.

- 1 Q. And you've never actually worked in a central office as an
- 2 engineer, have you?
- 3 A. No, I have not.
- 4 Q. And I -- And I think you also indicated earlier during
- 5 cross-exam that you're not an economist, correct?
- 6 A. Do not have an economics degree, that is correct.
- 7 Q. Okay. Now, Cincinnati Bell's interoffice network
- 8 accommodates a variety of different types of traffic and
- 9 services, doesn't it?
- 10 A. That is correct.
- 11 Q. For example, CBT uses its interoffice network to transport
- 12 access traffic and local traffic for its own end user customers
- as well as the dedicated transport traffic that we're talking
- 14 about in this study, correct?
- 15 A. I believe today Cincinnati's existing network probably
- 16 doesn't have -- I really don't know if it's got any dedicated
- 17 traffic for NECs today. It may, but --
- 18 Q. Right.
- 19 A. -- but the other traffic that you mentioned is carried on
- 20 our network.
- 21 Q. The actual network has --
- 22 A. Yes.
- 23 Q. -- all different kinds of traffic; you would agree with
- 24 that?
- 25 A. Yes.

- 1 Q. So when you redesign the interoffice network, shouldn't it
- 2 have economies of scale that reflect the combined usage of all
- 3 those different types of services that are -- that are used in
- 4 the network?
- 5 A. Yes.
- 6 Q. So what's the total call volume that you used when you
- 7 redesigned your interoffice network?
- 8 A. I need to back up to clarify the term "redesign".
- 9 We did not -- I did not take -- I did not design a network
- 10 independent of CBT's engineers. We worked with CBT's engineers
- 11 to identify how our network will be designed on a SONET -- on a
- 12 SONET basis, a hundred percent fiber, what rings would be needed
- 13 to carry that traffic. They provided that information to me in
- 14 terms of all the different SONET rings that would be needed to
- 15 carry that traffic. So the designing of that -- those rings,
- 16 et cetera, was performed by an engineer.
- 17 What we did in the study was we -- I'm sorry, let me back
- 18 up a second.
- 19 Once we had those rings designed, we then have, in effect,
- 20 I'll say routing rules that say given two offices on this
- 21 network, how do we get from Point A to Point Z in this network?
- That -- Those routing rules are also designed by the
- 23 engineering. The spreadsheets that we created, in effect, take
- 24 those routing rules and incorporate them into -- I lost my train
- 25 of thought.

- 1 The spreadsheets, in effect, incorporate those routing
- 2 rules so that if you're given a circuit, it gives a means to
- 3 cost out that circuit under those routing rules and that
- 4 network.
- 5 The spreadsheet then looks at all of the DS -- DS1s, for
- 6 instance, to cost those out and weight those together by band.
- 7 Q. Okay. But a couple of questions.
- 8 First of all, the engineers who provided input in helping
- 9 you redesign the network, was -- is Mr. Meier one of those
- 10 engineers who --
- 11 A. No, he was not.
- 12 Q. Were anyone -- I mean, do you know who they were or have
- 13 they been identified?
- 14 A. I know who they were, I don't know if they've been
- 15 identified in this proceeding.
- 16 Q. Okay. Now let's back up a minute. I think you described
- 17 for me the steps that the engineers went through to take the
- 18 existing routes and the existing circuits and redesign them into
- 19 a SONET ring technology. But my question was: What -- In
- 20 deciding the ring technology and the routing between the hubs,
- 21 what call volume did you use?
- 22 A. I did not --
- 23 Q. Or did they use?
- 24 A. I did not have a call volume, just to clarify.
- 25 Q. Okay.

- 1 A. When the engineers design the network, they look at the
- 2 total demand for all services for the -- you know, the different
- 3 services that you mentioned. Some are dedicated, some have
- 4 switched. And they designed the rings to meet that demand.
- 5 Q. Well, how --
- 6 A. I don't -- I don't know that they look at a call volume,
- 7 per se, because there are switched -- switch and trunk
- 8 interoffice engineers who look at the traffic and identify
- 9 what -- the number of trunks that are required to transport the
- 10 traffic. They -- They do that analysis using traffic
- 11 engineering theory to come up with the amount of trunks and,
- 12 therefore, that, in effect, will determine whether you -- if you
- 13 had a small number of trunks, you're probably going to be in a
- smaller speed system, if you have a higher number of trunks you
- 15 put in a higher speed system.
- 16 That is the work that they did in coming up with the -- the
- 17 SONET rings for the study.
- 18 Q. Let me make sure I understand your answer. Did you and the
- 19 engineers look at the circuits and the trunks, in other words
- 20 the number of lines that are there in the network now, or did
- 21 you look at the volume of calls? I'm a little confused by your
- 22 answer, what you told me.
- 23 A. Well, I think interoffice network design is not -- Although
- 24 number of calls -- number of calls determines trunks, an
- 25 interoffice engineer works in terms of trunks rather than I

- 1 think in terms of calls.
- 2 Q. Okay. So I guess if I understand your answer, there is
- 3 nowhere that I could find in these cost studies a call volume
- 4 for the usage on the -- on the interoffice network, correct?
- 5 A. Not in these dedicated studies, no.
- 6 Q. Okay. Now, you applied certain fill factors for the
- 7 electronics and the fiber facilities in the interoffice studies,
- 8 didn't you?
- 9 A. That is correct.
- 10 Q. And I believe that for all of them you assumed a 70 percent
- 11 fill on a variety of the FLM equipment, correct?
- 12 A. That is correct.
- 13 Q. Okay. Now, once again, and you may have already told me
- 14 this, but where did you get the 70 percent fill factor for the
- 15 electronics?
- 16 Q. Again, we worked with our engineers. We had information on
- 17 SONET ring utilization. Based on that utilization, and I don't
- 18 recall -- I know in the entrance facilities I talked to about 50
- 19 percent. In this situation, I don't recall an interoffice
- 20 number, but from discussing with them over the life of the
- 21 equipment, their input to me was that a 70 percent electronics
- 22 utilization on the interoffice was appropriate on a
- 23 forward-going basis.
- 24 Q. Okay. So, in other words, the engineers basically gave you
- 25 the fill factors to -- the 70 percent fill factors in the study?

- 1 A. It was in consultation with them, yes.
- 2 Q. Okay. And as I understand it, that engineer wasn't
- 3 Mr. Meier, correct?
- 4 A. That is correct.
- 5 Q. If you had assumed a higher fill factor on these pieces of
- 6 equipment, it would have corresponded to a larger number of DS0s
- 7 that the equipment could accommodate, correct?
- 8 THE WITNESS: Can I hear the end of that question?
- 9 (Question read back as requested.)
- 10 THE WITNESS: You used the term "accommodate". The
- 11 DSOs that the equipment can accommodate is not really related to
- 12 the fill factor.
- 13 BY MS. SANDERS:
- 14 Q. Why not?
- 15 A. Well, the DSOs that the equipment can accommodate is
- 16 determined by the equipment. I mean, I'm interpreting
- 17 "accommodate" in terms of how much capacity does the equipment
- 18 have, and that's not determined by fill factor.
- 19 Q. Well, I -- doesn't a 70 percent fill factor assume that
- only 70 percent of the equipment is being used?
- 21 A. That is correct.
- 22 Q. So if it were an 80 percent fill factor, there would be
- 23 more usage of that equipment, right?
- 24 A. That's correct. But when you used the term "accommodate",
- 25 that sounded like a capacity to me of the equipment, and the

- 1 capacity of the equipment is not determined by the fill factor.
- 2 Q. Okay. Right. The capacity of the equipment is set by the
- 3 manufacturer, right?
- 4 A. Yes.
- 5 Q. Okay. So there is a certain -- at a hundred percent fill
- 6 factor, the whole thing is filled up, all the DSOs that it can
- 7 accommodate are there, right; that's what you're saying?
- 8 A. At a hundred percent utilization, it's being --
- 9 O. All the capacity --
- 10 A. All the capacity is being utilized.
- 11 Q. Right.
- 12 A. Typically in this equipment, they probably don't think at a
- 13 DSO level, but at a hundred percent utilization, say at a DS3,
- it has been full -- it is being fully utilized.
- 15 Q. Okay. So it's a simple concept that the higher the fill
- 16 factor, the more DS0s or DS3s are being -- slots are being
- 17 utilized in that electronic equipment, correct, until you get to
- 18 the total capacity in the equipment, right?
- 19 A. The higher fill factor implies a higher utilization of
- 20 equipment, yes.
- 21 Q. Okay. I think we agree on that.
- 22 A. Yeah.
- Q. And a higher fill factor and a higher utilization of the
- 24 equipment would -- on a particular ring could potentially
- 25 correspond to a larger volume of traffic that could be

- 1 transported over the particular ring, correct?
- 2 A. In order to get a higher fill factor, there would have to
- 3 be a higher volume of traffic or circuits over that ring, that's
- 4 correct.
- 5 Q. Okay. Well, I thing that gets me to my question. If you
- 6 assume a higher -- with -- Let me back up a minute.
- 7 How can -- I think we've established that nowhere in the
- 8 cost study can we find the total volume of calls that were used
- 9 to make the assumptions to design this interoffice network,
- 10 correct?
- 11 A. That's correct.
- 12 Q. Okay. So if we don't have the call volume, how can we
- 13 determine that the specific fill factors that you used
- 14 correspond to the total volume of traffic that's supposed to be
- 15 accommodated under your cost studies?
- 16 THE WITNESS: Can I hear that again? I'm sorry.
- 17 (Question read back as requested.)
- 18 THE WITNESS: I'm struggling with taking call volume
- 19 to fill factor because call volume --
- 20 BY MS. SANDERS:
- 21 Q. Let me put it this way.
- 22 A. Okay.
- 23 Q. Without the call volume, haven't you allowed your 70
- 24 percent fill factor to drive the utilization of the interoffice
- 25 network? Because you don't know how many calls you're trying to

- 1 accommodate.
- 2 A. The network that is designed by the engineers is designed
- 3 to accommodate our interoffice traffic needs. And that
- 4 interoffice traffic needs is driven by numerous things;
- 5 interoffice trunks for calls, as well as interoffice transport
- 6 for private line circuits for end users or interoffice transport
- 7 for special access for carriers, all of that drives interoffice
- 8 demand.
- 9 Q. Right. And so does switched traffic and long-distance
- 10 traffic, right, access traffic as well?
- 11 A. Right.
- 12 Q. So --
- 13 A. Which I would include in the interoffice trunk, that's --
- 14 yes.
- 15 Q. Okay. And what you basically took into consideration in
- 16 your study are the number of lines, circuits, trunks in your --
- in your -- that are in your network right now, correct, but not
- 18 the call volume?
- 19 A. The call volume drives the trunks. The engineers look at
- 20 the need for interoffice trunks.
- 21 Q. Right. But without knowing the call volume, how could you
- 22 derive your fill factor?
- 23 A. The fill factor represents a utilization in terms of
- 24 circuits. And I'll use the term "circuit" and "trunk" kind of
- 25 synonymously in a sense. An interoffice trunk is a circuit.

- 1 Call volume -- Calling traffic, be it local, long distance,
- 2 access, through traffic engineering an engineer turns that into
- 3 trunks. Once they've turned that into trunks or circuits, that
- 4 determines the -- the network that's needed in terms of what
- 5 type of equipment meets that number of trunks or circuits.
- 6 Q. Right. And you took the number of trunks or circuits and
- 7 then you redesigned the network, correct, using those trunks,
- 8 circuits, the information that you had from your engineers,
- 9 correct?
- 10 A. I did -- Again, I did not redesign the network.
- 11 Q. All right. When I say "redesign the network", you used
- 12 SONET ring technology, fiberoptic transmission -- electronics
- 13 and you design rings, that's how you redesign the network,
- 14 right?
- 15 A. Yes.
- 16 Q. Just one more time. The engineers that created the deal
- 17 with trunks and circuits and creating the network as it exists,
- 18 they know the call volumes, correct, and that's -- which
- 19 translates into trunks and circuits?
- 20 A. The engineers would work with that data to decide the
- 21 amount of trunks that would be needed. That analysis is done at
- 22 a end-point-to-end-point -- that's an end-point-to-end-point
- 23 analysis.
- Just knowing total call volume doesn't allow anyone to
- 25 calculate total trunks because you need to look at, for all

- 1 these combinations, the traffic that is going from Point A to
- 2 Point Z. That's how the trunking is designed at that level.
- 3 Q. So you -- And you took that information, then, from the
- 4 engineers, used it in your cost study and assigned a fill factor
- 5 to it?
- 6 A. From the engineers, I obtained the SONET rings that would
- 7 be needed for this network, and from those SONET rings unit
- 8 costs were calculated at a per-DS1, per-DS3, per-DS0 level, and
- 9 in those calculations fill factors were ultimately applied to
- 10 come up with the final cost.
- 11 Q. Okay. One more time then, and maybe we'll leave this. I
- 12 think what you're telling me is the engineers took their
- information that they had about their trunks and circuits and
- 14 they redesigned it into SONET rings and gave you that
- information and you put it in your cost study, and in the
- 16 process of developing the costs of the network that they had
- 17 recon- -- redesigned, you added the fill factor as part of your
- 18 study, correct?
- 19 A. The fill factor calculation is on my end of the process,
- 20 that is correct.
- 21 Q. And the call volume started out at their end of the process
- 22 and it's not in this cost study, correct? That's all I'm asking
- 23 you.
- 24 A. That is correct.
- THE EXAMINER: Let's go off the record a minute.

- 1 (Recess taken.)
- THE EXAMINER: Back on the record.
- 3 Ms. Sanders.
- 4 MS. SANDERS: Thank you, your Honor.
- 5 BY MS. SANDERS:
- 6 Q. All right. Now, let's go back to the TELRIC principles
- 7 that we discussed a little bit earlier in our discussion today.
- 8 And I believe that one of the -- one of them that we talked
- 9 about was designing the -- your interoffice network in a lowest
- 10 or at least a least cost network configuration. Is that one you
- 11 would agree you used in your study?
- 12 A. Yes.
- 13 Q. Let's see how that works out. Now, I already had you
- 14 identify the network map that was in the back of your study.
- 15 We'll stick with the DS1 map.
- 16 MS. SANDERS: Your Honor, have you a copy of that?
- 17 THE EXAMINER: Yes.
- 18 BY MS. SANDERS:
- 19 Q. Now, what I'd like to do is take a look at the central
- 20 office marked AV, I think that's Avalon -- Is that not right?
- 21 (Laughter.)
- 22 A. It's Avondale.
- 23 Mr. Ankum.
- 24 Q. Is that where I got that?
- 25 Evendale is "EV" at the top?

- 1 MR. HART: No, it's Evelyn.
- 2 (Laughter.)
- 3 BY MS. SANDERS:
- 4 Q. Okay. And over to the right of your map there you have a
- 5 central office that's marked "RO", and that's Rossmoyne?
- 6 A. That's correct.
- 7 Q. What I would like to do is take a call that would -- or
- 8 traffic that would go from Avondale, AV, to Rossmoyne, which
- 9 would be RO. And those two central offices are not directly
- 10 connected, are they?
- 11 A. Those two central offices are node offices. One thing we
- 12 did not talk about when we talked about this map, is that there
- 13 are hub offices which are Evendale and West 7th Street, and all
- 14 inter-node traffic goes through Evendale or West 7th Street.
- 15 Q. Okay. And that was going done my next question. The call
- 16 that I'm talking about then, or the traffic I'm talking about
- 17 that would go from Avondale to Rossmoyne would -- can you show
- 18 me the two paths that it would take?
- 19 A. I just want to clarify that the discussion here is we're
- 20 talking about dedicated circuits?
- 21 Q. Right.
- 22 A. Because calls don't necessarily route this way because
- 23 you've got a switching hierarchy.
- 24 Q. Right. I'm talking about dedicated circuit. The traffic
- 25 could go in two different directions to the Rossmoyne office,

- 1 could it not?
- 2 A. A circuit from -- We're going from Avondale to Rossmoyne?
- 3 Q. Correct.
- 4 A. One circuit will only go one way, and -- but there are
- 5 different options on how that circuit will be provisioned. To
- 6 go from Avondale to Rossmoyne, as I indicated, all of the
- 7 inter-node connections are made through a hub office. The hub
- 8 offices are Evendale and West 7th Street.
- 9 O. West 7th Street is the "WS" box?
- 10 A. That's correct.
- 11 Q. And Evendale is the "EV" box?
- 12 A. That is correct. So the circuit will go from Avondale --
- 13 I'm sorry. The circuit could go two ways; one would be from
- 14 Avondale to West 7th Street and then to Rossmoyne, or the
- 15 circuit could be designed to go from Avondale to Evendale and
- 16 then to Rossmoyne.
- 17 Q. All right. And in your cost study, could you tell me what
- 18 the -- what the cost would be for the circuit going from
- 19 Avondale to Evendale to Rossmoyne?
- 20 Maybe we need to do this on the board. Maybe we could put
- 21 this up on the board, it would be easier.
- 22 (Discussion off the record.)
- 23 THE WITNESS: I'm going to just depict the geography a
- 24 little different, maybe it will make it a little easier, I'll
- 25 just do it like this (drawing).

- 1 So the two routes are -- There's a hub office,
- 2 Evendale, and West 7th Street. So a circuit could go from
- 3 Avondale to Evendale and Evendale to Rossmoyne, or Avondale to
- 4 West 7th Street and West 7th Street to Rossmoyne.
- 5 THE EXAMINER: When you say those are hub offices, are
- 6 those like separate -- they are tandem switches, separate
- 7 tandems?
- 8 THE WITNESS: All of the circuits we're talking about
- 9 here are dedicated so none of these circuits are, for purposes
- 10 of this, are touching a switch. There are switches in these
- 11 offices.
- What this design is based on is that there are kind of
- 13 sector areas where all of these offices out here home to this
- 14 node office, same here, same here, et cetera. So when the
- 15 engineers designed this network, they designed this sector node
- 16 relationship.
- Once they have that relationship, then the issue is
- 18 how do you get from a node to another node. And you can think
- of, well, you could have -- you could conceivably just create
- 20 all possible combinations between the nodes, but that's not a
- 21 very efficient thing to do.
- What the design is it creates hub offices, two offices
- 23 here (indicating), so that primarily because you didn't want to
- 24 route all the traffic into one central office and back out
- 25 because if there was a catastrophe in that single office your

- 1 entire network just went down the tubes, so the design was to
- 2 create two of these offices so that traffic gets split between
- 3 those two offices to route either this way or that way
- 4 (indicating). Any particular circuit, though, is only going
- 5 through one of them. I'm just showing two different ways that a
- 6 particular circuit could be provisioned.
- 7 THE EXAMINER: But all the central offices aren't
- 8 homed on one or the other of those two primary hubs?
- 9 THE WITNESS: No, they are not.
- 10 BY MS. SANDERS:
- 11 Q. What I had asked you to do was if you could price out the
- 12 two paths that you could take -- the circuit could take from the
- 13 Avondale office to the Rossmoyne office, first going through the
- 14 Evendale hub and then to the West 7th hub. You can find that
- information in the ring inventory information in the cost study,
- 16 correct?
- 17 A. That is correct. What I was looking for is what we had in
- 18 the study was we looked at. I believe, 3,000 circuits, and I did
- 19 not print out all 3,000 here, obviously, and I only printed the
- 20 first 30-some circuits to give an indication of how all the
- 21 calculations flow.
- 22 And I was just making sure that there was an
- 23 Avondale-to-Rossmoyne circuit in that first page, because if
- 24 there wasn't, then I would have had to build this thing up from
- 25 scratch. And there is an Avondale to Rossmoyne circuit here,

- 1 so....
- I may have to look at the numbers.
- 3 Q. I have numbers, I can give them to you subject to check.
- 4 A. Yes, ma'am. The reason -- The calculations do a composite,
- 5 I kind of have to uncomposite them.
- 6 Q. Let me write them up here and see if I've got them
- 7 correctly and you can tell me if you think it looks right.
- 8 All right. From your ring inventory table I believe this
- 9 leg would be \$317.79 from ring 299?
- 10 A. It's going to be hard for me to --
- 11 Q. And this leg would be 211.98. I think that's ring 285.
- 12 And here this leg would be, once again, 317.79, and 247.66 from
- 13 ring 149. Could you accept those subject to check?
- 14 A. There's more to create the total circuit though than just
- 15 those numbers, but that's a piece of it.
- 16 Q. That's the electronic piece, correct?
- 17 A. Well, there's more electronics than those numbers.
- 18 Q. Okay. Well, did you find them? Go ahead and add them in.
- 19 A. I might need a minute here just to make sure.
- 20 Q. Let me start with a basic principle before we add all these
- 21 numbers. Would you agree with me there's going to be a
- 22 difference in cost between -- this is what I'm getting at --
- 23 between the route, this upper route between Avondale, Evendale
- 24 and Rossmoyne, and what have you as the lower route here,
- 25 correct?

- 1 A. I won't be surprised.
- 2 Q. And would you be surprised to learn that it's -- the upper
- 3 route here is the lower priced? Would you agree, subject to
- 4 check, once you add all the other pieces together, that that
- 5 would be the lower priced?
- 6 A. I really have to check that just because there are several
- 7 other numbers.
- 8 Q. I think we can do this without all the numbers. And that's
- 9 because of the ring configuration between this ring and the
- 10 rings here, correct, drive the costs of each leg of this
- 11 circuit?
- 12 A. That is correct.
- 13 Q. Now, under your cost study, your cost study does not
- 14 reflect the lowest route though, does it, the lowest cost route?
- 15 A. What the cost study reflects is that there is a network
- 16 designed to transport traffic. That network also has other
- 17 factors in it in that in order to provide a viable network, it's
- 18 not appropriate to design a network that routes traffic through
- 19 one location.
- 20 So this multi-hub arrangement was created. A given circuit
- 21 could go one way or the other because of the multi-hub and the
- 22 desire to have a survivable network, and the cost study reflexes
- 23 the composite of those two giving that design.
- 24 Q. Isn't one of the principles that you agreed to for
- 25 developing your network is designing it in such a way as to be

- least cost? Isn't that what you agreed with me?
- 2 A. That is what I agreed with, yes.
- 3 Q. And your cost methodology doesn't reflect that as with
- 4 regards to this situation, does it?
- 5 A. What the cost methodology does is look at a total network
- 6 to come up with a total network cost, and then applying that
- 7 total network to individual circuits. In order to have a
- 8 network that is survivable and have these two offices it is true
- 9 because of this some circuits will route this way and some will
- 10 route this way (indicating).
- If we want to change the network design so that we don't
- 12 have this survivability aspect, that would give a different
- 13 number, but we have lost something in the process.
- 14 Q. Okay. But to the person ordering the route from AV to RO,
- 15 the price -- the price that's going to be paid under the TELRIC
- 16 methodology is going to be the average of all those rather than
- 17 the lowest price?
- 18 A. The cost that we developed was the average of these two so
- 19 that we provide survivability in the process.
- 20 Q. Wouldn't -- Couldn't the survivability aspect of your
- 21 interoffice network design be taken into account along with
- 22 least cost routing of the circuits?
- 23 A. I guess that's what I thought was going on here; maybe I'm
- 24 not understanding your question, I don't know.
- 25 Q. Well, I guess I really don't understand what you mean by

- 1 survivability of the -- or integrity of the network. Do you
- 2 mean redundancy between the circuit -- or, the hubs?
- 3 A. I'll back up a second. Before I mentioned that the network
- 4 is designed so that there are node offices, and I'll just put
- 5 four down just as an example, and the term we use is sector
- 6 offices that home in on the node offices.
- 7 The question then is how do we transport between node
- 8 offices. One possibility is you do all possible combinations,
- 9 which the engineers say that is not an efficient thing to do,
- 10 you don't want to do that.
- 11 Well, then you could say, well, in effect you really want
- 12 to create -- I don't know if tandem is the right word because
- 13 I'm not talking switching, but you want to create something to
- 14 minimize all these. And one possibility is -- Let me add a
- 15 fifth one in just to make my picture a little easier.
- You say, well, maybe I'll do this, you funnel everything
- into one location, and then I take it back out to where I'm
- 18 going.
- Well, the problem with that is that now if there's a
- 20 catastrophe here, the whole thing has a potential of falling
- 21 apart. So, therefore, you don't want to design a network where
- 22 you put this -- critical path might not be the right word, but
- 23 this point here where if this goes, everything goes.
- 24 So I'm going to add more nodes just to make this easier
- 25 right now. In effect what we have is something to this effect

- 1 where every node can go to both hub offices, and these can go,
- 2 too, so that traffic can go into these node -- into these hub
- 3 offices and then back out. That was the concept behind the
- 4 network that we have designed. So these two kind of act, in my
- 5 simplified picture here, as this office and this office
- 6 (indicating), which is 7th Street and Evendale.
- 7 Q. So the assumption that you made in your TELRIC study is
- 8 that all traffic from the node offices goes through one or the
- 9 other of the hub offices, correct? Is that what you're --
- 10 A. That is how the interoffice network will function, yes. It
- 11 will go through those hub offices.
- 12 Q. Once again, you're anticipating a complete -- that one of
- 13 your hub offices would be completely disabled when you talk
- 14 about survivability? I mean, so that one route is a backup to
- 15 the other route, is that what you're telling us? I guess I'm
- 16 still a little confused.
- 17 A. All I was saying was that if all of this traffic was
- 18 focused only on a single office, you're much more vulnerable
- 19 because all of your traffic is going through one place.
- If you have equipment failures in that one place, you have
- 21 the potential of taking down, you know, large pieces of the
- 22 network. And so the -- having the multi-hub arrangement is an
- 23 attempt to mitigate that impact of failure.
- 24 Q. All right. Thank you. Let's shift gears here.
- Now we have done the interoffice transport study -- Oh,

- over the break, if you wouldn't mind, I have a question I'd like
- 2 to go back to just for a second on the entrance facility study.
- 3 And it's just a question, we talked a little bit about how the
- 4 point-to-point configuration in your entrance facility study was
- 5 the configuration that most closely resembled a loop; is that
- 6 correct?
- 7 A. I think I said the entrance facility being a connection
- 8 from a central office to a customer NEC -- the NEC location is
- 9 analogous to the term loop. I think I said words like that.
- 10 Q. Yes, and that was in your testimony.
- 11 A. Yes.
- 12 Q. And the loop reminded me, now, you haven't yet provided a
- 13 cost study for unbundled DS1 loop, have you?
- 14 A. That is correct.
- 15 Q. Do you know when we might have that information?
- 16 A. My understanding is that that cost study would be the -- be
- 17 provided as part of the compliance portion of this once all the
- 18 parameters are set for the various things we're discussing here,
- 19 and then it would be provided as part of that process.
- 20 Q. Is it under way yet?
- 21 A. A lot of the information is -- is I'll say under way
- 22 because it's the same information that's in many of these
- 23 studies, so yes.
- 24 Q. So it could be done pretty promptly?
- 25 A. I don't think I quite said that. I don't know that I could

- 1 put a time frame on it sitting here right now.
- Q. But it's not like starting from scratch?
- 3 A. No, it is not.
- 4 Q. Okay. All right. Now, why don't you give me -- When I
- 5 talk about the general topic of a loop transport combination,
- 6 why don't you tell me what -- just give me your description of
- 7 the loop transport combinations, I guess there's two, and what
- 8 they are designed to do?
- 9 A. There are two loop transport combinations. I can't
- 10 remember which is number one or number two, but one of them is a
- 11 voice-grade-to-voice-grade combination, the other is a
- 12 voice-grade-to-DS1 combination.
- And the purpose of those is if a NEC purchased unbundled
- 14 loops in a central office at which it was not collocated, the
- 15 NEC could then have that loop combined with interoffice
- 16 transport and be transported back to the office -- or, an office
- 17 where it was collocated.
- And if the NEC did this one DSO at a time, that would
- 19 probably be a voice grade to voice grade so that there would be
- a voice-grade loop in the office where they are not collocated,
- 21 DSO transport from that office to the office where the NEC is
- 22 collocated, and then a DSO cross-connect to the NEC's
- 23 collocation cage.
- 24 The other transport combination is very similar, but the --
- 25 my understanding would be that the NEC is now probably

- 1 purchasing multiple DSO loops in this distant office. Those
- 2 would be multiplexed up to a DS1 and transported to the office
- 3 where the NEC is collocated, and then a DS1 handoff would be
- 4 given to the NEC containing the loops that were in the other
- 5 office.
- 6 Q. Okay. Mr. Mette, I have another diagram I'd like to show
- 7 you that you'll recognize.
- 8 MS. SANDERS: I'd like to have marked as MCI 14 a
- 9 diagram that's entitled "DSO Loop/DSO Transport".
- 10
- 11 Thereupon MCI Exhibit No. 14 was marked
- for purposes of identification.
- - -
- 14 BY MS. SANDERS:
- 15 Q. Mr. Mette, if you could identify this diagram.
- 16 A. This diagram was drawn in -- I believe in a deposition.
- 17 This diagram is only depicting the portion of the combination
- 18 that is in the central office that is not -- that is where the
- 19 NEC is not collocated, so on the left-hand side it says DSO loop
- which would terminate on the MDF, which is the main distribution
- 21 frame.
- From the main distribution frame it would go to a D4
- 23 multiplexer to be multiplexed up to a DS1 level. The DSX1 is
- 24 just a digital cross-connect again. That would go into a 1/0
- DCS, into a DSX1, and then it would start going into the

- 1 interoffice network to be transported to the office where the
- 2 NEC is collocated.
- 3 So this picture really doesn't depict the total combination
- 4 from the loop all the way back to the collocation cage, it's in
- 5 the office where the loop is located.
- 6 Q. Let me ask you a couple questions, and we'll just use this
- 7 diagram for a minute and then we'll add another one.
- 8 As I understand this diagram, the DSO loop enters the
- 9 central office through the main distribution frame there, the
- 10 MDF.
- 11 A. Yes.
- 12 Q. And then it proceeds -- that's a -- it says D4 box, that's
- 13 a D4 channel bank, correct?
- 14 A. That's the term we use, yes.
- 15 Q. And when it leaves the D4 channel bank it's at a DS1 level,
- 16 that's what you just told us?
- 17 A. That is correct.
- 18 Q. So the function of the channel bank right there is to
- 19 multiplex 24 DSO signals into a single DS1, correct?
- 20 A. It has that capability, yes.
- 21 Q. Okay. And then after it leaves the D4 bank, it's at the
- 22 DS1 level, and then it goes into the DS1 cross-connect for the
- 23 DSX1?
- 24 A. The 1/0 DCS, yes.
- 25 Q. Now, just for clarification purposes, there's some arrows

- 1 there that split the MDF going both directions. Do you want to
- 2 describe what that was showing us? I believe that was showing
- 3 us where the -- how loop transport combination is costed or
- 4 priced.
- 5 A. I believe what that was depicting is that the unbundled
- 6 loop stops at the mainframe so you can think of it as two sides
- 7 to the mainframe. So a portion of it is on the loop side and
- 8 included in the loop cost study, and then the other portion is
- 9 in the interoffice piece for the loop transport combination.
- 10 And it was just kind of depicting it as the MDF that shows up in
- 11 two different places.
- 12 Q. Now, let's get to how the DSO loop combination is priced.
- 13 The first piece of the combination is the DSO loop, right?
- 14 A. That is correct.
- 15 Q. And so the cost of the loop is included in the main
- 16 distribution frame in the loop price, correct?
- 17 A. That is correct.
- 18 Q. And then the electronics that are shown in this -- on the
- 19 other side of the main distribution frame, are those included in
- 20 the DSO transport charge?
- 21 A. That is correct.
- 22 Q. So what is the other charge, then, involved with the DSO --
- 23 DSO transport combination, the loop, transport combination?
- 24 A. I just want to look for a PUCO data request. I believe
- 25 there was a data request that asks specifically what all of the

- 1 charges were, and I just -- just to make sure that I don't miss
- 2 any of them, I hope to find that.
- 3 Q. I may be able to help you out, Mr. Mette. Is it PUCO Data
- 4 Request 121?
- 5 A. 121, yes.
- 6 Q. Actually maybe -- I was going to introduce this as an
- 7 exhibit anyway, so we could go ahead and do that now. Do you
- 8 want to take a look at this document?
- 9 A. I just found my own copy, but --
- 10 Q. Well, I think I'd like to talk about this later so we can
- 11 put it in and you can show us where the charges are here.
- 12 MS. SANDERS: I'd like to have marked as MCI
- 13 Exhibit 15 a document entitled PUCO Data Request 121, and it
- 14 also says supplemental response.
- 15 - -
- 16 Thereupon MCI Exhibit No. 15 was marked
- for purposes of identification.
- 18
- 19 BY MS. SANDERS:
- 20 Q. You have a copy of that?
- 21 (Pause.)
- 22 A. Is there a question?
- 23 Q. I think I asked you -- Actually, my question was whether
- 24 the -- No, strike that.
- 25 My question was, in addition to the loop price and the

- 1 transport, the DSO transport cost which would be both a fixed
- 2 cost and a mileage charge, are there any other charges included
- 3 in this combination?
- 4 A. Yes, there are.
- 5 Q. Okay. Do you want to describe those for me?
- 6 A. Yes.
- 7 Q. You can use this document if you -- MCI Exhibit 15 if you
- 8 want to.
- 9 A. I thought it might be helpful just to kind of highlight a
- 10 little picture just to....
- 11 There's the loop charge -- Do you want me to quote the
- 12 numbers or just point out where charges are?
- 13 O. I'd like to see the charges.
- 14 A. Okay. The numbers as contained in the studies that we put
- 15 forth as an exhibit, I'll assume that this -- in this office,
- 16 this is a Band 1 office, just -- I mean I'll use Band 1 as a
- 17 example --
- 18 Q. Sure.
- 19 A. -- this number is out of -- in that data request, 17.91.
- 20 That takes us up to the mainframe.
- In the office where the NEC is collocated, we have to
- 22 transport this from here, so central office A to central office
- 23 Z, there's going to be DSO transport. And I'm not going to draw
- 24 all the equipment that could be in there, but that gets us to
- 25 this office. And the rate for that is \$50.56. This is per

- 1 month. This one also is per month. This is the fixed piece,
- 2 and then there's a 7 cents per month per air mile, where air
- 3 miles are between those two offices (indicating).
- 4 Once we're in this office, there's going to be some
- 5 electronics. And all this eventually terminates in here. I'm
- 6 not going to draw the detail.
- 7 Now, the NEC is going to be collocated, they will have a
- 8 cage, so there's a DSO cross-connect from, you know, transporter
- 9 mainframe area to the NEC cage.
- These are being offered on a per hundred pair, so this
- 11 is -- I hope I got these numbers right -- can I double-check
- 12 something? If my memory is right, there was a revision to the
- 13 cross-connect study; I'm not sure these numbers reflect that
- 14 revision. If you want me to do that, I will; but these are
- 15 basically numbers out of the voice-grade cross-connect study.
- 16 Q. The point of that particular question was there were just
- 17 the three sets of charges that were included in the loop -- this
- 18 combination No. 1?
- 19 A. That is correct. There are nonrecurring charges which I
- 20 have not displayed on here, but these are the three charges.
- 21 Q. We'll get to those later. That was my only question.
- Then just to follow up where I think we started with that
- 23 was I was just asking if you look back at diagram -- what's been
- 24 marked as 14, that the pieces of electronics that are shown here
- 25 would be put in the transport charge, correct?

- 1 A. Yes.
- 2 Q. Now, let's shift gears just a second. I don't think I have
- a diagram for loop combination No. 2, but that's a DSO-DS1
- 4 combination?
- 5 A. That is correct.
- 6 Q. And if I recall from our deposition -- or, your deposition,
- 7 you indicated that there was an additional multiplexer that
- 8 would have to be included on this -- say on this same diagram
- 9 for that combination; is that correct?
- 10 A. That is correct, because since we're handing off for the
- 11 DS1 rate, we are, in effect -- most likely the NEC has purchased
- 12 multiple loops. I don't envision that a NEC purchasing the
- 13 DSO-to-DS1 combination if they only have one loop. So there's
- 14 multiple loops and there's a multiplexing function that has to
- 15 occur to get this up to a DS1 level.
- 16 Q. And could you -- So on our diagram, that would go right to
- 17 the right of the main distribution frame before the D4 channel
- 18 bank?
- 19 A. Once we move to DSO -- or, I'm sorry, once we move to voice
- 20 grade to DS1, this picture probably isn't appropriate because
- 21 we're combining. Now in that situation we still have
- 22 voice-grade loops, but this is DS1 transport because we're
- 23 transporting a DS1.
- 24 So the diagram, I think this was Exhibit 14, this is drawn
- in terms of DSO transport, so we have to look at a DS1 transport

- 1 diagram, and this multiplexer is inserted prior to that DS1
- 2 transport starting because we have got to get the voice-grade
- 3 circuits up to a DS1 level. So out of this multiplexer, we're
- 4 at a DS1 level --
- 5 Q. Mr. Mette, could you use a different pen because I can't
- 6 really read that.
- 7 A. I'm sorry.
- At this point in here we're still at voice-grade level, but
- 9 we got to get this up to DS1 level before we go into the DS1
- 10 transport. So that's where this multiplexing comes into play.
- 11 And I really can't put this multiplexer in terms of this diagram
- 12 because this was a DSO-level transport diagram.
- 13 Q. Now, going back to diagram or Exhibit 14, was this picture
- 14 drawn assuming that the DSO loop was provided on a copper
- 15 facility?
- 16 A. There was no assumption about how the loop was provided in
- 17 this diagram.
- 18 Q. Could it have been provided on a digital loop carrier?
- 19 A. Yes, it could have.
- 20 Q. If it were provided on integrated digital loop carrier, how
- 21 would that diagram change?
- 22 A. This gets back to our discussion this morning. In order to
- 23 pull that loop out, it really can't be provided on integrated
- 24 digital loop carrier because if it's on integrated, it's going
- 25 to be going into the switch and we'd have to start talking about

- 1 hairpinning out of the switch to get to that circuit.
- Q. But I thought -- isn't this the loop combination, correct?
- 3 We're not picking it up where it enters the central office.
- 4 A. This is the loop transport combination, but if a loop is on
- 5 an integrated digital loop carrier, that digital loop carrier
- 6 will terminate on the switch and there won't be any access to
- 7 the individual DSOs on that integrated digital loop carrier.
- 8 Q. What about then for the second combination, the DSO/DS1
- 9 loop combination? Let me -- Go ahead.
- 10 A. I was just going to say when you said how about -- What was
- 11 the question?
- 12 Q. Would your answer be the same if we were talking about the
- 13 DSO/DS1 loop combination?
- 14 A. Could I go back to what the question was?
- 15 (Question read back as requested.)
- 16 THE WITNESS: I'm sorry, but I wasn't sure what the
- 17 question was asked prior to the "what about".
- 18 BY MS. SANDERS:
- 19 Q. I believe my question was: Would your diagram be different
- 20 assuming an integrated digital loop carrier system, and let's
- 21 assume that -- Let's talk about the voice-grade to DS1 loop
- 22 combination.
- 23 A. I don't know. I've never talked to any engineer about
- 24 providing voice-grade to DS1 combination when that -- Well, when
- 25 a loop is on the integrated digital loop carrier. I haven't

- 1 talked to any -- you know, some of the issues that come to my
- 2 mind are, again, I would suspect there's more than one loop out
- 3 here, so we'll have to answer questions like where are all these
- 4 loops at.
- I guess it's conceivable all of them are on the same
- 6 digital loop carrier; but if they are not all on the same
- 7 digital loop carrier, somehow these would have to be brought
- 8 together, and that would seem to me complicating the situation.
- 9 But I have not talked to an engineer about how that type of
- 10 transport combination could be provided in that situation.
- 11 Q. Well, let me just ask you a couple questions. Do you have
- 12 a copy of MCI Exhibit 5 which we discussed with Mr. Meier
- 13 yesterday?
- 14 A. Yes, I do.
- 15 Q. Okay. Now, if you'll look at the -- if you'll look at the
- integrated column there, the integrated diagram there on the
- 17 left-hand side, and if I'm reading it correctly, after the --
- 18 after the circuit leaves the FLM-150, isn't it at the DS1 level
- 19 going towards the switch?
- 20 A. That is the DS1 level between those two pieces of
- 21 equipment, yes.
- Q. And then it goes directly into the DSX1, correct?
- 23 A. That is correct.
- Q. All right. So if we go back and look at our diagram, and
- 25 MCI Exhibit 14, couldn't we skip a lot of the equipment that was

- 1 required to multiplex the signal, the DSO signal to the DS1
- 2 level under the integrated system?
- 3 A. I honestly don't know what equipment we could skip because,
- 4 again, it would depend, is there an assumption that all the
- 5 loops are out of the same DLC system, or not? And I have not
- 6 talked to an engineer whether the DS1 out of the FLM-150 could
- 7 then interface into a -- the interoffice network. I don't know.
- 8 Q. Well, the FLM provides a multiplexing function, doesn't it?
- 9 A. That it does.
- 10 Q. So I'm not -- I'm not sure I understand what you're talking
- about with the loops on coming in, but once it hit the FLM, it
- would go directly into the switch, then we wouldn't need the
- 13 multiplexing equipment that you included in the study, correct,
- 14 on an integrated system?
- 15 A. What I'm saying is there's multiple loops that we're
- 16 talking about, I don't know if all the loops are on the same DLC
- 17 system because it's conceivable they are not.
- 18 Q. Okay. Assuming that they were?
- 19 A. And assuming if they were, I still don't know if there
- 20 could be a direct interface from this equipment to the
- 21 interoffice. I'm not saying there couldn't, I just don't know.
- 22 Q. Okay. Assuming that there was a direct interface that you
- 23 just described, so that the configuration of the loop trans- --
- 24 the loop transport combination, the DSO/DS1 loop transport
- 25 combination avoided a certain amount of equipment that was taken

- 1 into account in the cost study, would you expect that the
- 2 transport charge would be somewhat lower assuming an integrated
- 3 digital loop carrier system for this combination?
- 4 A. What I don't know, the DS1 transport assumes that you're
- 5 starting at a DS1 level, so if I just draw a cloud to represent
- 6 DS1 transport, you enter this at a DS1 level, you enter and exit
- 7 at DS1 level, the purpose of this multiplexer was to take the
- 8 voice grade to DS1.
- I don't know if the FLM-150, in that integrated mode, could
- 10 interface directly to this transfer combination, I just don't
- 11 know if there's anything special about the integrated DLC
- 12 situation that prohibits that or not.
- 13 Q. Okay. Fair enough. Without that understanding then I
- 14 guess you couldn't answer my question, is that what you're
- 15 saying?
- 16 A. That is correct. I cannot tell you whether it can or
- 17 cannot.
- 18 Q. I'm sorry?
- 19 A. I cannot tell whether it can or cannot.
- 20 Q. Or what effect it would have on your cost study?
- 21 A. That is correct.
- 22 Q. Mr. Mette, I think at your deposition you explained to me
- 23 that the combination charge that you had listed in your pricing
- 24 schedule which is connected -- or, attached to your testimony
- 25 was no longer a charge, it's going to be included with these

- 1 combinations; is that correct?
- 2 A. Yes. I think what the question there was is there some --
- 3 basically is there something different than these three charges,
- 4 and the answer was no, there is not something different.
- 5 Q. Well, for the DS1 -- DS0/DS1 combination, there's a
- 6 multiplexing charge?
- 7 A. That is correct.
- 8 Q. Under your cost study, not under my ideal scenario.
- 9 A. That is correct.
- 10 Q. I think you could refer to your -- to MCI Exhibit 15, the
- 11 response to the staff data request to answer this, but I'd like
- 12 you to add up the charges for the DSO/DS1 loop combination. I
- 13 believe you did it for the DSO to DSO, or I'd like you to just
- 14 identify them.
- 15 A. There's still the 17.91 per month, I'll put per loop, just
- 16 to convey the fact that since we're talking about DSO to DS1,
- 17 there's probably multiple loops out here and each of those would
- 18 be 17.91.
- 19 This multiplexing function, a voice grade to DS1
- 20 multiplexer is \$343 . The interoffice transport is 89.86 per
- 21 month, fixed.
- I think I just found a mistake in the response to this data
- 23 request. On the per-mile piece the data request included the
- 24 DSO transport instead of the DS1 transport.
- 25 Q. Could you tell us what page you're on so we can all --

- 1 A. In the PUCO data request response.
- 2 Q. Yeah. We're on No. 2, right?
- 3 A. That is correct. There is an attachment up in the top
- 4 right-hand side it says "PUCO Data Request 121, Question 1,
- 5 Attachment 1B, Page 3, Supplemental Response*.
- 6 Q. Okay. It's the very last page of the exhibit, is it?
- 7 A. I believe it is, yes.
- 8 O. And that should be --
- 9 A. Actually that should be 1.43, and I got the 1.43 by going
- 10 back to the DS1 transport study. And now we're at DS1
- 11 cross-connect, and these would be the numbers we talked about
- 12 earlier.
- 13 Q. Pardon me? I'm sorry, I didn't hear you.
- 14 A. These are the numbers that we were talking about earlier
- when we talked about cross-connecting DS1.
- 16 Q. Mr. Chorzempa made a good point, I wonder if you could
- 17 identify for me where in the PUCO -- the response to the staff
- 18 data request you could -- you've gotten these numbers so we
- 19 could follow what you're writing up on the board there.
- 20 A. There's some tables. The combination No. 2, there's a
- 21 table that starts "Combination No. 2 Cost Summary", on the
- 22 right-hand side it says "PUCO Data Request 121, Question 1,
- 23 Attachment 1B, Page 1, Supplemental Response".
- 24 Q. And you've just used the loop charge there on that page
- 25 without any of the nonrecurring charges?

- 1 A. Right, I said that --
- 2 Q. You don't need to do those right now. Why don't you go on
- 3 to the multiplexing charges on the next page, we can just follow
- 4 that right down?
- 5 A. That is correct.
- 6 Q. By the way, the \$343 monthly charge for the multiplexing is
- 7 applicable for any number of DSO loops that we would be
- 8 purchasing up to 24, correct?
- 9 A. Yeah. That's correct. This allows 24, so 1 to 24 is still
- 10 \$343.
- 11 Q. Then the point that we would perhaps have 25 DSO loops, we
- 12 would have two multiplexing charges?
- 13 A. That is correct.
- 14 Q. Up to whatever -- Up to fifty? Okay. And then your
- interoffice charge, we can just follow right down the page for
- 16 those charges, correct?
- 17 A. From here on everything is on a per-DS1 basis. This is on
- 18 a per-DSO basis here.
- 19 Q. And is it your understanding that one of the purposes of
- 20 the -- these loop transport combinations is so that a NEC could
- 21 pick up a voice-grade loop at a remote end office, perhaps a
- 22 residential loop at a remote end office, and carry it back to
- 23 the central office where it's collocated without having to incur
- 24 the additional expense of collocation at the end office where
- 25 the loop is?

- 1 A. That is my understanding, yes.
- 2 Q. And so one of the -- By not incurring these collocation
- 3 charges, I guess the point of it is to provide a more of a kind
- 4 of a cost-effective way for a NEC to provide residential service
- 5 in some of the remote offices, correct?
- 6 MR. HART: Objection. The contract calls for the
- 7 combination. Whether it was cost effective or not is up to MCI
- 8 because they asked for it.
- 9 MS. SANDERS: Well, I think Mr. Mette's experienced
- 10 enough to know that perhaps the reason a combination like this
- 11 would be attractive to a NEC.
- 12 THE EXAMINER: All right, Overruled.
- THE WITNESS: Can I hear the question again, please.
- 14 (Question read back as requested.)
- THE WITNESS: My understanding is that a NEC would
- 16 want this so as not to need to collocate. I don't know that
- 17 there's a tie-in to residence versus business, but the point of
- 18 this would be so that a NEC would not need to collocate in every
- 19 office.
- 20 BY MS. SANDERS:
- 21 Q. And it would be more likely that a NEC would want to pick
- 22 up a loop in a remote office for residential service, though,
- 23 wouldn't it?
- 24 A. It would be more likely for them to --
- 25 Q. To want to -- To want this configuration, a loop transport

1	combination in more of a remote office which would be tend to
2	be a residential area, wouldn't it?
3	A. I guess I could understand where a NEC would not want to
4	collocate in every office. I mean, these offices wouldn't
5	necessarily have to be remote.
6	Q. Okay. That's fair enough.
7	MS. SANDERS: Your Honor, at this point this would be
8	a breaking point I would be moving on to another cost study if
9	you want to call it a day.
10	THE EXAMINER: That's fine. Okay. Let's go off the
11	record.
12	
13	(Thereupon, the hearing was adjourned at
14	5:20 o'clock p.m. on Thursday, March 4, 1999,
15	to be reconvened at 9:00 o'clock a.m. on
16	Friday, March 5, 1999.)
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