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	I N D E X			
	WITNESSES	DIRECT	CROSS	REDIRECT RECROSS
1	I N D E X			
2	WITNESSES	DIRECT	CROSS	REDIRECT RECROSS
3	MICHAEL STARKEY			
	By Mr. Townsley	1883		
4	By Mr. Livingston		1892	
5	LARRY D. GINDLESBERGER			
	By Ms. Feinberg	1904		
6	By Mr. Binnig		1906	
7	MELIA CARTER			
	By Ms. Feinberg	1922		1947
8	By Mr. Binnig		1927	1951
9	TORSTEN CLAUSEN			
	By Mr. Harvey	1953		1981/1986
10	By Mr. Binnig		1955	1984
	By Mr. Schifman		1976	
11	JAMES E. KEOWN			
12	By Mr. Livingston	1987		2306
	By Mr. Bowen		2009/2101	2312
13	By Mr. Schifman		2268	2310
	By Ms. Franco-Feinberg		2275	
14	By Mr. Townsley		2282	
	By Mr. Dunn		2298	
15	By Judge Woods		2316	
16	DR. STANFORD L. LEVIN			
	By Mr. Livingston	2076		2098
17	By Mr. Schifman		2078	
18	EXHIBITS		MARKED	ADMITTED
19	AT&T/WorldCom Reh. 1.0		1881	
	Covad Reh. 2.0		1903	1905
20	Covad Reh. 1.0 & 1.0P		1921	1927
	ICC Reh. 1.0		1952	1954
21	Ameritech Reh. 10.0, 10.0P, 10.1, 10.1P		1987	1989
22	Ameritech Keown Direct 1		2006	
	Ameritech Reh. 11.0, 11.1		2075	2077

1 PROCEEDINGS

2 (Whereupon AT&T /WorldCom
3 Rehearing Exhibit 1.0 was
4 marked for identification.)

5 JUDGE WOODS: This is Docket 00 -0393 on
6 Rehearing, Illinois Bell Telephone Company, a
7 proposed implementation of high frequency portion
8 of the loop /line sharing service.

9 This cause comes on for hearing July 24,
10 2000, before Donald L. Woods, an Administrative Law
11 Judge appointed by the Illinois Commerce
12 Commission. The cause was set today for
13 evidentiary hearings.

14 I think we do have some new folks here,
15 so at this time I'll take appearances, beginning
16 with Illinois Bell Telephone.

17 MR. BINNIG: Theordore A. Livingston and
18 Christian F. Binnig of the law firm of Mayer, Brown
19 & Platt, 190 South La Salle Street, Chicago,
20 Illinois 60603, on behalf of Ameritech Illinois.

21 MS. HERTEL: Nancy Hertel, H-E-R-T-E-L,
22 appearing on behalf of Ameritech Illinois, 225 West

1 Randolph, 25D, Chicago, 60606.

2 MR. TOWNSLEY: Appearing on behalf of
3 WorldCom, Incorporated, Darrell Townsley, 205 North
4 Michigan Avenue, 11th Floor, Chicago, Illinois
5 60601.

6 MR. DUNN: Appearing on behalf of AT&T
7 Communications of Illinois, Inc., John Dunn, 222
8 West Adams, Suite 1500, Chicago, Illinois 60606.

9 MS. FRANCO-FEINBERG: Felicia Franco-Feinberg,
10 on behalf of Covad Communications Company, 222 West
11 Monroe, Floor 20, Chicago, Illinois 60606.

12 MS. TAFF-RICE: Appearing on behalf of Rhythms
13 Links, Inc., Anita Taff-Rice and Stephen P. Bowen,
14 4 Embarcadero Center, Suite 1170, San Francisco,
15 California 94111.

16 MR. HARVEY: Appearing for the Staff of the
17 Illinois Commerce Commission, Matthew L. Harvey and
18 Sean R. Brady, 160 North La Salle Street, Suite
19 C-800, Chicago, Illinois 60601-3104.

20 JUDGE WOODS: Any additional appearances? Let
21 the record reflect no response.

22 We do have Mr. Starkey on the stand.

1 Were you sworn, Mr. Starkey?

2 MR. STARKEY: I wasn't.

3 JUDGE WOODS: Is there's anyone who hasn't
4 been sworn who intends to give testimony today?

5 (Whereupon the witness was
6 sworn by Judge Woods.)

7 JUDGE WOODS: Thank you, sir. Be seated.

8 Mr. Townsley.

9 MR. TOWNSLEY: Thank you.

10 MICHAEL STARKEY
11 called as a witness on behalf of AT&T
12 Communications of Illinois, Inc. and WorldCom,
13 Inc., having been first duly sworn, was examined
14 and testified as follows:

15 DIRECT EXAMINATION

16 BY MR. TOWNSLEY:

17 Q. Mr. Starkey, will you please state your
18 full name for the record, spelling your last name?

19 THE WITNESS:

20 A. My name is Michael Starkey; last name
21 spelled S-T-A-R-K-E-Y.

22 Q. Mr. Starkey, by whom are you employed

1 and in what capacity?

2 A. I'm the President of QSI Consulting,
3 Incorporated.

4 Q. And you are presenting testimony in this
5 case on whose behalf?

6 A. On behalf of AT&T and WorldCom.

7 Q. Mr. Starkey, do you have in front of you
8 a document I've asked the Court Reporter to mark as
9 AT&T /WorldCom Joint Exhibit 1.0?

10 A. Yes, I do.

11 Q. Which is entitled the Rebuttal Testimony
12 of Michael Starkey?

13 A. Yes.

14 Q. And does that document consist of 46
15 pages of text in question and answer form?

16 MR. LIVINGSTON: Actually I think it's 49.

17 MR. TOWNSLEY: I've got 46.

18 THE WITNESS: Mine has 46.

19 MR. LIVINGSTON: Oh, we're going to have a
20 problem.

21 JUDGE WOODS: Let's go off the record and see
22 what we've got.

1 (Whereupon at this point in
2 the proceedings an
3 off-the-record discussion
4 transpired.)

5 JUDGE WOODS: Back on the record.

6 MR. TOWNSLEY:

7 Q. And that does consist of 46 pages of
8 text in question and answer form. Correct?

9 A. Yes, it does.

10 Q. And it also has three attachments marked
11 MPS-1, MPS-2, and MPS-3?

12 A. Yes.

13 Q. Mr. Starkey, was this prepared by you or
14 under your supervision or direction?

15 A. It was.

16 Q. Do you have any changes that you'd like
17 to make to this testimony at this time?

18 A. I just have three small changes.
19 Starting on page 11, it's in footnote number 10.
20 The third line or second line from the top from the
21 previous line it said TR-301. We need to change
22 the 301 to 303.

1 Page 23, line 559, the fourth word from
2 the left is "unlikely". You need to remove the
3 "un" so that it's now "likely".

4 And then in MTS-1, Attachment MTS-1,
5 under my Contact Information my address has
6 changed. To make it consistent with the testimony,
7 it's 703 Cardinal Street as opposed to 1918 Merlin
8 Drive.

9 Q. Any further corrections?

10 A. No.

11 Q. And the corrections that you've made
12 here have been made in the copies of the testimony
13 that have been provided to the Court Reporter.
14 Correct?

15 A. That's my understanding.

16 Q. With the corrections that you've made,
17 if I were to ask you the same questions that are
18 set forth in your rebuttal testimony, would your
19 answers be the same as set forth in writing?

20 A. Yes, they would.

21 MR. TOWNSLEY: Your Honor, at this time I'd
22 move for the admission of AT&T/WorldCom Exhibit 1.0

1 and tender Mr. Starkey for cross-examination.

2 MR. LIVINGSTON: Your Honor, we have an
3 objection to two of the exhibits and some of the
4 testimony.

5 We have specifically an objection to
6 MTS-2 and 3. MTS-2 is a document styled as an
7 Affidavit of Sidney L. Morrison. It's seven pages
8 I believe. It's really testimony. It's Q's and
9 A's. It's unsworn, and Mr. Starkey is relying on
10 it to make assertions, and obviously Mr. Morrison
11 is not here for us to cross-examine, and MTS-3 is
12 simply Mr. Morrison's -- what purports to be his
13 CV. I think this is an inappropriate way to submit
14 testimony, and we move to strike it on that
15 grounds, and we move to strike testimony that
16 merely repeats what Mr. Morrison says, and I now
17 have to find where that is.

18 MR. TOWNSLEY: Page 32.

19 MR. LIVINGSTON: Yeah. We would move to
20 strike the question and answer that begins on line
21 778 on page 32 and runs over to line 802 on page 33
22 on the grounds that it merely repeats what is

1 contained in this inadmissible piece of testimony.

2 MR. TOWNSLEY: Your Honor, if I might respond.

3 Mr. Starkey is testifying on our behalf.
4 He's an expert here. He is, as an expert, entitled
5 I believe to rely on the opinions or advice of
6 other experts in the field. Mr. Morrison is a
7 person who has over 25 years of experience in
8 outside plant operations, starting with Bell
9 Operating Companies dating back to 1966.

10 It is fully appropriate for Mr. Starkey
11 to be able to rely on Mr. Morrison's opinions. He
12 relies on them for two central purposes. One is to
13 illustrate the inefficiencies of Ameritech's
14 decision to hard-wire feeder plant from the remote
15 terminal to the serving area interface directly to
16 the back plant of the digital loop carrier, which
17 is an issue that's relevant here, and also to
18 illustrate how Ameritech has placed cross-connect
19 panels between the remote terminals in the serving
20 area interfaces in order to resolve some of the
21 problems that are caused by the fact that Ameritech
22 has made a decision to hard-wire its digital loop

1 carriers.

2 I have heard Ameritech complain about
3 witnesses who have not cited the authority which
4 they base their opinions on. Mr. Starkey has cited
5 that authority. In fact, he has provided the
6 affidavit. He has gone the next step. It is no
7 different than Ameritech witness Mitchell, for
8 example, relying on advice or opinions that he had
9 heard from subject matter experts at Ameritech and
10 SBC for the testimony that he proffered. I suggest
11 to you that it is no different than Dr. Ransom,
12 Alcatel witness Dr. Ransom appending to his
13 testimony the comments of Alcatel in the FCC
14 proceeding on line sharing.

15 Mr. Starkey is here for cross-
16 examination. If Mr. Livingston wants to ask
17 Mr. Starkey questions about the attachments, he
18 certainly can do that. This is the first I've
19 heard of the objection. To the extent that they
20 were going to object to it, I could have tried to
21 make Mr. Morrison available.

22 So on those bases I would ask you to

1 deny the motion to strike.

2 MR. LIVINGSTON: May I respond?

3 JUDGE WOODS: Just briefly.

4 MR. LIVINGSTON: If Mr. Townsley's theory is
5 accepted, you could present your entire case with
6 one witness and then just append everybody else's
7 testimony.

8 Also, with respect to what an expert can
9 rely on, it is true that an expert can rely on
10 out-of-court statements if, in fact, an expert in
11 the area ordinarily does so, but those statements
12 don't come into evidence, and that's what they're
13 trying to do here.

14 JUDGE WOODS: Right, and I would agree with
15 you that the -- it is a close question. It's not
16 much different than saying I talked to a SME and
17 the SME told me this, but I do think it is -- by
18 appending the attachment, we've gotten way outside
19 of the hearsay problem to where we have
20 out-of-court statements of someone who obviously
21 can't be cross-examined, so I'll strike the
22 attachments. However, the testimony I think stays

1 in.

2 MR. TOWNSLEY: And, Mr. Examiner, just to be
3 accommodating here, if this is truly a concern of
4 Mr. Livingston's, we would offer to make
5 Mr. Morrison available for cross-examination via
6 telephone if that's something that Mr. Livingston
7 would like to do.

8 JUDGE WOODS: I think that's up to you to
9 decide whether or not you want to make -- I don't
10 think that's going to cure the objection, but I
11 think if we want to have him as a witness, then you
12 need to decide what week we're going to get him in
13 here.

14 MR. LIVINGSTON: He hasn't submitted
15 testimony, unless this is considered sort of a sub
16 rosa submission.

17 JUDGE WOODS: Well, anyway, that's the ruling,
18 so you can do what you're going to do with
19 Mr. Morrison. The attachments are stricken. The
20 testimony stays in.

21 MR. TOWNSLEY: Well, Mr. Livingston, if we
22 could make Mr. Morrison available via telephone

1 today, we'd like to enter the affidavit as
2 testimony, and if you want to cross-examine him,
3 you're certainly welcome to.

4 MR. LIVINGSTON: I don't think it's
5 appropriate. This is an after the hearing has
6 started submission of testimony. I mean if we were
7 going to have him as a witness, his testimony
8 should have been submitted in accordance with the
9 schedule set by the Hearing Examiner.

10 MR. TOWNSLEY: Had you objected in advance, I
11 could have made arrangements to do that.

12 JUDGE WOODS: I don't think that cures the
13 late submission.

14 MR. TOWNSLEY: Okay.

15 JUDGE WOODS: So that motion is denied.

16 Mr. Livingston.

17 MR. LIVINGSTON: Thank you, Your Honor.

18 CROSS EXAMINATION

19 BY MR. LIVINGSTON:

20 Q. Good morning, Mr. Starkey.

21 A. Good morning, Mr. Livingston.

22 Q. You represent AT&T and WorldCom in this

1 matter?

2 A. That's correct.

3 Q. And does AT&T provide broadband service
4 via cable modem?

5 A. My understanding is that AT&T has a
6 cable modem service.

7 Q. Does it provide that service in
8 Illinois?

9 A. My understanding is that it does in
10 certain portions of Illinois, limited portions.

11 Q. Pardon?

12 A. My understanding is that it does in
13 limited portions of Illinois.

14 MR. TOWNSLEY: Can I ask is there a reference
15 to Mr. Starkey's testimony that you're asking
16 questions on?

17 MR. LIVINGSTON: No. I'm asking questions
18 about what his client is doing.

19 Q. Do you know how many customers AT&T
20 cable modem has in Illinois?

21 A. I don't.

22 Q. Does AT&T provide cable modem in other

1 states?

2 A. I believe they do.

3 MR. TOWNSLEY: Your Honor, I'm going to object
4 based on relevance. What we're discussing in this
5 case is the obligations of Ameritech to unbundle
6 their network architecture known as Project Pronto.
7 We're not here discussing cable modems or the like,
8 and I would also suggest that -- well, I'd also
9 object on the basis that it's beyond the scope of
10 Mr. Starkey's testimony.

11 JUDGE WOODS: I agree it's beyond the scope.
12 The objection is sustained.

13 MR. LIVINGSTON:

14 Q. Is AT&T providing DSL service in
15 Illinois?

16 A. I don't know.

17 Q. Do you know if it's providing it
18 anywhere?

19 A. I don't.

20 Q. Are you aware that AT&T purchased the
21 DSL assets of NorthPoint?

22 A. I'm aware that that transaction took

1 place.

2 Q. But you don't know what, if anything,
3 they're doing with those assets. Fair statement?

4 A. I don't.

5 Q. Is WorldCom providing DSL service in
6 Illinois to your knowledge?

7 A. I don't know.

8 Q. Is it providing DSL service anywhere?

9 A. Again, I don't know.

10 Q. Is it providing broadband service
11 through any other technology anywhere?

12 A. We may have to talk a little bit about
13 what broadband service is in that context, but my
14 understanding is that WorldCom would provide T-1
15 and above services or high capacity services to
16 some extent.

17 Q. Now, in broad strokes, you're here
18 urging the Commission to maintain its order that
19 Ameritech Illinois provide unbundled access to the
20 Project Pronto architecture. Correct?

21 A. I think that's fair.

22 Q. How does AT&T plan to use that

1 architecture?

2 A. I don't know exactly. I know that I was
3 involved in responding to Ameritech's discovery
4 requests, and one of the concerns of AT&T and I
5 believe WorldCom was the fact that until the rules
6 become more concrete, until they understand how
7 they'll have access to unbundled network elements
8 comprising Project Pronto, it's difficult for them
9 to put a business case into place.

10 Q. To your knowledge does AT&T have a
11 current plan it would like to implement concerning
12 Project Pronto?

13 A. I don't know.

14 Q. What about WorldCom?

15 A. Again, I don't know.

16 Q. Any idea of what kind of services either
17 of your clients would like to provide using Project
18 Pronto?

19 A. I don't know. Again, I think it depends
20 a lot on how this case is ultimately adjudicated,
21 what the result is, and how they can gain access to
22 those facilities.

1 Q. Have either of your clients signed the
2 wholesale broadband service contract with SBC
3 anywhere?

4 A. I don't know.

5 Q. Okay. Bear with me. I'm going to try
6 to find my references.

7 I'd like to direct your attention to the
8 question and answer that begins on page 8 and runs
9 over to the top of page 9, and I think the question
10 has to do with packet switching technology and the
11 FCC's unbundling obligations. Is that right?

12 A. Yes, it does.

13 Q. Okay. And at lines 214 through 216 on
14 page 9 you state: "While Project Pronto may employ
15 packet technology, the components of the loop to
16 which this Commission has required unbundling do
17 not include packet switching." Have I read that
18 correctly?

19 A. Yes, you have.

20 Q. Now did you testify about the same issue
21 up in Wisconsin recently?

22 A. I did testify in the case that dealt

1 with unbundling Project Pronto, yes.

2 Q. And that's case 6720 -T1-161?

3 A. I'll take your word for that. I don't
4 remember if it was 161 or 160. I know there were
5 those two cases.

6 Q. And in that case did you testify on
7 behalf of WorldCom and AT&T?

8 A. Among others, yes.

9 Q. But AT&T and WorldCom were two of your
10 clients.

11 A. They were.

12 Q. And in that case, among other things,
13 you urged the Wisconsin Commission to basically do
14 what the Illinois Commission did in the order
15 that's on rehearing here.

16 A. I don't know if I'd say it that
17 precisely. I made recommendations to the Wisconsin
18 Commission to unbundle Project Pronto. They were
19 probably very similar to what the Illinois
20 Commission had already done.

21 Q. Basically, basically on behalf of your
22 clients, which included AT&T and WorldCom, you

1 urged the Wisconsin Commission to provide unbundled
2 access or require unbundled access to Project
3 Pronto.

4 A. Yeah, I think that's fair.

5 Q. Okay. And you filed prefiled testimony
6 in that case?

7 A. I did.

8 Q. And you wrote that testimony, correct ?

9 A. I did.

10 Q. And in your Wisconsin prefiled testimony
11 you said: "It is true that the Project Pronto
12 architecture will encompass some number of packet
13 switching elements." Is that correct?

14 A. You'd have to refresh my memory.

15 Q. Well, maybe we can do that.

16 Does anybody else want copies?

17 MR. TOWNSLEY: Yes, please.

18 MR. LIVINGSTON: Anybody besides -- obviously
19 Mr. Townsley does. Anybody else?

20 MS. FRANCO-FEINBERG: I'd like one.

21 MR. LIVINGSTON:

22 Q. I've put in front of you Volume 9 of the

1 transcript in that proceeding. Do you recognize
2 this as the transcript in the proceeding that we
3 were just talking about?

4 A. Yes, it appears to be.

5 Q. And I'd like to direct your attention to
6 page 3399, and we're not going to read anything
7 that's confidential. I've learned my lesson.

8 Have you found 3399?

9 A. I have.

10 Q. And in Wisconsin it's their practice to
11 actually incorporate your prefiled testimony when
12 its admitted into the record into the transcript of
13 the proceeding. Is that correct?

14 A. It appears to be. This appears to be my
15 prefiled.

16 Q. Do you recognize this as page 16 from
17 the rebuttal testimony that you submitted in
18 Wisconsin?

19 A. Yes.

20 Q. And I'd like to direct your attention to
21 lines 9 and 10, the beginning of your answer. "It
22 is true that the Project Pronto architecture will

1 encompass some number of packet switching
2 elements." Did I read that correctly?

3 A. You did.

4 Q. And that's your sworn testimony in
5 Wisconsin. Is that correct?

6 A. It is.

7 Q. Thank you.

8 I'd like to direct your attention to the
9 testimony concerning cross-connects, and in my copy
10 that was up around page 33. It's probably about 31
11 in yours.

12 A. Yes.

13 Q. Could you please direct your attention
14 to page 31?

15 A. Okay.

16 Q. I would like to direct your attention
17 specifically to the passage that begins at line
18 750. Do you see that where you say: "In talking
19 with QSI's network engineers"?

20 A. Yes.

21 Q. "And in reviewing Alcatel's product
22 documentation (and Ameritech's testimony and

1 comments)", you go on then to express an opinion
2 about what you're unable to do. Correct?

3 A. I do.

4 Q. Okay. Who are the QSI network
5 engineers, plural, that you refer to there?

6 A. Perhaps I was being loose with my
7 language. It would have been Mr. Morrison.

8 Q. Anybody else?

9 A. Well, I did discuss -- we certainly did
10 have discussions with Mr. Gates from our firm as
11 well. He was assisting me with the testimony, but
12 I wouldn't consider him a network engineer.

13 Q. Has AT&T to your knowledge requested in
14 Illinois to collocate a DSLAM at an RT?

15 A. I don't know.

16 Q. Has WorldCom?

17 A. Again, I don't know.

18 Q. To your knowledge has any CLEC requested
19 to collocate a DSLAM at an RT? In Illinois.

20 A. I don't know.

21 Q. Are you aware of any instance where
22 Ameritech Illinois has not permitted a requesting

1 carrier to deploy a DSLAM at an RT?

2 A. I'm sorry. Was that Ameritech Illinois?

3 Q. Yes, sir.

4 A. I don't know.

5 Q. You're not aware of any instance like
6 that? Is that a fair statement?

7 A. I just don't have any information either
8 way.

9 MR. LIVINGSTON: I have no further questions.

10 JUDGE WOODS: Redirect?

11 MR. TOWNSLEY: No redirect.

12 JUDGE WOODS: Thank you, Mr. Starkey.

13 (Witness excused.)

14 JUDGE WOODS: Call your next witness.

15 (Whereupon Covad Rehearing
16 Exhibit 2.0 was marked for
17 identification.)

18 MS. FRANCO-FEINBERG: It's my understanding
19 that Ameritech is willing to stipulate to the
20 admission of Mr. Gindleberger's testimony, so I'm
21 just going to ask you some introductory questions,
22 Mr. Gindlesberger.

1 LARRY D. GINDLESBERGER
2 called as a witness on behalf of Covad
3 Communications Company, having been first duly
4 sworn, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MS. FRANCO-FEINBERG:

7 Q. Could you please state your name and
8 business address for the record?

9 THE WITNESS:

10 A. My name is Larry Gindlesberger. My
11 business address is 8301 Manchester Road, Canal
12 Fulton, Ohio.

13 Q. Okay, and by --

14 A. Zip code is 44614.

15 Q. Sorry. By whom are you employed and in
16 what capacity?

17 A. I'm employed by Covad Communications,
18 and I'm a Senior Project Manager.

19 Q. Okay. Mr. Gindlesberger, do you have
20 what has been marked as Covad Exhibit 2.0 on
21 Rehearing which is your testimony on behalf of
22 Covad Communications Company?

1 cross.

2 MR. BINNIG: Thank you, Your Honor.

3 CROSS EXAMINATION

4 BY MR. BINNIG:

5 Q. Good morning, Mr. Gindlesberger.

6 A. Good morning.

7 Q. That's a tough name to get out.

8 A. You ought to be on my side.

9 Q. Mr. Gindlesberger, you're not a
10 Registered Professional Engineer. Is that correct?

11 A. I'm not, that's correct.

12 Q. And you don't have any engineering
13 degrees, undergraduate or advanced. Is that
14 correct?

15 A. I do not have any engineering degrees.
16 That's correct.

17 Q. I'd like to turn to page 2 of your
18 testimony, and beginning at the bottom of page 2,
19 I'm going to try to refer you to questions and
20 answers. I don't have line numbers on my copy, but
21 there's a question near the bottom of the page that
22 says: "What are your responsibilities at Covad?"

1 A. Yes.

2 Q. And you say as Senior Project Manager,
3 you have been responsible for directing the
4 build-out of collocation sites within the Ameritech
5 territory. Do you see that?

6 A. Yes.

7 Q. That includes the Ameritech Illinois
8 territory. Is that correct?

9 A. Yes, that's correct.

10 Q. To the best of your knowledge,
11 Mr. Gindlesberger, Covad has never submitted a
12 request to collocate a DSLAM in or at an Ameritech
13 Illinois remote terminal site. Is that correct?

14 A. That I'm aware of, we have not.

15 Q. Let's move to page 3 of your testimony.
16 In the summary there's a question near the bottom
17 of the page that begins: "Please summarize your
18 testimony." Do you see that?

19 A. Yes, I do.

20 Q. And you begin there by saying you
21 respond to the testimony of certain SBC witnesses
22 concerning the technical feasibility of unbundling

1 the loops that pass through next generation digital
2 loop carriers that Ameritech is deploying as part
3 of its Project Pronto network build. Do you see
4 that?

5 A. Yes, I do.

6 Q. Are you aware, Mr. Gindlesberger, that
7 the SBC ILECs already offer unbundled 8 decibel
8 loops over the TDM side of the Project Pronto
9 facilities?

10 A. Yes.

11 Q. Now, you also I think mention in your
12 experience that you were employed by Ohio Bell
13 Telephone Company for a number of years. Is that
14 correct?

15 A. That's correct.

16 Q. Okay. When you were at Ohio Bell, is it
17 correct that you never had responsibility for CLEC
18 collocation at central offices or CLEC collocation
19 at remote terminals?

20 A. When it was Ohio Bell, there was no
21 remote collocation or collocation for any matter.

22 Q. Okay. When you were there was that the

1 case?

2 A. Yes.

3 Q. And the same would be true, just to make
4 sure we aren't getting confused on name changes,
5 the same would be true if I referred to it as
6 Ameritech Ohio?

7 A. Yes.

8 Q. Let's move to page 6 of your testimony,
9 and there's a question at the bottom. On my page 6
10 anyway there's an answer that begins at the top of
11 my page. Is that what you have on your page?

12 A. Yes. On page 6?

13 Q. Yes.

14 A. Yes.

15 Q. And at the end of that answer there's a
16 sentence that says Ameritech routinely -- you're
17 talking I think about managing capacity, and you
18 say: "Ameritech routinely does this to manage
19 capacity on a variety of systems used by CLECs --

20 MS. FRANCO-FEINBERG: I'm sorry. It actually
21 says items, does it not?

22 MR. BINNIG: On a variety of items used by

1 CLECs. What did I say?

2 MS. FRANCO-FEINBERG: Systems.

3 MR. BINNIG: Oh, items.

4 Q. "...used by CLECs such as interoffice
5 transport systems, digital cross-connect systems,
6 its own switches, ILEC-owned splitters used for
7 line sharing and interconnection trunks." Do you
8 see that?

9 A. Yes, I do.

10 Q. I want to specifically ask you about the
11 reference to Ameritech's own switches, and I want
12 to focus on circuit switches. To your knowledge,
13 Mr. Gindlesberger, isn't it true that CLECs do not
14 insert their own line cards in ILEC circuit
15 switches?

16 A. To my knowledge, yes.

17 Q. Going to the bottom of page 6, there's a
18 Q and A at the bottom here, and I want to focus on
19 a sentence that begins at least in my version of
20 the testimony on the last line of page 6. It says:
21 "Covad would not seek to deploy, or ask Ameritech
22 to deploy, any line cards that are not compatible

1 with Alcatel equipment." Do you see that?

2 A. Yes, I do.

3 Q. And by that is what you are saying that
4 Covad only seeks to deploy line cards that are
5 manufactured or licensed by Alcatel for use in the
6 LiteSpan system?

7 A. Manufactured or licensed by Alcatel is
8 correct, yes.

9 Q. This is a change in position for Covad,
10 isn't it?

11 A. To my knowledge?

12 Q. Yes.

13 A. Not that I'm aware of.

14 Q. You don't know one way or the other?

15 A. Right.

16 Q. Would you agree with me that as we sit
17 here today the only DSL card manufactured or
18 licensed by Alcatel for use in the LiteSpan system
19 is the ADLU card?

20 A. Restate the question again, please.

21 Q. Okay. Do you agree with me that as of
22 today the only DSL card manufactured or licensed by

1 Alcatel for use in the LiteSpan NGDLC is the ADLU
2 card?

3 A. To my knowledge, yes, the ADLU is the
4 only one.

5 Q. Let's move on to page 9 of your
6 testimony, and you have a long answer that starts
7 at the top of page 9, right?

8 A. Yes.

9 Q. And I want to go to the third sentence.
10 My third sentence in that answer reads: "Again,
11 capacity issues are not new. They exist in all
12 telecommunications equipment." Do you see that?

13 A. Yes.

14 Q. Would you agree with me,
15 Mr. Gindlesberger, that efficiency issues relating
16 to the use of telecommunications equipment also are
17 not new?

18 A. Yes, I would agree with that statement.

19 Q. Would you agree with me,
20 Mr. Gindlesberger, that from the viewpoint of a
21 supplier in a competitive market, that supplier
22 would want to be as efficient as it can?

1 A. I would want to know what the definition
2 that you have for supplier. Do you mean an
3 equipment supplier or do you mean a supplier of
4 services to a customer?

5 Q. Either one.

6 A. Well, I can't speak for a supplier of
7 equipment. As a supplier for services to a
8 customer, certainly I would want to supply as much
9 efficiency as I could to my customers.

10 Q. Talking about the supplier of services
11 in a competitive market that you just referred to,
12 would you agree with me, Mr. Gindlesberger, that in
13 a competitive market, if you are less efficient
14 than your competitor supplier of services, you
15 probably won't be competing in that market for very
16 long?

17 A. No, I don't think I would agree with
18 that. Less efficiency doesn't necessarily mean
19 that you won't be competing. The product that you
20 have, the quality of your product, the price of
21 your product all weighs in to whether you're going
22 to be competitive or not.

1 Q. If we were to assume that -- I'll
2 withdraw the question.

3 Let's move to page 10 of your testimony,
4 Mr. Gindlesberger, and at the bottom of page 10 at
5 about five lines from the bottom you have in your
6 answer there the following testimony. You say:
7 "First, there are interference problems as I
8 explain later in my testimony." Do you see that?

9 A. Yes.

10 Q. And I think you acknowledge later in
11 your testimony that the T-1 /E-1 committee that is
12 looking at those issues has not issued any findings
13 or conclusions --

14 A. That's correct, not final conclusions.

15 Q. And are you aware of any -- I'll
16 withdraw that question too.

17 Let's go to page 12, and I'm looking at
18 the first Q and A on page 12, and in the answer
19 here you refer to the FCC's rules, and you say as
20 you understand it, the FCC's rules already consider
21 such "attached electronics" as the remote terminal
22 electronics to be part of the loop, because the

1 definition of the loop includes all features,
2 functions, and capabilities of that loop. Do you
3 see that?

4 A. Yes, I do.

5 Q. Isn't it correct, Mr. Gindlesberger,
6 that the FCC's definition of the local loop which
7 ILECs are obligated to unbundle expressly excludes
8 electronics used to provision advanced services?

9 A. No, actually that's not true. What it
10 says is, in my understanding, and, again, I'm not
11 the regulatory person, but from my reading of the
12 rules, it says specifically DSLAMs. It does not
13 say collocation equipment. It says electronics
14 connected to the loop, but it specifies DSLAMs.

15 Q. I'm giving you a copy of the FCC's UNE
16 Remand Order. I'd like you to turn to the actual
17 FCC rules. It's in Appendix C.

18 MS. FRANCO-FEINBERG: I'm going to object. At
19 this time it's not clear that Mr. Gindlesberger is
20 familiar with these rules or has ever seen them.

21 MR. BINNIG: He's testifying about the FCC's
22 definition of the loop, Your Honor.

1 JUDGE WOODS: I think so too. He can answer.
2 I mean we'll see where he goes with it, but I think
3 the objection is premature. He is clearly
4 testifying as an expert.

5 A. Can you give me a page number?

6 Q. If you look at Appendix C at the back,
7 very back, very back, very back.

8 A. Very back. Okay.

9 Q. Maybe about 20 pages from the back. If
10 you want, I can just give you my copy, and I'll
11 switch you with.

12 A. Please. We can save some time.

13 Q. And I've given you the UNE Remand Order,
14 and it's turned to -- it's page 3 of Appendix C.
15 Do you see that?

16 A. Yes, I do.

17 Q. And there's a definition here under A-1
18 of local loop. Do you see that?

19 A. Yes, I do.

20 Q. And if you move down to the middle of
21 this paragraph, there's a sentence that says: "The
22 local loop network element includes all features,

1 functions, and capabilities of such transmission
2 facility." Do you see that?

3 A. Yes, I do.

4 Q. And then the next sentence reads: "Those
5 features, functions, and capabilities include, but
6 are not limited to, dark fiber, attached
7 electronics", and then the FCC says in a
8 parenthetical "(except those electronics used for
9 the provision of advanced services such as digital
10 subscriber line access multiplexers.)" Isn't that
11 what the FCC rule says?

12 A. That is indeed what this says, yes.

13 Q. Okay. Let's move now to page 14,
14 Mr. Gindlesberger, and at the top of this page, the
15 very first line, there's a sentence that begins:
16 "As strikingly demonstrated by Alcatel's testimony,
17 monopolies do not have any incentive to innovate -
18 which is why both Alcatel and Ameritech seek to
19 maintain a closed, inaccessible architecture." Do
20 you see that?

21 A. Yes, I see that.

22 Q. You're not asserting that Alcatel is a

1 monopolist in the market for advanced services
2 equipment, are you?

3 A. Alcatel, in my opinion, is not a
4 monopolist in the telecommunications industry.

5 Q. Okay. And you're not an economist. Is
6 that correct?

7 A. I am not. That's correct. In fact, my
8 wife would tell you flat out I don't know a lot
9 about economy.

10 Q. So you -- okay.

11 Do you know who Michael Armstrong is?

12 A. No. I'm sorry. I don't.

13 Q. Chairman of AT&T? That doesn't ring any
14 bells?

15 A. No. I don't have any AT&T stock, so.

16 (Laughter)

17 Q. Did you cash out at the right time? I
18 withdraw that.

19 Let's move to page 16 of your testimony,
20 Mr. Gindlesberger, and I'm looking at the question
21 and answer on the bottom half of this page, and in
22 the second sentence of the answer you refer to wave

1 division multiplexing. Do you see that?

2 A. Yes, I do.

3 Q. Would you agree with me,
4 Mr. Gindlesberger, that for the LiteSpan 2000
5 NGDLC, in order to perform wave division
6 multiplexing you would have to add extra equipment
7 to the NGDLC?

8 A. That's a true statement. You do have to
9 add a wave division multiplexer separate from the
10 LiteSpan 2000.

11 Q. Okay.

12 Let's move to page 21, and there's a
13 question that begins on the bottom of page 21 and
14 the answer appears on the top of page 22, and
15 you're responding to a statement by Mr. Boyer, and
16 you begin your answer by saying: "Using the same
17 thought process, a splitter for line sharing is not
18 appropriate for collocation", and you're referring
19 to Mr. Boyer's thought process I believe.

20 A. Yes.

21 Q. "A splitter for line sharing is not
22 appropriate for collocation since it is not a

1 complete piece of equipment without the mounting
2 shelf." Do you see that?

3 A. You're on the top of 22?

4 Q. Top of 22. At the top of my page 22 the
5 answer begins at the very top. It says: "No.
6 Using this same thought process --

7 A. Yes.

8 Q. Would you agree with me,
9 Mr. Gindlesberger, that CLECs do not collocate
10 their own splitter cards in an ILEC-owned splitter
11 shelf?

12 A. I would not agree with that.

13 Q. It's your understanding that CLECs
14 collocate splitter cards in the ILEC-owned
15 splitter?

16 A. CLECs collocate splitter cards in
17 ILEC-owned splitter shelves as well as CLEC-owned
18 splitter shelves.

19 Q. Can you point me to any example where a
20 CLEC has collocated its own splitter card in an
21 ILEC-owned splitter shelf?

22 A. Yes, absolutely. There are certain

1 areas in Verizon territory. There are also certain
2 areas in BellSouth.

3 Q. Okay. In any of the SBC 13 states do
4 CLECs collocate their splitter cards in an
5 ILEC-owned splitter shelf?

6 A. Not that I'm aware of, no.

7 MR. BINNIG: No further questions at this
8 time, Your Honor.

9 JUDGE WOODS: Okay.

10 MS. FRANCO-FEINBERG: Could I have one minute
11 with my witness?

12 JUDGE WOODS: Yes, you may.

13 MS. FRANCO-FEINBERG: Thank you.

14 (Pause in the proceedings.)

15 MS. FRANCO-FEINBERG: Covad has no redirect.
16 Thank you.

17 JUDGE WOODS: Okay. Thank you, sir.

18 (Witness excused.)

19 JUDGE WOODS: Call our next witness, please.

20 (Whereupon Covad Rehearing
21 Exhibits 1.0 and 1.0P were
22 marked for identification.)

1 JUDGE WOODS: Okay.

2 MS. FRANCO-FEINBERG: Covad calls Melia
3 Carter.

4 MELIA CARTER

5 called as a witness on behalf of Covad
6 Communications Company, having been first duly
7 sworn, was examined and testified as follows:

8 DIRECT EXAMINATION

9 BY MS. FRANCO-FEINBERG:

10 Q. Ms. Carter, would you please state your
11 name and business address for the record?

12 THE WITNESS:

13 A. Melia Carter. I reside at 227 West
14 Monroe, Floor 20, Chicago, Illinois 60606.

15 Q. By whom are you employed and in what
16 capacity?

17 A. I'm Director of ILEC Relations and
18 External Affairs for Covad Communications.

19 Q. Do you have before you what has been
20 marked as Covad Exhibit 1.0 on Rehearing, the
21 Rebuttal Testimony of Melia Carter on Behalf of
22 Covad Communications Company?

1 A. Yes.

2 Q. And that consists of 58 pages of
3 questions and answers and two attachments in the
4 public version. Is that correct?

5 A. In the public version that's correct.

6 Q. Do you have any changes or additions to
7 make to your testimony that's been marked as Covad
8 Exhibit 1.0?

9 A. Yes, I do.

10 Q. Okay.

11 A. On page 41 in the quote quoting
12 paragraph 55 of the UNE Remand Order, there's a
13 typo. Towards the -- let's see. The third
14 sentence from the bottom it starts out: "In
15 particular, such a standard would", and instead of
16 "note" it should be "not".

17 Q. Okay. Do you have any other changes to
18 make to your testimony?

19 A. No.

20 Q. Was Covad Exhibit 1.0 either prepared by
21 you or under your direction and supervision?

22 A. Yes.

1 Q. There's also a proprietary version of
2 your testimony, is there not?

3 A. That's correct.

4 Q. And that would be marked for the record
5 as Covad Exhibit 1.0P, and do you have to make the
6 same change that you just referred to on page 41 --

7 A. Yes.

8 Q. -- to that version as well?

9 And that version, Covad Exhibit 1.0P,
10 has an additional exhibit. Is that correct?

11 A. That's correct.

12 Q. And that's been marked as Exhibit MAC -3.
13 Is that correct?

14 A. Yes.

15 JUDGE WOODS: It's not separately marked.
16 It's an attachment. Is that correct?

17 MS. FRANCO-FEINBERG: Yes, it is an
18 attachment.

19 Q. Are the exhibits -- or I'm sorry -- are
20 the attachments to your testimony true and correct
21 copies to the best of your knowledge and belief?

22 A. Yes.

1 Q. If I were to ask you the questions and
2 answers contained in Covad Exhibit 1.0 here today,
3 would your answer be the same?

4 A. Yes.

5 MS. FRANCO-FEINBERG: Covad would move for the
6 admission of Covad Exhibit 1.0 and 1.0P into the
7 record at this time.

8 MR. BINNIG: Your Honor, we do have objections
9 to certain portions that we would move to strike.

10 JUDGE WOODS: Okay.

11 MR. BINNIG: And without anticipating what
12 Your Honor's ruling will be, for record purposes,
13 there's a question beginning on page 6 at the
14 bottom that says: "Ameritech witnesses claim that
15 if it is forced to comply with the Commission's
16 Order", and then there's an answer on the next page
17 which discusses the new Illinois statutory
18 provisions. We would move to strike this on the
19 grounds that it's purely conclusions of law, and
20 even if it purported to be Ms. Carter's
21 understanding of the law, we believe it's
22 completely irrelevant. It's simply her

1 understanding.

2 On page 11 at the bottom, five lines
3 from the bottom there's a sentence that begins:
4 "Even absent a federal requirement for SBC to
5 combine such elements," and then it goes into,
6 again, a discussion of the new Illinois law, and it
7 concludes with the second line at the top of page
8 12. We would also move to strike that on the same
9 grounds.

10 MS. FRANCO-FEINBERG: I'm sorry. What page
11 are you referring to, Mr. Binnig?

12 MR. BINNIG: Page 11, the sentence five lines
13 from the bottom that begins: "Even absent a federal
14 requirement", starting with that through the second
15 line on page 12 on the same grounds that it's
16 purely a legal conclusion, and even if it were not,
17 Ms. Carter's understanding would be completely
18 irrelevant.

19 JUDGE WOODS: Overruled.

20 MR. BINNIG: And then the last, there's one
21 more, just for the record, Your Honor. On page 37,
22 on the top of page 37 there's again a discussion of

1 the new Illinois legislation. It begins at the
2 very first line and continues down to the next
3 question that begins: "Is the availability of
4 broadband service". We would also move to strike
5 the discussion of the Illinois legislation here in
6 the top ten lines or so on page 37 on the same
7 grounds.

8 JUDGE WOODS: Same ruling.

9 CROSS EXAMINATION

10 BY MR. BINNIG:

11 Q. Good morning, Ms. Carter.

12 A. Good morning.

13 MS. FRANCO-FEINBERG: I'm sorry. Has Covad's
14 exhibits been moved into the record?

15 JUDGE WOODS: Over objection, the documents
16 will be admitted.

17 (Whereupon Covad Rehearing
18 Exhibits 1.0 and 1.0P were
19 received into evidence.)

20 MS. FRANCO-FEINBERG: Thank you.

21 MR. BINNIG:

22 Q. Could you turn to page 5 of your

1 testimony, Ms. Carter?

2 A. Yes.

3 Q. On my page 5 you have a question and
4 answer, and in about the middle of the answer
5 you've got a sentence that reads: "Ameritech is
6 regulated differently because it is different." Do
7 you see that?

8 A. Yes.

9 Q. Okay. And what you are contrasting
10 Ameritech with is other providers of advanced
11 services like cable companies, for example?

12 A. Correct.

13 Q. Okay. And at the bottom of the page you
14 say that cable companies are regulated differently
15 because they are different. They never had a
16 government monopoly that allowed them to build
17 their networks. Do you see that?

18 A. Yes.

19 Q. Isn't it true, Ms. Carter, that most
20 cable companies operate in franchised service
21 areas?

22 A. That's true. They have to win those

1 franchises from the cities.

2 Q. Okay. And aren't most of those
3 franchises exclusive franchises?

4 A. It's my understanding that they actually
5 have to win the franchises from the city. That
6 essentially -- I believe there is some sort of law.
7 I'm not a lawyer and I'm not aware of it, but I
8 believe that there is some sort of law that
9 prohibits the ability to have some sort of an
10 exclusive -- I don't know if the term is exclusive
11 franchise, but it does -- the basic concept is that
12 the cable company does have to go to the cities and
13 win a franchise from the city.

14 Q. Have you ever worked for a cable
15 company, Ms. Carter?

16 A. Well, if you consider Ameritech's
17 ownership of a cable company. I didn't work
18 directly in that arm, but when I was at Ameritech,
19 they did own a cable company.

20 Q. That would be Ameritech New Media?

21 A. Correct.

22 Q. You were never employed by Ameritech New

1 Media. Is that correct?

2 A. That's correct.

3 Q. Is it fair to say that you don't know
4 whether the franchises that cable companies
5 currently have now or had in the past were
6 exclusive franchises?

7 MS. FRANCO-FEINBERG: Objection; asked and
8 answered.

9 JUDGE WOODS: I don't recall her answering
10 that.

11 A. Well, again, I don't know the legal
12 definition of exclusive franchise. What I do know
13 is that unlike the ILECs who were granted a
14 monopoly in the early 1900s to basically build a
15 ubiquitous network to reach every home in the
16 country, cable companies do have to go to
17 municipalities and win those franchises and start
18 from the bottom up.

19 Q. Let's move to the bottom of page 5,
20 Ms. Carter, and there's a sentence here where you
21 say that -- I'm about five lines from the bottom.
22 You're talking about this proceeding, and you say:

1 "It is about the basic obligation to unbundle local
2 loops and OSS." Do you see that?

3 A. Yes.

4 Q. And you were just here for
5 Mr. Gindlesberger's testimony, were you not?

6 A. Yes. I can't say I was paying attention
7 to the whole thing.

8 Q. Okay.

9 A. But I was here.

10 Q. I'll try to cut this short. If not,
11 we'll go through it, but would you agree with me
12 that the FCC's definition in its rules in Section
13 51.319 defines a local loop that ILECs are required
14 or obligated to unbundle as expressly excluding
15 electronics used to provision advanced services?

16 A. I believe it goes on to say such as
17 DSLAMs, and if you go to the discussion in the UNE
18 Remand Order, it does specifically talk about
19 DSLAMs. At the time when the UNE Remand Order was
20 written and came out, this architecture was not
21 contemplated.

22 MR. BINNIG: I hate to do this, Your Honor,

1 but I'm going to move to strike everything after
2 her description of what the rule says. That is not
3 responsive to my question.

4 JUDGE WOODS: I agree; it was nonresponsive.
5 Your counsel can bring that out on redirect,
6 Ms. Carter, if she wish to.

7 THE WITNESS: Okay.

8 JUDGE WOODS: It will be stricken.

9 Q. Let's turn to page 8 of your testimony,
10 Ms. Carter. Actually, before I do that, let's go
11 to page 7, and I want to ask you about your answer
12 that appears about -- at the top of page 7 where
13 you're talking about your understanding of Section
14 13-517, the new Illinois legislation. Do you see
15 that?

16 A. Yes.

17 Q. Does Section 13-517 -- let me rephrase
18 that. Does the phrase Project Pronto appear
19 anywhere in Section 13-517?

20 A. No.

21 Q. Does the phrase DSL appear anywhere in
22 Section 13-517?

1 A. No.

2 Q. Okay. Would you agree with me that what
3 13-517 says is that certain incumbent LECs are
4 obligated to provide advanced telecommunications
5 services to a certain percentage of their customers
6 by 2005?

7 A. Yes. It says to 80 percent of their
8 customers.

9 Q. Now let's turn to page 8, and at the top
10 of page 8 it starts -- in my copy it's the second
11 line down from the top. You have a sentence where
12 you state: "The category of `advanced services
13 equipment' does not, despite Mr. Ransom's
14 suggestion, exist in the unbundling arena." Do you
15 see that?

16 A. Yes.

17 Q. I take it you would agree with me that
18 at least the FCC recognizes -- in the definition of
19 a local loop we just talked about recognizes a
20 category of advanced services electronics?

21 A. You're specifically referring to that
22 quote in --

1 Q. Yeah, I'm referring to the actual rule,
2 47 CFR 51.319(a)(1).

3 A. Yes.

4 Q. And would you also agree with me that in
5 the Project Pronto Waiver Order the FCC concluded
6 that ADLU cards were advanced services equipment?

7 A. In the context of the waiver, I would
8 agree with that.

9 Q. Since the UNE Remand Order came out in
10 November of 1999, would you agree that the FCC's
11 definition that we've looked at here has not
12 changed, the definition in 51.319?

13 A. Yes.

14 Q. Let's go to page 13 of your testimony,
15 Ms. Carter, and I'm looking at a paragraph that
16 begins in the middle of the page. It says: "The
17 third prong is also satisfied." Do you see that?

18 A. Yes, I do.

19 Q. About halfway down into that paragraph,
20 a little over halfway, there's a sentence that
21 reads: "Covad would have no way of deploying its
22 own DSLAM in an Ameritech remote terminal and

1 interconnecting with Ameritech's Pronto loops." Do
2 you see that?

3 A. Yes, I do.

4 Q. Are you familiar with the engineering
5 controlled splice arrangement that is a condition
6 to the FCC's Project Project Waiver Order?

7 A. Yes.

8 Q. Okay. Would you agree that that is a
9 way, a technical way for Covad to connect a DSLAM
10 collocated in an Ameritech remote terminal with the
11 sub-loop facilities?

12 A. I believe it's a technical way. I
13 believe what I'm discussing here is a constructive
14 denial, but I would agree that it is a technical
15 way.

16 Q. Okay. To your knowledge -- I asked this
17 of Mr. Gindlesberger, but I'll ask it of you. To
18 your knowledge, has Covad requested to collocate a
19 DSLAM in any Ameritech Illinois remote terminal
20 site?

21 A. I don't believe so.

22 Q. Let's move to page 24 of your testimony,

1 Ms. Carter, and I'm looking at your answer here,
2 and you list -- you say -- about five lines into
3 the answer you say: "Covad would like to offer
4 consumers several different types of DSL". Do you
5 see that?

6 A. Yes.

7 Q. And then you list several here. You
8 list, for example, symmetric DSL service such as,
9 in parentheses, (such as G.SHDSL). Do you see
10 that?

11 A. Right.

12 Q. Would you agree with me that with
13 symmetric DSL services, those services occupy the
14 entire frequency of the copper facilities so that
15 no sharing of voice and data services is possible
16 on those copper facilities?

17 A. At this time, yes.

18 Q. And then you also refer to different ATM
19 quality of services, and the one you reference here
20 is two: variable bit rate - real time and variable
21 bit rate - non-real time. Do you see that?

22 A. Yes.

1 Q. And would you agree with me that those
2 quality of services are not currently available on
3 the Alcatel LiteSpan NGDLCs?

4 A. I believe I even recognize that in my
5 testimony because I say when available in the
6 LiteSpan 2000.

7 Q. Okay. Were you here when Mr. Ransom
8 testified last week?

9 A. Yes.

10 Q. Are you aware that Alcatel has no plans
11 to develop a VBR capability for the LiteSpan
12 system?

13 A. I don't think Mr. Ransom actually stated
14 that. I think he said there was no plans for issue
15 11, but I don't think he inferred that they were
16 never going to do it.

17 Q. Let's move to page 28 of your testimony,
18 Ms. Carter, and I'm looking at the answer here at
19 the top of the page, and there's a sentence that
20 begins actually in the first line that talks about
21 if Covad is denied the ability to provide
22 competitive choice of service to entire

1 neighborhoods, the incentive -- you say "the
2 incentive of national companies like Mindspring,
3 Prodigy, and Avon to deal with Covad diminishes
4 intensely." Do you see that?

5 A. Yes.

6 Q. And you mentioned this in the next
7 sentence, but those three companies you mentioned,
8 Mindspring, Prodigy, and Avon, those are all
9 Internet service providers or ISPs. Is that
10 correct?

11 A. I don't believe Avon is an "ISP" per se.

12 Q. Okay.

13 A. But they do purchase services from us.

14 Q. You recognize Mindspring and Prodigy as
15 ISPs?

16 A. Yes.

17 Q. And would you agree with me that --
18 well, let me skip back for a second. You agree
19 with me that Ameritech Illinois does not provide
20 any retail ADSL services to end users in Illinois?

21 A. Well, I would hesitate to say yes
22 pursuant to the ASCENT decision which basically

1 established that the affiliate and the ILEC are one
2 in themselves.

3 Q. To your knowledge, has -- well, let me
4 put it this way. You recognize that under the
5 FCC's merger conditions that Ameritech Illinois is
6 prohibited from providing retail DSL service to end
7 users; that any such services have to be provided
8 through the affiliate which in Illinois is AADS?

9 A. I recognize that that was the case prior
10 to the ASCENT decision, but now that the ASCENT
11 decision is out there, I'm not so sure that that's
12 the case anymore.

13 Q. To your knowledge, has SBC or Ameritech
14 eliminated the separate affiliate status of AADS?

15 A. Not currently, but I believe Mr. Ellis
16 said they are considering it or looking into it.

17 Q. Okay. So at least currently,
18 recognizing the option that SBC has to discontinue
19 its affiliates if it chooses to do so, at least
20 currently it's AADS that provides retail DSL
21 services in Illinois to the best of your knowledge.

22 A. True.

1 Q. Okay. And doesn't AADS market its
2 retail DSL services to ISPs like Mindspring and
3 Prodigy?

4 A. I'm not aware who AADS markets its
5 product to.

6 Q. Well, let me ask this question then;
7 assuming that Ameritech Illinois were to deploy
8 Project Pronto and the only thing it was required
9 to provide was a broadband service, couldn't CLECs
10 purchase that broadband service and, in turn,
11 resell that to ISPs like Prodigy and Mindspring?

12 A. Assuming you could come to an agreement
13 on a contract, that's true.

14 Q. And if you could turn to page 35 of your
15 testimony, Ms. Carter, there's a question that
16 says: "What does Covad want this Commission to
17 provide?" Do you see that?

18 A. Yes.

19 Q. And then in the first bullet point you
20 talk about the end-to-end UNE from the OCD port to
21 the NID, with the ability to utilize any available
22 QoS, COS, or line card that is technically

1 feasible. Do you see that?

2 A. Yes.

3 Q. I want to focus on the last phrase, the
4 line card that is technically feasible. By that do
5 you mean line cards that are manufactured or
6 licensed by Alcatel for use in the LiteSpan system?

7 A. Assuming that the LiteSpan system is
8 deployed in that particular area, yes.

9 Q. And then on page 40 you begin a
10 discussion of the necessary and impair standard.
11 Do you see that?

12 A. Uh-huh.

13 Q. And in your answer, in the first
14 sentence of your answer there you say: "As I
15 mentioned above, the necessary and impair analysis
16 is not necessary in this case because the
17 Commission is not considering adopting new UNEs".

18 Do you see that?

19 A. Yes.

20 Q. Okay. Well, I guess I'm a little
21 confused because I read that on page 40, and then I
22 looked back on page 35, and what you list on page

1 35 is a bunch of UNEs. Isn't that right?

2 A. I believe they are a bunch of loops and
3 sub-loops.

4 Q. Okay.

5 A. Which is categorized as a UNE.

6 Q. Well, let's focus on some of these UNEs.

7 Under the third bullet point, individual UNEs

8 consisting of --

9 A. I'm sorry. Which page are you on?

10 Q. I'm back on page 35. I'm sorry.

11 A. That's okay. I just need to get back
12 there.

13 Okay. I'm there.

14 Q. Okay. The third bullet point refers to
15 individual UNEs consisting of and you have a bunch
16 of sub bullet points. Do you see that?

17 A. Uh-huh.

18 Q. Okay. One of the individual UNEs you
19 reference is a port on the ILEC-owned ADLU card.
20 Do you see that?

21 A. Yes.

22 Q. Can you point out to me anywhere in the

1 FCC's unbundling rules in Section 51.319 where they
2 define a port on the ILEC-owned ADLU card as a UNE?

3 A. Not specifically. They do talk about
4 the attached electronics to the loop, and they do
5 -- assuming that the Commission disagrees with that
6 assertion, they do talk about packet switching
7 being a UNE.

8 Q. Okay. And if you look at the next
9 bullet point, a port on the OCD in the central
10 office, can you point to me anywhere in the
11 Commission's unbundling rules in Section 51.319
12 where the FCC identifies that as a UNE?

13 A. Again, I believe my answer would be the
14 same. They identify the attached electronics as
15 part of the loop, which is a UNE. They also
16 identify that packet switching in itself is a UNE.

17 Q. Okay. And just to be clear, they
18 specifically exclude from their definition of a
19 local loop electronics used to provision advanced
20 services. Correct?

21 A. No. I believe what they say is they
22 exclude attached electronics used to provision

1 advanced services except for DSLAMs, and they go on
2 to state that -- if you look at the
3 packet-switching rules, they do state that packet
4 switching does have to be unbundled unless the ILEC
5 upholds the criteria, the criteria that's set
6 forth.

7 Q. Well, we'll get to the packet-switching
8 rules in a second. I want you to focus first on
9 the definition of a local loop.

10 A. Okay.

11 Q. In the Commission's rules. Do you agree
12 with me that that definition excludes electronics
13 used for provision of advanced services such as
14 DSLAMs?

15 A. Such as DSLAMs, correct.

16 Q. And with respect to packet switching,
17 would you agree that the Commission's rules provide
18 that incumbent LECs are not required to unbundle
19 packet switching unless the four conditions that
20 you discuss in your testimony are met?

21 A. I believe that it says the opposite of
22 what you just said. It actually states: "We find

1 that in this limited situation, requesting carriers
2 are impaired without access to unbundled packet
3 switching. Accordingly, incumbent LECs must
4 provide requesting carriers with access to
5 unbundled packet switching in situations in which
6 the incumbent has placed its DSLAM in a remote
7 terminal. This obligation exists --

8 JUDGE WOODS: Slower, please.

9 A. Oh, I'm sorry. "This obligation exists
10 as of the effective date of the rules adopted in
11 this Order. The incumbent will be relieved of this
12 unbundling obligation only if it permits a
13 requesting carrier to collocate a DSLAM in the
14 incumbent's remote terminal on the same terms and
15 conditions that apply to its own DSLAM."

16 Q. Okay. Now you just read a portion of
17 paragraph 306 of the UNE Remand Order. Is that
18 correct?

19 A. That's correct.

20 Q. And does the first sentence in that
21 paragraph say: "We decline at this time to unbundle
22 the packet-switching functionality except in

1 limited circumstances"? Is that the first sentence
2 of that paragraph?

3 A. Yes.

4 Q. Okay. Let's turn to the actual rule.
5 Okay? Look at 51.319. Okay?

6 A. Is that on Attachment 3?

7 Q. If you're looking at Appendix C.

8 A. Yes, I think I'm there are.

9 Q. And on page 6 of Appendix C. Do you
10 have that?

11 A. Yes.

12 Q. And do you see the italics packet -
13 switching capability?

14 A. Yes.

15 Q. And then there's a sub (a) and a sub
16 (b)?

17 A. Yes.

18 Q. And then sub (b) says: "An incumbent
19 LEC shall be required to provide nondiscriminatory
20 access to unbundled packet-switching capability
21 only where each of the following conditions are
22 satisfied", and then it lays out the four

1 conditions that you discuss in your testimony?

2 A. That's correct.

3 MR. BINNIG: Okay. I have no further
4 questions at this time, Your Honor.

5 JUDGE WOODS: Redirect?

6 MS. FRANCO-FEINBERG: Yes, Your Honor. Thank
7 you.

8 REDIRECT EXAMINATION

9 BY MS. FRANCO-FEINBERG:

10 Q. Ms. Carter, in response -- you discussed
11 with Ameritech's counsel the definition of a local
12 loop. Do you recall that?

13 A. That's correct.

14 Q. And you talked about with him exclusions
15 I think of attached electronics -- or I'm sorry --
16 what constitutes attached electronics, were or were
17 not excluded. Do you recall that?

18 A. Yes.

19 Q. And I think it was your testimony that
20 it's your understanding that the exclusion is
21 limited to a DSLAM? Is that correct?

22 A. Yes. If you look at the FCC's

1 discussion on packet switching, they're
2 specifically referring to a DSLAM.

3 Q. And what's the basis for your opinion
4 with respect to the -- I think you addressed the
5 UNE Remand Order?

6 A. Yes.

7 Q. Is that correct?

8 A. Yes.

9 JUDGE WOODS: Slower, please.

10 Q. I believe you addressed the UNE Remand
11 Order with Ameritech's counsel.

12 A. That's correct.

13 Q. And what's the basis or what is your
14 understanding of what the FCC had under
15 consideration at the time it issued its UNE Remand
16 Order?

17 A. What the FCC was looking at was packet
18 switching as it related to DSLAMs. I think the
19 Commission goes on and on to discuss the situation
20 where many CLECs have come into the market or DLECS
21 I should say have come into the market and
22 purchased DSLAMs, so they did not see a reason, as

1 you read their discussion, they did not see a
2 reason to unbundle the packet switching of the
3 DSLAM as a general matter. What they do say is
4 that there are limited circumstances in a remote
5 terminal setting where CLECs who are trying to
6 access small and medium-size business customers
7 would be impaired because they -- because of the
8 remote terminal.

9 Q. Okay. Is it your understanding that at
10 the time of the UNE Remand Order the FCC considered
11 SBC's Pronto architecture in developing or creating
12 its rules?

13 MR. BINNIG: I'll object. That's a legal
14 question.

15 JUDGE WOODS: She can answer.

16 A. I'm sorry. Can you repeat the question?

17 Q. Is it your understanding that the FCC
18 considered the Pronto architecture at the time it
19 issued or created its rules that are in the UNE
20 Remand Order?

21 A. No, it did not consider the Pronto
22 architecture. What it did consider at that time

1 and what it does mention is digital loop carriers
2 in general.

3 Q. Ms. Carter, in response to questions
4 relating to page 13 of your testimony that
5 Ameritech Illinois' counsel asked you, you stated
6 that it was technically possible to rely on an ECS,
7 but you indicated that essentially there was a
8 constructive denial on Covad's ability to
9 collocate. Do you recall that?

10 A. Yes.

11 Q. Can you explain what you meant by
12 constructive denial?

13 A. Yes. I think the issue that I'm
14 addressing here is the fact that under 251(c)(3) of
15 the Act, my reading of that says that they have to
16 provide UNEs at just, reasonable, and
17 nondiscriminatory terms -- rates, terms, and
18 conditions. If you look at what SBC is doing with
19 the Project Pronto architecture, essentially
20 they're taking a loop. It's a loop architecture,
21 and they are upgrading it to make it technically
22 and economically superior to what exists out there,

1 you know, in the past.

2 In order -- what they've also done, in
3 order for a CLEC to access this architecture,
4 they've created all these work-arounds. So we have
5 to get an ECS. We have to -- we can't, you know,
6 deploy at the remote terminal. I mean there's all
7 of these work-arounds that we have to do which
8 drives up the cost and creates delay. So my point
9 here is that because of that, that's a constructive
10 denial of our ability to access UNEs, which I think
11 the FCC has acknowledged in the past in regards to
12 collocation in itself.

13 MS. FRANCO-FEINBERG: Covad has no further
14 questions at this time.

15 MR. BINNIG: I have a few more questions.

16 RE CROSS EXAMINATION

17 BY MR. BINNIG:

18 Q. You've never been employed by the FCC,
19 correct?

20 A. That's correct.

21 Q. And you did not personally participate
22 in the UNE remand proceedings. Is that correct?

1 TORSTEN CLAUSEN
2 called as a witness on behalf of the Staff of the
3 Illinois Commerce Commission, having been first
4 duly sworn, was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. HARVEY:

7 Q. Mr. Clausen, do you have before you a
8 document consisting of 14 pages of text in question
9 and answer form?

10 THE WITNESS:

11 A. I do.

12 Q. Is that your direct testimony in this
13 proceeding?

14 A. It is.

15 Q. Do you have any changes to it?

16 A. Yes, I have a few minor changes. On
17 page 6, line 120, there should be a space inserted
18 after the word "Ameritech", between "Ameritech" and
19 the word "proffers".

20 An additional change is on page 10, line
21 230. The answer starts with "Yes," and there
22 should be a lower case t instead of a capital T for

1 the word "this".

2 And then on page 13, line 297, the
3 answer says: "As described above, when Alcatel..."
4 Alcatel is misspelled. There should be an "e" for
5 the last "a".

6 That's all the changes.

7 Q. Thank you, Mr. Clausen. And those are
8 the only corrections?

9 A. Correct.

10 MR. HARVEY: Understanding that this has been
11 stipulated to, I'll move it into evidence at this
12 point in time.

13 JUDGE WOODS: It's admitted without objection.

14 (Whereupon ICC Staff
15 Rehearing Exhibit 1.0 was
16 received into evidence.)

17 MR. HARVEY: And I'll proffer the witness for
18 cross, having apparently misspelled the word in the
19 testimony.

20 JUDGE WOODS: The witness is available for
21 cross.

22

1 CROSS EXAMINATION

2 BY MR. BINNIG:

3 Q. Good morning, Mr. Clausen.

4 A. Good morning.

5 Q. If could you turn to page 3 of your
6 testimony, and particularly at lines 66 and 67, and
7 you assert there -- I'm going to just quote this.
8 "However, operational and administrative obstacles,
9 particularly the lack of space in RTs, often would
10 make collocation at the RT impossible." Do you see
11 that?

12 A. Correct. I see that.

13 Q. Can you identify for me, Mr. Clausen,
14 any specific Ameritech Illinois RT site in which
15 collocation is impossible?

16 A. Could I name some RT sites off the top
17 of my -- no, I couldn't.

18 Q. Can you identify for me, Mr. Clausen,
19 any specific Ameritech Illinois RT site at which a
20 CLEC has requested to collocate a DSLAM and
21 Ameritech Illinois has refused that request?

22 A. No, but I was just in the room when

1 Ms. Carter testified so, or Mr. Gindlesberger, so I
2 don't think they made a request. That was Covad
3 and listening to the other CLEC witnesses, I don't
4 think there was a request in Illinois.

5 Q. And I'll try not to belabor this, but we
6 went over this I think in the underlying case, but
7 you're aware, are you not, that in the Project
8 Pronto waiver proceedings that the SBC ILECs made
9 certain commitments regarding the enlargement of RT
10 sites, and those commitments were incorporated as
11 conditions in the FCC's Project Project Waiver
12 Order?

13 A. Correct, they are in there.

14 Q. And then in the next sentence here at
15 the bottom on page 3 carrying over on to page 4 you
16 say: "Even where RT collocation is possible, the
17 number of customers served by a single RT often
18 makes leasing collocation space an excessively
19 costly alternative on a per-customer basis." Do
20 you see that?

21 A. Yes.

22 Q. Can you identify for me, Mr. Clausen,

1 any specific Ameritech Illinois RT site where
2 leasing collocation space is an excessively costly
3 alternative on a per-customer basis?

4 A. No. With that narrow question, no, I
5 cannot identify a specific RT site.

6 Q. What I'm getting at is you haven't
7 yourself performed any cost study or economic
8 analysis of whether the costs of leasing
9 collocation space at any Ameritech Illinois RT site
10 is an excessively costly alternative. Correct?

11 A. That is correct, and I want to add to
12 that that I did see some evidence presented by
13 James Keown in this proceeding who for the purposes
14 of his assumptions used an example of a CLEC having
15 I believe two or three customers per RT site, and I
16 don't think it requires an in-depth analysis to
17 show that such a collocation at an RT is not
18 necessarily an economically feasible alternative in
19 many instances. I think that's what this sentence
20 is referring to.

21 Q. If you could turn to page 4 -- I guess
22 we're on page 4. Move further down the page.

1 Beginning at line 85, you say: "However, in areas
2 where Ameritech initially served communities by an
3 'old' fiber-fed DLC architecture, spare copper
4 loops connecting the RT with the CO are typically
5 unavailable." Do you see that?

6 A. Yes.

7 Q. Okay. You can't identify for me,
8 Mr. Clausen, what portion or percentage of
9 Ameritech Illinois' outside loop is served by this
10 "old" DLC. Is that right?

11 A. I couldn't give you the percentage, no.

12 Q. And you haven't done any analysis of
13 that. Is that correct?

14 A. Correct.

15 Q. And then at lines 87 to 88, you assert
16 here that many of the copper loops being replaced
17 by Project Pronto are probably incapable of
18 delivering advanced services because of their
19 considerable lengths. Do you see that?

20 A. Yes.

21 Q. Okay. And, again, you can't identify
22 for me how many such excessive length copper loops

1 exist in Ameritech Illinois' outside plant. Is
2 that correct?

3 A. That is correct. I want to add that
4 Ameritech's intention with the Project Pronto --
5 Ameritech Illinois' intention with Project Pronto
6 is essentially to extend the reach of its customer
7 base. Of course the numbers we are hearing in this
8 proceeding and in other proceedings is that they're
9 trying to increase it, the reach, from 40 percent
10 to 80 percent of the customer base, so I'm
11 definitely assuming there are copper -- all copper
12 loops in the plant that just do not support the DSL
13 services Ameritech Illinois wants to provide
14 because of their length.

15 Q. Okay. But you don't know how many of
16 those loops there are. Is that right?

17 A. No, I do not.

18 Q. Okay. Down at the bottom of page 4,
19 beginning on line 95, you have a sentence that
20 begins: "The very fact that SBC viewed the existing
21 alternatives as", and it continues on page 5,
22 "insufficient in order to provide ubiquitous DSL

1 coverage is itself a strong argument for unbundling
2 Project Pronto." Do you see that?

3 A. Yes.

4 Q. I take it here that what you are talking
5 about in terms of your claim that SBC viewed the
6 existing alternatives as insufficient is Ameritech
7 Illinois' -- its planned investment in Project
8 Pronto DSL facilities. Is that what you're talking
9 about?

10 A. Is that the alternative or is that the
11 choice?

12 Q. Well, is that the basis for your claim
13 that SBC viewed the existing alternatives as
14 insufficient that they planned to make an
15 investment in the Project Pronto DSL facilities?

16 A. That is correct.

17 Q. And that investment in DSL facilities
18 consists of the planned investment in OCDs, in the
19 OC-3c fiber facilities, and the NGDLCs at the RT
20 sites. Is that correct?

21 A. Correct.

22 Q. Okay. And that was all new investment

1 that Ameritech Illinois had planned to make. Is
2 that correct?

3 A. It's my understanding that's new
4 investment, yes.

5 Q. Okay. So Ameritech Illinois, if it were
6 to make that investment, would have to spend money
7 to purchase and install that new equipment. Is
8 that right?

9 A. Correct.

10 Q. And it would have to buy that equipment
11 from third-party manufacturers like Cisco and
12 Alcatel. Correct?

13 A. Correct.

14 Q. And other telecommunications companies
15 can buy that same equipment from Cisco and Alcatel
16 if they choose to do so. Is that correct?

17 A. Sure.

18 Q. Moving down on page 5, beginning at
19 lines 106 through 116, you begin discussing the
20 HFPL UNE. Do you see that?

21 A. Yes.

22 Q. And I think you quote here from the Line

1 Sharing Order, beginning on line 111 and then again
2 on line 113. Is that right?

3 A. That's right.

4 Q. Have you reviewed the Common Carrier
5 Bureau's clarification letter dated I think
6 February 22, 2001? It was actually released
7 February 23, 2001.

8 A. I'm not sure I have it. Maybe if I
9 could take a look at it.

10 Q. I can give you a copy here.

11 (Whereupon said document
12 was provided to the witness
13 by Mr. Binnig.)

14 A. I've read it.

15 Q. You've seen this before?

16 A. I think I did, yes.

17 Q. Okay. So I take it you agree that the
18 FCC in this order clarification said specifically,
19 and I'm looking at the second sentence here, that
20 "We clarify that the line sharing reconsideration
21 order in no way modified the criteria set forth in
22 the Commission's UNE Remand Order regarding the

1 unbundling of packet-switching functionality." Do
2 you see that?

3 A. I see that.

4 Q. And the next sentence they say: "We
5 clarify that the line sharing reconsideration order
6 does not alter Section 51.319(b)(5) of the
7 Commission's rules which describes the limited set
8 of circumstances under which an incumbent LEC is
9 required to provide nondiscriminatory access to
10 unbundled packet-switching capability."

11 A. I see that.

12 Q. And you didn't reference this order
13 clarification in your testimony, did you?

14 A. I did not for some reason.

15 Q. Let's move to page 7 of your testimony,
16 Mr. Clausen, at lines 163 to 164, and you're here
17 describing the major benefits of the requirements
18 that were ordered by the Commission, and you say
19 that each competitor can use the inherent features
20 and capabilities of the NGDLC even where Ameritech
21 itself is either not ready or decides not to employ
22 the additional capabilities. Do you see that?

1 A. I see that.

2 Q. I'm going to ask you a hypothetical,
3 Mr. Clausen, and I want to see if you'll agree with
4 me. Here's the hypothetical.

5 Okay. I want you to assume that Alcatel
6 develops a new line card for the LiteSpan 2000
7 NGDLC as well as a new software release that
8 supports a high-speed SDSL product. Okay?

9 A. Okay.

10 Q. And that SDSL product uses a lot of
11 bandwidth so that the number of customers that
12 could be served by the NGDLC falls from about 700
13 customers to less than 200.

14 A. Okay.

15 Q. Can you assume all that?

16 A. Sure.

17 Q. In your opinion, would that be a good
18 thing if that happened?

19 A. It all depends on the pricing you employ
20 for the SDSL offering. I don't think I can give a
21 definite answer whether that's a good or bad idea
22 unless we know what Ameritech is allowed to charge

1 for deploying such an SDSL line card and the
2 underlying service with it. I believe that such a
3 pricing should definitely reflect the greater
4 bandwidth requirements that the service commands,
5 and so, again, it really depends on what pricing
6 you attach to such a service offering, and if the
7 price is right, then it doesn't really matter how
8 much bandwidth it takes up. If the price is right,
9 if the price reflects the additional bandwidth it
10 takes up, it is a good idea.

11 Q. Okay. Let's turn to page 8 of your
12 testimony, and at lines 171 through 174 you give an
13 example of when Intel announces a new faster, more
14 capable microprocessor, the majority of consumers
15 purchasing a PC in the first few months following
16 such announcement are likely to buy a model that
17 has the previous generation of microprocessor built
18 into it. Do you see that?

19 A. Yes.

20 Q. I want to talk about this example that
21 you give here. Isn't it correct that the PC makers
22 themselves, like Dell, Hewlett Packard, Compaq,

1 Gateway, decide what chips and features to put in
2 their computers?

3 A. Well, they have a variety of offerings.
4 If you go to Dell, Compaq, or HP, you can choose
5 from a number of hard drives. You can choose from
6 a number of graphics cards. You can choose from a
7 number of sound cards. You can specify the RAM you
8 want. So they certainly have a variety of
9 offerings for the customer.

10 Q. Okay, but it's the PC makers themselves
11 that decide what features and attributes they're
12 going to make available to the purchasers of their
13 computers.

14 A. Correct. If you want to talk about
15 Dell, Compaq, and HP, that certainly is the case
16 because they are trying to bundle these pieces and
17 put it into one computer, put it into one set and
18 sell it to the customers. If you want to talk
19 about a customer going out and buying all the piece
20 parts themselves, you can do that. I can go out
21 and buy my own graphics card. I can go buy a
22 mother board. I can buy the chip and some other

1 cards that I want with that PC because nobody else
2 is offering it, and I can -- if I choose to do so,
3 if I really want to be such a geek to get it all
4 together myself, I can do that.

5 (Laughter)

6 Not necessarily I want to.

7 Q. I take it you haven't done that.

8 A. No, not yet.

9 Q. Let me cut to the chase a little,
10 Mr. Clausen. You agree with me that Dell doesn't
11 tell Compaq what pieces Compaq puts in its PCs,
12 correct?

13 A. I don't know. I don't think they do,
14 no.

15 Q. Okay. And likewise, Compaq doesn't tell
16 Dell what microprocessors and other pieces of
17 equipment Dell puts in its computers. Correct?

18 A. That's correct.

19 Q. Let's move to page 13 of your testimony,
20 Mr. Clausen, and here -- I want to refer you to
21 lines 277 to 279, but to put this in context,
22 you're talking about your proposal that the

1 Commission establish an NGDLC UNE -P. Is that
2 correct?

3 A. Correct.

4 Q. And essentially what you're recommending
5 is that the Commission require Ameritech Illinois
6 to tariff as a UNE platform, an end-to-end
7 platform, its existing broadband services. Is that
8 correct?

9 A. That is correct.

10 Q. And then you also say here that to
11 ensure CLECs have the ability to specify
12 alternative line cards, Ameritech should be
13 required to offer a new version of the NGDLC UNE
14 platform as soon as either Alcatel or a licensed
15 manufacturer issues a new line card. Do you see
16 that?

17 A. Yes.

18 Q. I'm trying to figure out exactly how you
19 envision that, that process working. Is it your
20 view that Ameritech should be required to
21 immediately tariff these new versions of the
22 platform without any opportunity to establish

1 whether the new platform is technically feasible or
2 economically sensible?

3 A. No, that's not my proposal. I think, in
4 reality, when we're talking about a new line card,
5 it would really surprise me if that new line card
6 wouldn't be used by SBC themselves at least in some
7 part of the territory, and since SBC is still the
8 -- right now is one of the major purchasers of this
9 equipment, it certainly has a major portion of the
10 demand for those line cards behind it, so if a new
11 line card gets developed by Alcatel or a licensed
12 manufacturer, I would assume part of that new
13 product offering is a result of SBC's demand for
14 such a line card.

15 What I'm trying to say here is that if
16 such a line card becomes available, SBC or in this
17 case Ameritech Illinois should be required to offer
18 a new version of this NGDLC UNE -P and certainly
19 will attach some terms and conditions on such an
20 offering as it does today for its current broadband
21 service offering, and that should be I call it the
22 base line offering that they're tariffing, and this

1 is a tariff proceeding, and so that's really all
2 I'm advocating.

3 If there are additional issues that need
4 to be worked out, I don't think the tariff is the
5 appropriate place to accommodate all concerns of
6 all parties, including Ameritech Illinois.

7 Q. But do you envision some type of
8 procedure that before -- let's talk about a
9 hypothetical example where Alcatel develops a line
10 card and Ameritech Illinois concludes on its own
11 that it thinks that deployment of that line card
12 creates difficult technical problems or would make
13 no economic sense. Okay? Would Ameritech Illinois
14 have a procedure available to it to try to
15 establish those tenets with the Commission before
16 it would have to file a new tariff?

17 MR. HARVEY: I am sorry, Mr. Binnig. The word
18 -- was the word you used tenets?

19 MR. BINNIG: Tenets, T-E-N-E-T-S.

20 A. Like I just said in my earlier answer, I
21 believe that such a new tariff requirement has some
22 terms and conditions that Ameritech will put

1 forward when it proposes a new tariff offering as
2 it does with any tariff filing here at the
3 Commission. It does attach the appropriate
4 language that goes with such an offering.
5 Therefore, the appropriate venue is right then
6 right there when Ameritech decides to file a new
7 tariff that reflects a new line card and new
8 service.

9 Q. I guess what I'm having trouble
10 understanding, Mr. Clausen, that if Ameritech is
11 required to file a tariff establishing a new NGDLC
12 UNE platform when Alcatel releases a card for the
13 LiteSpan system, NGDLC line card for the LiteSpan
14 system, when would they have the opportunity to
15 object to the deployment of that new NGDLC UNE
16 platform on the grounds that it's either not
17 technically feasible or that it makes no economic
18 sense?

19 A. Well, that offering, that new line card
20 won't go into effect until the Commission approves
21 it in an appropriate tariff, so I don't really see
22 your concern of -- I this what you're getting at is

1 CLECs jumping at Ameritech as soon as a new line
2 card comes out and Ameritech has no control over
3 it. Is that what you're --

4 Q. That's exactly what I'm getting at.

5 A. Yeah, and I think as with any tariff
6 filing, if the LEC wants to purchase something from
7 Ameritech Illinois out of a tariff, the tariff has
8 to be established first, so I think that really
9 addresses your concern.

10 What I just mentioned earlier, if
11 Ameritech files a tariff, there's language that
12 goes with it where they specify their desired
13 version of the terms and conditions for that new
14 tariff filing, and that's the appropriate venue to
15 examine that language, and only after the
16 Commission approves it then that tariff will go
17 into effect.

18 Q. Okay. Now, in order for there to be a
19 contested tariff proceeding, the Commission would
20 have to suspend the tariff, wouldn't it?

21 A. Well, it all depends. I think there's
22 several other opportunities, especially under the

1 new law. Again, I'm not a lawyer. I don't want to
2 go into specifics, but it's my understanding that
3 the Commission could approve a temporary tariff and
4 then -- let a temporary tariff go into effect while
5 investigating some of the merits of the underlying
6 language.

7 Q. Okay. Is what you're suggesting, just
8 to try to get to nuts and bolts here, what you're
9 suggesting is that Ameritech Illinois would
10 essentially have to object to or contest its own
11 tariff filing in order to get a proceeding in front
12 of the Commission?

13 A. No, not at all. I think if a new line
14 card comes out, Ameritech has the first shot at
15 establishing the terms and conditions that go with
16 that new line card offering, so it's in Ameritech's
17 hands to make the first tariff filing, so I don't
18 really see how Ameritech needs to contest its own
19 tariff filing.

20 Q. What if Ameritech Illinois concludes
21 that it's either technically infeasible or it makes
22 no economic sense to provide a new NGDLC UNE with a

1 new line card?

2 A. Well, you just mentioned two cases. The
3 first one, technically infeasible, I don't think
4 that really in the real world will ever be a case
5 because we're talking about Alcatel line cards or
6 licensed by Alcatel, so I really don't think that
7 applies.

8 The second example you mentioned is
9 economically infeasible. Again, that goes all back
10 to the pricing of that service offering. If the
11 price is right, if the TELRIC is right for such a
12 service offering and takes into account all the
13 bandwidth, all the resources it uses up, from an
14 economic standpoint that's exactly what is required
15 to be efficient.

16 Q. I guess I have a couple more questions,
17 Mr. Clausen, based on that answer. Is what you're
18 saying is that -- is your recommendation is that if
19 Alcatel comes out with a new line card, that
20 Ameritech Illinois should be under a continual duty
21 to file new tariffs providing a new platform that
22 utilizes that line card? Is that your

1 recommendation?

2 A. I think it is, yes.

3 Q. Okay. You would agree with me that
4 before an ILEC can provide a service, it has to
5 basically establish an infrastructure to support
6 that service, including provisioning systems,
7 training personnel, etc., etc.?

8 A. Correct.

9 Q. Okay. You would agree with me that
10 before Ameritech Illinois files tariffs for new
11 services, it goes through that development process
12 so it's able to provision the service when the
13 tariff is filed?

14 A. I completely agree, but I'm just having
15 a little trouble accepting all the implications
16 you're putting behind it. We are talking about a
17 line card. I mean we're talking about -- we're not
18 talking about putting in a whole new infrastructure
19 or a whole new type of services that nobody ever
20 offered before. It's just a new line card. It's a
21 new type of DSL services, and the examples you just
22 gave about training and developing and all, I

1 certainly do not see that to be extensive for a new
2 line card.

3 MR. BINNIG: No further questions, Your Honor.

4 JUDGE WOODS: Redirect? Oh, I'm sorry,
5 Mr. Schiffman.

6 MR. SCHIFMAN: Yes, I have some cross, Your
7 Honor.

8 JUDGE WOODS: All right.

9 CROSS EXAMINATION

10 BY MR. SCHIFMAN:

11 Q. Mr. Clausen, in your testimony you talk
12 about line card collocation, correct?

13 A. Correct.

14 Q. You don't think that's necessarily a bad
15 idea, right? That the CLECs should be able to
16 collocate line cards?

17 A. No, that's --

18 Q. Virtually? I'm sorry. I meant to
19 qualify my question by saying virtually collocate
20 line cards.

21 A. I would agree it's not necessarily a bad
22 idea. It really depends on the additional costs

1 that such a virtual collocation requirement would
2 impose on the ILEC.

3 Q. And if it were found here in this
4 hearing that the costs that Ameritech Illinois is
5 claiming are not substantiated, then you would
6 agree that the virtual line card collocation would
7 be a good idea.

8 MR. HARVEY: I'm not sure that costs are
9 entirely at issue at this hearing.

10 MR. SCHIFMAN: No, the costs for line card
11 collocation, not how much it costs the CLEC to buy
12 that from Ameritech, but how much it costs
13 Ameritech to implement a virtual line card
14 collocation requirement.

15 MR. HARVEY: Fair enough.

16 A. Again, I believe that that might be the
17 case. It might be the case that Ameritech's claim
18 of additional costs do not materialize, but I also
19 believe that the same goal could be achieved
20 through an end-to-end service offering that is made
21 available as a UNE which then gives the CLECs the
22 right to influence some of the terms and conditions

1 that go along with such a UNE offering, and, again,
2 I believe the goal could be achieved in a different
3 way.

4 Q. On page 11 of your testimony,
5 Mr. Clausen, you talk about a tariffed NGDLC UNE
6 platform offering which would consist of SBC's
7 current broadband service. Do you see that on
8 lines 248 and 249?

9 A. Correct.

10 Q. Okay. Are you talking about here that
11 the platform that you're suggesting should include
12 all the features, functionalities, and capabilities
13 of the NGDLC system that Ameritech is deploying?

14 A. Well, in general, yes, but that really
15 is a broad statement when you talk about all the
16 inherent features, capabilities, and functions.
17 Going back to my proposal, that's one of the
18 reasons I'm proposing to use SBC's current
19 broadband service offering as a starting point for
20 this tariff proceeding for them to be required to
21 file this broadband service offering as a UNE, and
22 I don't think that tariff offering can be a

1 catchall for all interested parties. I certainly,
2 you know, see issues that probably will still come
3 up in arbitrations over interconnection agreements
4 between individual carriers.

5 Q. One of the things that you're suggesting
6 though is that when cards that go beyond the
7 current ADLU cards, when those become available,
8 that CLECs should be able to get access to those
9 cards in the Ameritech LiteSpan system. Right?

10 A. Correct.

11 Q. Okay. And you would expect a tariff
12 that you're supporting here would say something to
13 that effect, such as when new cards are available,
14 CLECs should be able to designate those cards and
15 tell Ameritech to place them in their LiteSpan
16 systems.

17 A. I think I would propose some language
18 similar to a sentence that would state this NGDLC
19 UNE platform offering will be modified or Ameritech
20 will be required to file a modified tariff offering
21 as soon as a new line card becomes available.

22 Q. Mr. Clausen, if language like that is in

1 the tariff, would you agree with me that Ameritech
2 may not file a tariff that CLECs like?

3 A. That happens all the time.

4 Q. Right. And would you agree with me that
5 if that were the case, we'd be right back here in
6 this hearing room asking the Commission to revise
7 the tariff again?

8 A. Not necessarily. Again, I think the
9 tariff itself could be something similar to what's
10 in place right now. An additional tariff with a
11 new line card could be similar to what's in place
12 right now, and, again, I don't think the tariff
13 proceeding is the right place to be a catchall for
14 all issues that carriers need to hammer out with
15 Ameritech, and, again, I think the appropriate
16 place for that will probably be the individual
17 interconnection agreements with some of the
18 carriers to get into more detail, which I believe
19 the tariff is probably not the right place.

20 Q. Would you agree with me, Mr. Clausen,
21 that the more detail that the Commission gives
22 here, the more guidance that the Commission gives

1 here in its order, the better off CLECs will be
2 when we get to interconnection negotiations with
3 Ameritech?

4 A. I agree.

5 MR. SCHIFMAN: I have nothing further.

6 JUDGE WOODS: Anyone else have cross?

7 Mr. Harvey.

8 MR. HARVEY: A couple, three questions on
9 redirect.

10 REDIRECT EXAMINATION

11 BY MR. HARVEY:

12 Q. Mr. Clausen, Mr. Binnig asked you a
13 number of questions, starting on page 4 of your
14 testimony, with respect to -- well, I'm probably
15 asking you two questions regarding lines 85 and 86.
16 Do you see that line and do you remember that
17 exchange with Mr. Binnig?

18 A. Yes.

19 Q. You said that you could not estimate the
20 number of areas in the Ameritech Illinois service
21 territory which were served by "old" fiber-fed DLC
22 architecture, did you not?

1 A. I did say that, yes.

2 Q. Are you aware that there are such areas
3 in the Ameritech Illinois service territory?

4 A. According to Ameritech, there are some,
5 yes.

6 Q. Okay. Essentially the same question
7 with respect to lines 87 and 88. Are you aware of
8 copper loops being replaced by Project Pronto being
9 incapable of delivering services because of their
10 -- are you aware of such --

11 JUDGE WOODS: Are you what?

12 MR. HARVEY: I will withdraw the question
13 since it was as inartfully stated as any question
14 has been over the last several days.

15 Q. Mr. Binnig asked you if you could
16 estimate the number of loops in the Ameritech or
17 the percentage of loops in the Ameritech Illinois
18 service territory that were of excessive length.
19 Do you remember that?

20 A. I remember that.

21 Q. Are you aware whether or not there are
22 such loops in the Ameritech Illinois service

1 territory?

2 A. I am aware that a lot of customers want
3 to get DSL services and they cannot get it because
4 of the considerable length of the loop.

5 Q. Okay. And one final question with
6 respect to lines 95 through 97 of your testimony.
7 Do you remember the conversation you had with
8 Mr. Binnig about those lines?

9 A. I do.

10 Q. Do you remember that he asked you a
11 question -- he asked you to agree with him that
12 CLECs could purchase all of the things that
13 Ameritech Illinois could purchase from vendors to
14 implement a Project Pronto type of architecture,
15 correct?

16 A. In theory, that is correct.

17 Q. What, in your opinion, do CLECs lack
18 that Ameritech Illinois has to implement such an
19 architecture?

20 A. Well, I don't think it's a secret that
21 CLECs lack the infrastructure in place, meaning the
22 outside loop plant, that Ameritech as an ILEC

1 already has in place, the equipment Mr. Binnig was
2 referring to as an upgrade to the existing loop
3 that is out there from the ILEC, so, of course,
4 that is something the CLECs do not have available
5 to them.

6 MR. HARVEY: Nothing further on redirect.

7 JUDGE WOODS: Anything else?

8 MR. BINNIG: Yes.

9 RE CROSS EXAMINATION

10 BY MR. BINNIG:

11 Q. Going back to the loops of excessive --
12 copper loops of excessive length, do you agree,
13 Mr. Clausen, that if Ameritech Illinois does not
14 deploy its Project Pronto facilities, that those
15 consumers are worse off?

16 A. Could you explain? I don't think I got
17 the question.

18 Q. Let me try to rephrase the question.
19 You talked about consumers not being able to get
20 DSL services because their copper loops were of
21 excessive length. Do you recall that?

22 A. Correct.

1 Q. Okay. Would you agree that if Ameritech
2 Illinois does not deploy its Project Pronto DSL
3 facilities, that those consumers are worse off?

4 MR. HARVEY: I think we have to determine
5 compared to what.

6 A. I was just going to ask that.

7 Q. Worse off compared to if Ameritech
8 Illinois did deploy the Project Pronto DSL
9 facilities.

10 A. I guess it depends if there are
11 alternatives to Ameritech's DSL service offering ,
12 but by looking at the complaints the Consumer
13 Services Division is receiving and by looking at
14 the overall market in Illinois, there are a lot of
15 areas in Illinois where they don 't have an existing
16 alternative, so in that case I would agree with you
17 that customers definitely are worse off if they do
18 desire high-speed Internet access, and I believe
19 there's a growing number of customers who do desire
20 that.

21 Q. Okay. And would you also agree,
22 Mr. Clausen, that CLECs that may be interested in

1 providing DSL service to those consumers, that
2 those CLECs would be worse off if Ameritech did not
3 deploy Project Pronto DSL facilities compared to a
4 situation if it did deploy Project Pronto DSL
5 facilities?

6 A. I think I would agree with that.

7 MR. BINNIG: Nothing further, Your Honor.

8 MR. HARVEY: I hate to say it, but I do have
9 one.

10 REDIRECT EXAMINATION

11 BY MR. HARVEY:

12 Q. Mr. Clausen, you have been asked to
13 assess the relative merits of consumers being with
14 or without DSL service. What would you consider,
15 in your opinion, to be the best possible state of
16 affairs for consumers with respect to the
17 availability and variety of DSL service?

18 A. The best state of the world, obviously,
19 would be competing technologies, competing DSL
20 offerings that would suit the need of consumers out
21 there. I don't believe there's demand for one
22 particular type of service. I think there's a

1 variety of services that consumers demand, so in an
2 ideal world we definitely want to satisfy all those
3 consumer demands.

4 MR. HARVEY: Fair enough. Nothing further.

5 JUDGE WOODS: Okay. Thank you, Mr. Clausen.

6 (Witness excused.)

7 JUDGE WOODS: Let's take a break until 10:30.

8 (Whereupon a fifteen-minute
9 recess was taken, during
10 which Ameritech Illinois
11 Rehearing Exhibits 10.0,
12 10.0P, 10.1, and 10.1P were
13 marked for identification.)

14 JAMES E. KEOWN

15 called as a witness on behalf of Ameritech
16 Illinois, having been first duly sworn, was
17 examined and testified as follows:

18 DIRECT EXAMINATION

19 BY MR. LIVINGSTON:

20 Q. We've marked your testimony as 10.0,
21 10.0P, 10.1 and 10.1P, 10.0 being your direct and
22 10.1 being your rebuttal. Do you have any

1 corrections or changes you'd like to make,
2 Mr. Keown?

3 THE WITNESS:

4 A. Yes, I do. In my direct testimony, page
5 1, line 15, I want to change the word "Inc." to
6 "L.P."

7 On page 17 of my direct testimony at
8 line 28, I want to insert the words "behind NGDLC"
9 between "length" and "in". So the sentence would
10 now read: "The designed goal for Project Pronto is
11 to limit the copper loop length behind NGDLC in
12 Pronto wire centers to 12 kilofeet."

13 MR. TOWNSLEY: Can we go off the record for a
14 second?

15 JUDGE WOODS: Yes, we may.

16 (Whereupon at this point in
17 the proceedings an
18 off-the-record discussion
19 transpired.)

20 MR. LIVINGSTON: Go ahead.

21 A. In my rebuttal testimony, at page 2 on
22 line 4, delete the word "are". Where it says

1 "customers are", delete "are" and the words will be
2 added "will not". So the sentence will now read:
3 "Customers will not be moved to the Pronto NGDLC
4 network unless they purchase DSL service from a
5 provider."

6 On page 5 of my rebuttal testimony, at
7 line 13, the word "or", O-R, should have been O-F,
8 "of". Those are all the correction I have.

9 MR. SCHIFMAN: Off the record.

10 (Whereupon at this point in
11 the proceedings an
12 off-the-record discussion
13 transpired.)

14 MR. LIVINGSTON:

15 Q. Does that conclude your changes and
16 corrections?

17 A. Those are all the corrections I have.

18 MR. LIVINGSTON: Move the admission of 10.0,
19 10.0P, 10.1, and 10.1P.

20 JUDGE WOODS: By stipulation.

21 (Whereupon Ameritech
22 Illinois Rehearing Exhibits

1 10.0, 10.0P, 10.1, and 10.1P
2 were received into
3 evidence.)

4 MR. LIVINGSTON: Your Honor, at the beginning
5 of the proceedings we were given leave to respond
6 orally to Danny Watson's supplemental reply
7 testimony dated July 13. We responded to part of
8 that in supplemental direct at the beginning of
9 Chris Boyer's testimony on the stand here live. We
10 have additional parts of the supplemental reply
11 testimony of Danny Watson to which Mr. Keown will
12 respond, and I'd like to do that questioning at
13 this time.

14 JUDGE WOODS: Sounds good to me.

15 MR. LIVINGSTON: Okay.

16 Q. Do you have a copy of Mr. Watson's
17 supplemental reply testimony?

18 A. I do.

19 Q. Could you turn, please, to page 5? On
20 page 5 near the top, and I'm referring to lines 1
21 through 4, basically lines 3 and 4. Mr. Watson is
22 referring to the LiteSpan Release 10.2. Do you see

1 that?

2 A. I do.

3 Q. And he says that under that release,
4 only one PVP per channel bank assembly is
5 supported. Do you see that?

6 A. Yes, I do.

7 Q. Is that a true statement?

8 A. That's correct.

9 Q. He then refers to that as a feature
10 deficiency. Do you see that?

11 A. I do.

12 Q. And I think in the balance of the page,
13 I won't disclose what's in confidential brackets,
14 but in the balance of that paragraph at least
15 Mr. Watson testifies in sum and substance that
16 Release 11, the adoption of Release 11, will cure
17 that feature deficiency. Do you see that?

18 A. I do.

19 Q. Okay. Is Release 11 a complete solution
20 to what Mr. Watson refers to as a feature
21 deficiency?

22 A. I do not believe that that is a complete

1 cure for what Mr. Watson characterizes as a
2 deficiency.

3 Q. Why is that?

4 A. The reason I don't is, first of all, I
5 have to qualify that by saying that with Release
6 11, we do not have a feature description or feature
7 specification for what multiple PVPs will do or how
8 they will behave in the LiteSpan 2000 nor has that
9 been tested. In addition, realizing how the actual
10 physical facility attaches to the channel bank
11 itself, there's still just one physical attachment,
12 so multiple PVPs will still have to go through that
13 one attachment from that single channel bank. So
14 as I've described in some of my rebuttal testimony,
15 there is still a robbing, if you will, of capacity,
16 either electronics or bandwidth, from the channel
17 bank.

18 In addition to that, the documentation
19 that's attached to my rebuttal from Alcatel
20 indicates that there is no way for us to manage
21 that feature, and if they're developing it, we
22 certainly would have expected that they would know

1 whether we could or not. So not being able to
2 manage that feature becomes a real problem for us.

3 Q. If you can't manage the feature, is it
4 possible that a PVP could grow beyond its assigned
5 bandwidth?

6 A. Yes, it is possible.

7 In my home I have just gotten DSL
8 service, as a matter of fact, and my speeds are 128
9 by 384. I also run on my computer a program called
10 NetMedic which let's you see how much bandwidth
11 you're actually consuming, and I've watched my
12 download speed spike up as high as 500 kilobits
13 even though my service is 384, but with a UBR type
14 service that's not uncharacteristic, and with some
15 of the other ATM quality of services in the Alcatel
16 LiteSpan or on any packet network it's not unusual
17 for PVCs to spike.

18 Q. Refer, please, to page 6 and 7. Here
19 Mr. Watson is talking about means that he proposes
20 for expanding throughput capacity. Correct?

21 A. Yes, I see that.

22 Q. And he talks about a couple means. One

1 is un-daisy chain, and Mr. Boyer talked about that.

2 A. Uh-huh.

3 Q. And the other one is, on page 7, upgrade
4 from LiteSpan 2000 to LiteSpan 2012. Can that be
5 done?

6 A. Alcatel has not given us any methods to
7 upgrade a LiteSpan 2000 to 2012. What they have
8 told us that if we want to do that, we would have
9 to physically replace the LiteSpan 2000 with a new
10 LiteSpan 2012.

11 Q. Basically take one system out, put the
12 other one in?

13 A. That's correct.

14 Q. Okay.

15 I'd like to direct your attention now to
16 page 8, and on page 8 Mr. Watson is talking about
17 how many ADLU cards can be put in an NGDLC. Right?

18 A. I see that.

19 Q. And at lines 3 and 4 he basically says
20 the only constraint on the number of ADLU cards is
21 heat dissipation. Is that a true statement?

22 A. No, it is not. The ADLU cards are

1 actually really high-powered cards. They require a
2 lot of battery power. The other constraint in all
3 our deployments is the battery and the battery
4 reserve. Heat is certainly one of them, but having
5 to maintain an eight-hour battery reserve for
6 critical services is another very important
7 criteria. So we also have to look at the amount of
8 power that's going to be drawn from the batteries
9 in case of an AC power failure, so power is the
10 other consideration we have to take a look at.

11 Q. Directing your attention to lines 4
12 through 7 on that page 8, I won't say the number
13 that's in the confidential bracket, having learned
14 my lesson, but basically Mr. Watson says there that
15 a certain number of channel bank assemblies can be
16 fully loaded with ADLU cards in a CEV or hut
17 configuration. Do you see that?

18 A. Yes, I do.

19 Q. Is he correct?

20 A. The number he quotes is not the number
21 that we use in our design. He is correct in that
22 we can get more than three, which is what we get in

1 a cabinet configuration, but we don't get the
2 number that he quotes in his testimony.

3 Q. What number do you get?

4 A. Typically about five.

5 Q. Is that the most you can get?

6 A. Again, you have to look at the heat and
7 the power, the battery power in the hut or CEV to
8 see if you can maintain the eight hours of
9 reliability that we require, eight hours reserve
10 backup that we require in our huts and CEVs.

11 Q. And based on that, you've concluded that
12 five is the most?

13 A. That's what we've concluded based on the
14 batteries that we're using.

15 Q. And I'd like to direct your attention
16 now to what appears on lines 7 through 14, and here
17 he's talking about cabinets, and I think he's
18 contrasting the 2016 LiteSpan with the Lucent 82G.
19 Is that right?

20 A. That is correct.

21 MR. BOWEN: Well, Your Honor, counsel
22 obviously can waive protections whenever he chooses

1 to, but the type of cabinet that was the topic of
2 the contrast was within the beginning and end
3 confidential marks in the testimony, so I think
4 that's a waiver then.

5 MR. LIVINGSTON: Well, I'd like to direct
6 Mr. Bowen's attention to page 13 of the testimony
7 that I think he probably had a hand in writing, and
8 he contrasts the 82G and the 2016, and it is
9 certainly outside the brackets.

10 JUDGE WOODS: Whatever.

11 MR. LIVINGSTON: Okay.

12 JUDGE WOODS: I'm not going to sit here and
13 argue and decide a contract dispute between you
14 guys, so. If you want to sue each other for breach
15 of your confidentiality agreement, there is a forum
16 available to do that. This, fortunately for me, is
17 not it.

18 MR. LIVINGSTON:

19 Q. Now basically in this portion of his
20 testimony Mr. Watson states that if you went to the
21 Lucent cabinet, you could put a certain number of
22 channel bank assemblies populated fully with ADLU

1 cards in that cabinet. Is he right?

2 A. Again, one of the things that Mr. Watson
3 is not considering in his number here is the
4 requirement to maintain battery power. It's our
5 requirement that the remote terminals be able to
6 sustain themselves on batteries for at least eight
7 hours in case of a commercial AC power failure. If
8 you put that many cards in an NGDLC, without having
9 just tons and tons of battery, you won't be able to
10 sustain eight hours of battery power, battery
11 backup.

12 In addition, when he mentions a Lucent
13 cabinet, that cabinet was not approved for use by
14 Alcatel or our internal folks because of
15 configurations you have to have in order to allow
16 the heat to dissipate. So that wasn't available
17 when we started -- initially started deploying
18 Project Pronto.

19 Q. If you had the Lucent cabinet, is he
20 right about the number of fully loaded channel bank
21 assemblies?

22 A. No, he is not. It still is limited in a

1 cabinet configuration to three, again because of
2 heat, power, and other environmental conditions.

3 Q. Direct your attention to the question
4 that appears at the bottom of the page concerning
5 whether Alcatel engineering documents characterize
6 the LiteSpan 2000 /2012 deployments as an
7 "overlay". Do you see that?

8 A. Yes, I do.

9 Q. Would you expect the Alcatel engineering
10 documents to characterize the deployment of their
11 equipment in that fashion?

12 A. No, I would not. What we expect is that
13 the vendor will tell us what their equipment is
14 capable of doing, and then internally we would
15 decide how we deploy it, so I would not expect to
16 see that in an Alcatel LiteSpan document.

17 Q. Do you view the entire deployment of
18 2000 and 2012 as an overlay?

19 A. Yes, I do.

20 Q. Why is that?

21 A. Because a typical characterization of a n
22 overlay network is you're deploying facilities that

1 are over an existing network, and with the DSL
2 facilities and DSL services, that's exactly what
3 we're doing with the LiteSpan. We're overlaying it
4 with the current copper and the current NGDLCs --
5 or excuse me -- DLCs in some cases, so it is an
6 overlay network for the DSL services.

7 Q. I'd like to direct your attention up to
8 pages 12 through 14, maybe even the top of page 15.
9 There's a lengthy answer following the question
10 "Please explain further." Have you found that?

11 A. I see that.

12 Q. And I believe that Mr. Watson there --
13 well, he basically takes the position that SBC made
14 design choices that make expansion difficult and
15 make access by CLECs difficult. Is that a fair
16 characterization of what he's doing here?

17 A. That appears to be fair.

18 Q. And he comes up with some examples, and
19 on page 13 he talks about the decision to go with
20 the 2016 cabinet rather than the Lucent 82G
21 cabinet. Do you see that?

22 A. I do.

1 Q. Why was that design choice made?

2 A. At the time when we started deploying
3 the LiteSpan 2000 systems, the 82G was not approved
4 by Alcatel or our internal folks, and that's
5 important because we want to make sure that we
6 don't void the warranty of the equipment that we're
7 purchasing. In addition, there were no standard
8 configurations that would fit into the 82G cabinet,
9 so we had to get all that worked out and all those
10 issues resolved with the vendor as well as with our
11 internal folks before we could deploy the 82G.

12 Q. And I think you've already testified
13 that even if you had the 82G, you'd still be
14 limited to three fully loaded channel bank
15 assemblies?

16 A. I'm still limited to three DSL capable
17 channel banks.

18 Q. Okay. Down at the bottom of the page,
19 this is 13 and over on most of page 14, Mr. Watson
20 is talking about the absence of a cross-connect
21 field at the remote terminal, and I think basically
22 his contention is that a cross-connect field should

1 have been added to all new and existing RTs. Fair
2 statement?

3 MR. BOWEN: Objection. I've allowed counsel
4 to characterize testimony and allow this witness to
5 agree with that, but I think the testimony speaks
6 for itself, Your Honor. I don't want the
7 transcript to be misleading. If he wants to point
8 the witness to a particular spot and have him read
9 it to himself or out loud, I think that's fine.
10 Otherwise --

11 MR. BINNIG: I'll withdraw the question.

12 JUDGE WOODS: Okay.

13 Q. Down at lines 20, 21, and 22 he states
14 that a much more practical solution, both for new
15 and existing RT installations, would be to
16 terminate 25 to 100 feeder pairs per SAI on the
17 field side of a small cross-connect field located
18 at the RT. Do you see that?

19 A. I see that.

20 Q. And I think the implication is that that
21 would be a better way to do it for you and that
22 would be a better way to do it for the CLECs.

1 MR. BOWEN: Objection. The testimony speaks
2 for itself. He can ask the question, but he can't
3 speculate about the implications of the testimony.

4 JUDGE WOODS: Or he can ask him is it your
5 understanding that his testimony is suggesting that
6 it's a better way for you and for the CLECs? Is
7 that your understanding of that testimony?

8 A. Reading this testimony, that's what I
9 understand.

10 JUDGE WOODS: Okay.

11 Q. Do you agree with that?

12 A. No, I do not.

13 Q. Why not?

14 A. Well, placing cross-connects at RTs
15 presents several problems. Number one, it's an
16 additional cost to the Project Pronto build. The
17 second is the operational issues that are typically
18 related with multiple cross-connects in the plant,
19 one being that whenever a service order is issued,
20 instead of a technician going to one spot, which is
21 typically our SAIs, in this case they would have to
22 be dispatched to two locations, one being the SAI

1 and the other being to this small cross -connect
2 field that's placed there. So that introduces some
3 operational issues that have to be resolved.

4 And finally, placing cross -connects in
5 fields where you have pairs exposed and pairs
6 available, it introduces a network reliability
7 problem, and we try to minimize as much as we
8 possibly can "hands in the plant", and that's in
9 quotes, because "hands in the plant" typically
10 generate problems for us, service -related problems.

11 Q. With respect to that last point, do you
12 have any evidence that Mr. Watson actually agrees
13 with you?

14 A. Actually I do. In the California -- in
15 the testimony that Mr. Watson has filed in
16 California, at a couple locations in his testimony
17 he talks about these additional cross -connects
18 introducing problems. One specific he talks about
19 is locating a box next to an RT and the problems
20 that that would introduce from a network
21 reliability standpoint.

22 Q. Does he say that the fewer the jumpers,

1 the better the network?

2 A. I remember that quote somewhere in his
3 testimony, yes.

4 Q. And of course if you have a
5 cross-connect field, you're going to have jumpers.

6 A. We'll have several jumpers.

7 Q. I'd like to direct your attention now to
8 the last question and answer of Mr. Watson, and
9 this concerns, just to put it in context, cross
10 talk or spectral interference. Have you reviewed
11 Mr. Watson's answer which appears at page 17, line
12 1 through 16?

13 A. Yes, I have.

14 Q. And is it your understanding that he's
15 talking there about what's referred to as cross
16 talk or spectral interference?

17 A. Yes, he is.

18 Q. What is that?

19 A. Well, in systems and in services that we
20 provide, what the cross talk is is kind of a
21 radiation, if you will. Cable pairs act sometimes
22 like an antenna, and they'll pick up noise from

1 adjacent cable pairs or adjacent facilities, and
2 what he's talking about is that adjacent noise from
3 one service being introduced into another service
4 cable pair.

5 Q. And he references in line 5 an
6 Ameritech- supplied document. Do you see that?

7 A. Yes, I do.

8 Q. Are you familiar with that document?

9 A. Yes, I am.

10 MR. LIVINGSTON: Your Honor, I'd like to mark
11 as Ameritech Keown Direct Exhibit 1 the document
12 entitled Additional Noise Margin Ratio that's
13 referred to in this testimony.

14 JUDGE WOODS: Okay.

15 (Whereupon Ameritech
16 Rehearing Keown Direct
17 Exhibit 1 was marked for
18 identification.)

19 JUDGE WOODS: During an off-the-record
20 discussion it was indicated that the cover
21 attachment to the actual document that's being
22 introduced indicates that it's proprietary and

1 confidential. However, based upon conversations
2 with Ameritech counsel, it has been indicated that
3 this is a public document and will be treated
4 accordingly.

5 MR. LIVINGSTON: Thank you.

6 Q. What is the document that we've marked
7 as your Rehearing Direct Exhibit 1?

8 A. This is a contribution made by our NRIC
9 representatives after making some empirical
10 measurements on remote transceivers versus CO-based
11 transceiver interference.

12 Q. Does this document report on an actual
13 field test?

14 A. It does.

15 Q. Does it make recommendations based upon
16 the empirical findings that resulted from that
17 test?

18 A. It does. Again, our TRI labs made some
19 empirical measurements on actual circuits in
20 service that were remote transceiver-based as well
21 as CO-based to measure noise and noise ratios and
22 concluded that this significantly mitigates any

1 problems that we might expect.

2 Q. Are you familiar with the document that
3 Mr. Watson attached to his testimony as Exhibit
4 DW-4?

5 A. I've seen that document.

6 Q. This is a contribution made by Copper
7 Mountain Networks and Rhythms. Is that right?

8 A. Yes, that's correct.

9 Q. And is this based upon an actual field
10 test or a computer simulation?

11 A. Well, the first page in this mentions
12 that it is actually based on simulation, a computer
13 simulation versus actual field measurements.

14 Q. So this isn't going to give me any
15 empirical data.

16 A. No, it will not.

17 MR. LIVINGSTON: I have no further questions.

18 JUDGE WOODS: Cross?

19 MR. BOWEN: I have a few on that additional
20 direct, Your Honor.

21 JUDGE WOODS: All right.

22 CROSS EXAMINATION

1 BY MR. BOWEN:

2 Q. Good morning, Mr. Keown. Nice to see
3 you again.

4 A. Good to see you, Mr. Bowen.

5 Q. While it's still fresh in our mind, why
6 don't we chat about what you've just said in
7 response to your counsel's questions.

8 Now you said in response to additional
9 testimony right now, I'm starting back with what
10 you started with so we're back to page 5 where
11 you're discussing Release 11, and you testified
12 that you don't think it's a complete solution, if
13 my notes are correct here, because there's been no
14 testing yet. That's one of the things you said,
15 right?

16 A. Well, I think I said -- the question was
17 is this a feature deficiency, and I think I
18 responded that this does not cure a feature
19 deficiency.

20 Q. Okay. Let's start there then. Do you
21 think that having a single PVP per channel bank is
22 a feature deficiency?

1 A. I'm sorry. I didn't hear you.

2 Q. Do you think that having only one PVP
3 per channel bank assembly is a feature deficiency
4 in the current software release for the LiteSpan
5 platform?

6 A. I don't view it as a feature deficiency
7 for what the vehicle was placed there to serve.

8 Q. Well, then can you explain to us how it
9 is that a representative of SBC asked for multiple
10 PVPs over a year ago from Alcatel?

11 A. I don't know what that -- who that
12 person was and I don't know the context of the
13 discussion.

14 Q. Well, let's assume that that's true.

15 A. Okay.

16 Q. Since it's in an exhibit in the case
17 already. Can you assume that with me?

18 A. I can.

19 Q. That SBC representatives contacted
20 Alcatel and said I want more than one PVP per CBA.

21 A. Okay.

22 Q. Wouldn't that indicate to you that they

1 were somehow dissatisfied in some fashion with a
2 single PVP per CBA limit?

3 A. I don't know that it indicates a
4 dissatisfaction. It might just indicate that an
5 anticipated future feature or future service that
6 was desired to be served over the platform required
7 something else. I don't think you characterize
8 that as a deficiency though in the platform.

9 Q. So it's a feature then. It's a feature
10 that there's only one PVP per CBA. Is that your
11 testimony?

12 A. That is all that exists in 10.2, yes.

13 Q. You view that as a good thing there's
14 only one PVP per CBA.

15 A. Well, again, for what the platform is
16 out there to serve right now, I don't see a problem
17 with that.

18 Q. Well, you're aware that this Commission
19 has three times ordered access to PVPs as UNEs, are
20 you not?

21 MR. LIVINGSTON: I object. I think that
22 mischaracterizes what the Commission actually

1 ordered. I think at least the first arbitration
2 award was collocation of line cards only. I don't
3 think there was anything in it about PVPs.

4 JUDGE WOODS: That's my recollection.

5 MR. BOWEN: All right. Fine.

6 Q. Do you know whether this Commission has
7 ordered SBC to provide PVP-based UNEs to CLECs,
8 Mr. Keown?

9 A. Based on the -- the reason for this
10 rehearing is because they already actually require
11 PVPs, but it didn't say multiple.

12 Q. Okay. Well, if you're faced with an
13 order from this Commission which is currently in
14 effect and you see that as of right now your
15 equipment only supports one PVP per channel bank
16 assembly, do you still think that that is a good
17 thing? That is, a single PVP per CBA is a good
18 thing?

19 A. Well, I think the answer is whatever is
20 out there today, that's all that's available. So
21 if the feature only has one PVP and if the
22 Commission has ordered -- and the Commission has

1 ordered that, my system only supports one today so
2 that's all I could possibly do.

3 Q. Can you form any judgment, Mr. Keown,
4 sitting here today, on whether you think one PVP
5 per CBA is sufficient going forward or not? Can
6 you form that judgment? I said going forward in my
7 question. Keep that in mind, please.

8 A. I heard that. Depending on what
9 services are going to be offered over the platform,
10 that may or may not be sufficient.

11 Q. You can't form an opinion.

12 A. Well, again, I answered it that
13 depending on what services are going to be offered
14 over the platform, that may or may not be a
15 sufficient number of PVPs.

16 Q. I'm sorry. I want you to assume that
17 the Commission's order already issued is upheld on
18 rehearing. Do you have that assumption in mind?

19 A. I do.

20 Q. Okay. If that order is upheld, do you
21 think one PVP per channel bank assembly is or is
22 not sufficient going forward?

1 A. I guess even going forward, based on
2 what the equipment will do today, and that order is
3 if the Commission upholds the order, as long as I
4 have systems out there with 10.2 release, and they
5 will be out there for quite awhile, that's all I
6 can provide is one PVP. Is it sufficient? Again,
7 it depends on the service that's going to be
8 offered over it.

9 Q. Okay. So your crystal ball gets cloudy
10 after Release 10.2. Is that what you're saying?
11 You can't look beyond Release 10.2 and give us any
12 testimony today?

13 A. Well, based on the length of time it's
14 taken me to get just words on 11.0, it's difficult
15 to look past 10.2 until we get some more
16 specificity on what 11.0 will actually do.

17 Q. I want you to tell this Hearing Examiner
18 and all of us what you think the proper time of
19 view is for this decision in this case. Is it --
20 should it not include Release 11 at all?

21 A. I think until any of us know exactly
22 what Release 11 actually has and what's been tested

1 and what will work, I think it would be pure
2 speculation to try to make some service that we
3 don't know exactly how it will work.

4 Q. All right. Taken from that answer then,
5 you're recommending to the Commission that it
6 decide this case based on the current available
7 features of Release 10.2. Is that correct?

8 A. I think my answer is this Commission as
9 well as this company, Ameritech Illinois, as well
10 as Rhythms would want to know what the feature
11 would actually do before we make some decisions
12 that might be counter to what the equipment will
13 actually do.

14 Q. That wasn't my question, Mr. Keown.
15 That wasn't my question. My question was are you
16 recommending to this Commission that it decide this
17 rehearing on the basis of the features currently
18 available in software Release 10.2?

19 A. And I think this Commission needs to
20 decide -- to make their decision based on what the
21 equipment will actually do and is capable of doing,
22 and right now the equipment is capable of handling

1 10.2. we don't have any -- I don't have enough
2 information in my possession to tell me all the
3 features that are in Release 11.

4 Q. Mr. Keown, this is actually a very
5 simple question. I'd like you to give me a very
6 simple answer. I'm going to ask it again.

7 A. Okay.

8 Q. Are you recommending to the Commission
9 they decide this rehearing on the basis of the
10 current features of Release 10.2? Yes or no? And
11 then you can explain your answer.

12 A. I think this Commission needs as much
13 information as it can get --

14 Q. Can you just start with a yes or no,
15 please, and then answer, just so we know where
16 you're headed?

17 MR. LIVINGSTON: I object. If the question
18 can't be answered fairly yes or no, I think the
19 witness is allowed to answer it in a different
20 fashion.

21 JUDGE WOODS: Is there some reason that you
22 believe that you can't answer that question yes or

1 no? Because as I heard it, it was posed as a
2 question that would ordinarily elicit a yes or no
3 answer.

4 A. Well, it's difficult for me, Your Honor,
5 to just give a yes or no. I guess --

6 JUDGE WOODS: Mr. Keown, you've been here
7 before. You're a very intelligent man. Difficulty
8 in the questions should not be a barrier. Can it
9 be answered yes or no?

10 A. Could you repeat the question one more
11 time?

12 Q. Yes. Are you recommending to this
13 Commission that they decide the issues on rehearing
14 on the basis of the current features of Release
15 10.2?

16 A. No. Now, the reason I would not -- I
17 said no is I think before the Commission goes
18 beyond 10.2 release it needs to know what 11.0 will
19 do, what features are in 11.0 and how those
20 features will behave on the platform.

21 Q. Okay. So then given your no answer, I
22 take it you will agree that the Commission should

1 consider what's coming up in Release 11.0. Is that
2 fair?

3 A. Again, I have to answer yes. I think
4 the Commission needs to know what Release 11.0 will
5 actually do on the platform.

6 Q. Okay. And so your complaint, I take it,
7 is based on the fact that you aren't certain about
8 exactly what those features will look like and do.
9 Is that correct?

10 A. That's correct.

11 Q. Okay.

12 Were you here when Dr. Ransom was
13 testifying, Mr. Keown?

14 A. I was here for part of Dr. Ransom's
15 testimony.

16 Q. Okay. Did you hear Dr. Ransom say that
17 the current plan is to delivery Release 11 to SBC
18 for testing in August of this year?

19 A. That's my understanding.

20 Q. Okay. I take it that SBC tests each
21 release of LiteSpan system software that it plans
22 to deploy. Is that correct?

1 A. Yes, we do.

2 Q. Okay. Do you recall when Alcatel -- I'm
3 sorry. Does Alcatel -- I'm sorry. Does SBC have
4 deployed Release 10.1 of the software anyplace?

5 A. That was the initial release that we
6 deployed, 10.1.

7 Q. Okay. And does SBC have 10.2 deployed?

8 A. We do have some sites up on 10.2.

9 Q. I want you to think 13-state wide, not
10 just --

11 A. That's what I'm thinking.

12 Q. Well, you have a lot of sites up in
13 total outside of Illinois, don't you?

14 A. Yes, we do.

15 Q. Okay. What is the breakdown between
16 10.1 and 10.2 amongst those sites, or are they all
17 on 10.2 now?

18 A. They're between 10.1 and -- 10.1 has
19 some more point releases after that. There's
20 10.1.1, a 10.1.2, and a 10.1.3 release, so we have
21 systems that are scattered among. I don't know the
22 percentage that are on 10.2 currently.

1 Q. Okay. Do you know when the company
2 received Release 10.1 for testing?

3 A. I don't remember the exact date.

4 Q. Well, give me the month or give me the
5 quarter.

6 MR. LIVINGSTON: Do you mean to be asking him
7 about 10.1 or 10.2?

8 MR. BOWEN: I mean 10.1 first.

9 A. I think 10.1 was delivered to our labs
10 initially in late 1999 or early 2000, like January
11 of 2000, somewhere in that time frame.

12 Q. Okay. And do you know when 10.2 was
13 delivered? By the labs you mean TRI, right?

14 A. TRI, yes.

15 Q. When was 10.2 delivered for testing to
16 TRI?

17 A. I don't remember when 10.2 was
18 delivered.

19 Q. Do you remember the quarter?

20 A. I think it was the third or fourth
21 quarter, third quarter of last year. I'm not
22 certain of that.

1 Q. Third quarter of 2000?

2 A. 2000.

3 Q. Okay. And do you remember what month or
4 what quarter 10.2 was approved for use?

5 A. I do not.

6 Q. It was in 2000 though, wasn't it?

7 A. I'd only be speculating.

8 Q. Well, isn't -- you're saying that you
9 can't rely on 11 because it hasn't been tested yet,
10 but you're testifying that you have no idea of any
11 previous history of the cycle between receipt for
12 testing and deployment. Is that what you're
13 saying?

14 A. Well, if I understood the question,
15 you're asking me specific dates on when specific
16 releases were delivered.

17 Q. Right.

18 A. And I don't know those specific dates.
19 I just remember years I guess.

20 Q. Okay. Well, isn't it the case that
21 there's always going to be some gap between receipt
22 for testing and approval for deployment?

1 A. That is correct.

2 Q. So you can test it.

3 A. Yes.

4 Q. So how long, whether you recall the
5 dates or not, how long was the gap between receipt
6 for testing and approval for deployment on Release
7 10.2, if you know?

8 A. That was a very small release, so I
9 think it took us about six weeks to test that
10 release.

11 Q. Okay. And were you here when Dr. Ransom
12 testified that he expected, based on his experience
13 as the Chief Technology Officer of Alcatel, that
14 the SBC testing of Release 11 would probably take
15 around four months?

16 A. I don't know if I recall him saying that
17 or not. I don't recall if I was here when he made
18 that statement.

19 Q. I'm sorry?

20 A. I don't recall if I was in the room when
21 he made that statement, but that time frame is
22 about right though for our testing.

1 Q. Okay. Well, let's assume then that you
2 get the software when Dr. Ransom said under oath he
3 thought it would show up on your doorstep, that is
4 in August of this year, and it tests in on the
5 cycle that he expects to happen that you agree will
6 happen. That puts that software, Release 11,
7 available for deployment by the end of this year,
8 doesn't it?

9 A. Well, our estimated time for testing
10 this release, because it has so many different
11 features in it and because we will really be
12 learning the features, our estimated time for when
13 we think it will be ready for field is really
14 February of 2002.

15 Q. And is there something -- is that new,
16 new information that you just got since you filed
17 your testimony or since you were asked questions by
18 your counsel on additional direct?

19 A. No.

20 Q. Can you tell me why you didn't put that
21 in your written testimony?

22 A. In my testimony?

1 Q. Yeah. Why didn't you put that
2 deployment date for Release 11 in your testimony?
3 Is there a particular reason?

4 A. No, there's no reason.

5 Q. Okay. Well, let's assume that that's
6 the right date. Do you understand this case to be
7 in place until for some reason we all come back
8 together again and visit these issues again, don't
9 you? That is it's a permanent tariff case.

10 A. I understand that.

11 Q. All right. And the permanency of the
12 tariff case, it will be in effect after February of
13 next year, won't it?

14 A. I expect that to be the case.

15 Q. Do you think it's reasonable for the
16 Commission to try and foresee the conditions that
17 are likely to be in effect during the effective
18 date of a tariff that it's being asked to approve?

19 A. I'm sorry. Could you repeat the
20 question?

21 Q. Do you think it's reasonable for the
22 Commission to try and foresee the conditions that

1 will be in place during the time the tariff it's
2 being asked to approve is in effect?

3 A. I think that's reasonable.

4 Q. Okay.

5 All right. Now you said that there's
6 only one physical attachment to the channel bank
7 assembly. Do you recall saying that?

8 A. Yes.

9 Q. I took from that that you're indicating
10 that you think you need some kind of back side
11 physical attachment to the CBA, channel bank
12 assembly, to access a PVP. Is that what you're
13 saying?

14 A. Essentially that's what I'm saying.
15 That in order to physically access a PVP -- you
16 really can't physically access a PVP because in the
17 packet network it's just generated when it's
18 established or when it needs to use the band width,
19 so that was my intent is that you have to have the
20 electronics as well as the fiber attachments in
21 order to have a PVP, have access to a PVP.

22 Q. All right, and how would you get access

1 -- let's leave aside the NGDLC side of that path.

2 How do you access a PVP at the central office?

3 A. We can hand off on the physical
4 facility, for instance on the OCD port. If you
5 have a physical facility and set up a PVP, we can
6 hand that PVP through that physical facility.

7 Q. Well, that's just a DS-3 or an OC-3,
8 isn't it?

9 A. The signal bandwidth is a DS-3 or an
10 OC-3c, but within that packet build is a --

11 JUDGE WOODS: Within the packet what.

12 A. Within the packet build it's a virtual
13 path or a virtual circuit.

14 Q. Isn't it correct that the devices that
15 create and maintain these PVPs are the element
16 managers that run the OCD and the NGDLC systems?

17 A. The way we have deployed Project Pronto,
18 the PVP is created with the element management
19 system.

20 Q. Okay.

21 A. PVCs are not.

22 Q. Okay. Well, the PVP is created with --

1 you're going to use Cisco 6400 OCDs, right?

2 A. That was the planned deployment in
3 Illinois.

4 Q. All right. And there is a Cisco element
5 manager. Is that right?

6 A. That's correct.

7 Q. Okay. And then at the other end there's
8 an Alcatel element manager for the NGDLC LiteSpan.
9 Right?

10 A. That's correct.

11 Q. All right. And each of those has to be
12 able to talk to and manage the packet-handling
13 device. That is, in the case of the Cisco element
14 manager it's addressing the OCD's ability to route
15 packets, and in the case of the LiteSpan it's the
16 AMS system that's controlling how that device
17 routes packets. Right?

18 A. They set up the routing within those
19 devices. That's correct.

20 Q. Okay. Now, let's talk about how you do
21 that. Have you heard of a VPI and a VCI before?

22 A. Yes, I have.

1 Q. Do you know what those mean?

2 A. Yes, I do.

3 Q. Can you tell the record what those mean?

4 A. Sure. VPI is a virtual path identifier,
5 and a VCI is a virtual circuit identifier.

6 Q. I thought VCI was a virtual channel
7 identifier.

8 A. Yeah, virtual channel identifier, yes.

9 Q. Okay, and for each -- if you have the
10 number of PVCs, don't you have to tell the element
11 manager both those chunks of information? That is,
12 don't you have to tell it what the virtual channel
13 identifier is for that circuit and the virtual path
14 identifier?

15 A. That is typically in the heading of a --
16 or header record of an ATM or packet cell.

17 Q. Okay. So that every cell that comes out
18 of my ADSL modem, if I can use that term, has that
19 information in the header. Right?

20 A. Yes.

21 Q. That is, it says I belong to virtual
22 circuit or virtual channel number X and virtual

1 path number Y, right?

2 A. Those two pieces of information are used
3 for routing the cells.

4 Q. Okay. And so when the ADLU card sees
5 that, it routes -- it sends those cells on to the
6 ATM bank control unit, right?

7 A. That is correct.

8 Q. And the ABCU says aha, this is VPI
9 number 1, VCI number 12, for example, right? Since
10 there's only one virtual path you can take, let's
11 just say it's 1 or 0. Right?

12 A. Not quite.

13 Q. Okay. What's wrong with that?

14 A. Well, what's wrong with that is each
15 packet header changes as it hits the ATM portion of
16 the network, so when it comes into the ADLU card,
17 it says I want to go down virtual path whatever it
18 is for that particular channel bank, and I am
19 virtual circuit -- virtual channel identifier XYZ.

20 Q. Okay. All right. So then the NGDLC
21 control equipment routes that packet onto the right
22 virtual path and virtual channel, right?

1 A. Correct.

2 Q. Because it's reading the header
3 information and saying, aha, I've got to route it
4 into this particular PVC which sits within this
5 particular PVP, right?

6 A. That's correct.

7 Q. Add the other end of the pipe -- then it
8 goes down the fiber, right?

9 A. Correct.

10 Q. Along with a bunch more ATM cells.

11 A. Correct.

12 Q. And it gets to the OCD, and what happens
13 there?

14 A. The OCD reads that header and then
15 changes the header based on the destination of
16 those packets.

17 Q. And it says send these to Rhythms, for
18 example, right?

19 A. That's correct.

20 Q. Or, frankly, what it says is send these
21 to OCD port number whatever, right?

22 A. Well, in fact what it says is send this

1 to virtual path ABC or whatever the number might
2 be. This is virtual channel number whatever.

3 Q. Okay. And that is then mapped to the
4 right outgoing connection or port that goes to
5 Rhythms' collocation facilities. Right?

6 A. That is correct.

7 Q. Okay. Well, the virtual paths and
8 virtual circuits really just exist and are created
9 by these two end devices to be able to manage the
10 flow across the fiber between them. Isn't that
11 right?

12 A. That's what the electronics do.

13 Q. And what they're managing is a bunch of
14 same sized ATM cells, right?

15 A. They are routing those ATM cells.

16 Q. Okay. Each of those is the same size,
17 right?

18 A. That's correct.

19 Q. Okay, and each has a payload and a
20 header, right?

21 A. That is correct.

22 Q. And so the only thing you need PVCs and

1 PVPs for is to be able to put these identical cells
2 in the right pipe to go from point A to point B,
3 right?

4 A. That's correct.

5 Q. Okay. Well, I guess I don't understand.
6 So what if you only have one physical connection of
7 the fiber to the CBA? How is that relevant at all
8 to the creation and management of these permanent
9 virtual paths and circuits?

10 A. Well, as I understood the order and as I
11 understood the way the UNEs were broken down, when
12 you talk about just a PVP, it implies some access
13 to that PVP; that it could be broken down
14 separately as an element, and in the case of this
15 LiteSpan system, the way it's attached to the
16 channel bank, there's no physical way to do that.

17 Q. Oh, it's that physical connection then,
18 right? That's what your concern is.

19 A. Yes.

20 Q. Okay. What if I've got a virtual
21 connection to it?

22 A. Well, again, access to the PVP is what

1 I'm discussing or what I'm trying to reference in
2 the answer.

3 Q. Okay. Well, can't I get access to the
4 PVP at the OCD?

5 A. You have a PVP that's established on the
6 outgoing port of the OCD.

7 Q. Okay. And can't I get access to the
8 NGDLC via the ADLU card?

9 A. You have PVCs or virtual circuits on the
10 ADLU card. At least electrically that's what's
11 there, but you don't have access to it.

12 Q. You don't have access to what?

13 A. To the PVC.

14 Q. Well, if I say, per the Commission's
15 order, I want to plug in my ADLU card and access a
16 PVC or a PVP from there to the OCD hand-off, I can
17 do that, right?

18 A. Well, my understanding is the PVP and
19 PVCs are all created in the packet network, and my
20 understanding is the packet network is a network
21 that can't be unbundled. That's not required to be
22 unbundled.

1 Q. Ah. Because it's packet switching.

2 A. Because it's packet switching.

3 Q. Well, I thought we were talking just
4 about technology, Mr. Keown, not regulatory stuff?

5 A. Well, and that's what I'm talking about,
6 technology, but this packet switching is a virtual
7 -- is the virtual paths that are created and
8 virtual circuits that are created within the packet
9 network, so you have to talk a little bit about the
10 packet network itself.

11 Q. Okay. Well, isn't it the case that this
12 whole packet network idea or the ATM capabilities
13 is not unique to Project Pronto?

14 A. That's correct.

15 Q. Aren't there ATM networks all over the
16 world right now?

17 A. I can't attest to all over the world,
18 but there are certainly lots of ATM networks.

19 Q. And weren't you planning to deploy your
20 own interoffice ATM network on VTOA until recently?

21 A. Yes, we were.

22 Q. Okay. And weren't you planning to have

1 PVPs on that interoffice network?

2 A. I can't say that whether those were
3 going to be PVPs or PVCs.

4 Q. Well, you're a technologist yourself,
5 aren't you, Mr. Keown?

6 A. Yes, I am.

7 Q. Isn't PVP a very, very common thing for
8 people to ask for and get from ATM network
9 providers?

10 A. Maybe I misunderstood your previous
11 question.

12 Q. Okay.

13 A. If it was going to be multiple PVPs over
14 that network versus multiple PVCs, we were going to
15 establish a PVP between the end office to the ATM
16 tandem that we would have deployed, and then
17 multiple PVCs, permanent virtual circuits, would
18 have been routed over that big pipe.

19 Q. Well, I take it you're familiar with the
20 technology though, right?

21 A. Somewhat.

22 Q. Not just what SBC planned to offer, but

1 what actually is offered right now out there in the
2 real world.

3 A. Generally.

4 Q. Okay. Isn't it generally true that
5 carriers ask for and obtain on a routine basis PVPs
6 between two points? Interoffice points, if you
7 will, or internode points.

8 A. Again, this is my understanding. My
9 understanding is carriers typically ask for a
10 facility between two points, and then PVPs or PVCs
11 are generated over that facility.

12 Q. So you don't think that carriers right
13 now actually order say a 40 megabyte PVP between
14 two points. Is that your testimony?

15 A. Well, I will tell you that I contacted
16 some of our industry marketing folks to see if we
17 sold anything like that, and the response I got was
18 we sell a facility and then we -- if the carrier
19 wants to generate PVPs or PVCs within that
20 facility, it's done.

21 Q. Within what facility?

22 A. Well, for instance, if Rhythms decided

1 they wanted to do a frame relay network from point
2 A to point Z, Rhythms would purchase or could
3 purchase a facility between those two points. If
4 they were using a packetized equipment on each end
5 of that pipe, then they could generate or they
6 could get PVCs or PVPs within that facility, but to
7 just sell a PVP, it might have been an element in
8 the cost. It might have been an element in some
9 service, but I'm not sure.

10 Q. I'm not just talking about what SBC
11 might sell, Mr. Keown. I'm talking about what is
12 generally offered. You're aware that there are a
13 number of packetized networks out there in the US,
14 are you not?

15 A. I can only speak from my experience.

16 Q. I understand. So your experience is you
17 have no experience besides asking SBC reps about
18 how ATM traffic is handled in the real world. Is
19 that right?

20 A. That's correct.

21 Q. Okay. Okay. Then you said that there's
22 no way to manage the PVP feature. Do you recall

1 saying that?

2 A. Yes, I do.

3 Q. What does manage mean?

4 A. To make sure you can control the
5 bandwidth that is taken up to be able to enforce
6 all the traffic descriptors.

7 Q. Let me try and understand that answer.
8 Let's say that you have -- let's keep it simple --
9 you have an un-daisy chained channel bank assembly.
10 Okay?

11 A. Okay.

12 Q. And that will carry an OC-3c running at
13 155 megabits a second, right?

14 A. That's correct.

15 Q. Okay. Now if Rhythms wants to get a PVP
16 -- I want you to assume that we're in multiple PVP
17 land, okay?

18 A. Okay.

19 Q. If Rhythms wants to get two 5 megabit
20 per second PVPs, you're saying that you don't think
21 it's possible to offer that, or you think it's
22 possible, but you think that you can't put the

1 ceiling of 5 megs on the PVP. Is that your
2 testimony?

3 A. I'm saying that we could put some
4 parameters in there, but it does not necessarily
5 keep the PVP from spiking beyond that bandwidth.

6 Q. Who told you that?

7 A. Well, I've read that in some ATM forum
8 documentation. If it's a UBR, it can spike beyond
9 the 5 meg in the case of Rhythms.

10 Q. Okay. What if it's a CBR? Isn't that
11 by definition a fixed size pipe?

12 A. CBRs are fixed, but CBRs have four or
13 five traffic descriptors that lock it in, but even
14 within those parameters, there's a parameter that
15 says how much do you want to spike, so you could
16 set that so that it should not spike beyond that.

17 Q. Sounds like management to me. Doesn't
18 it to you?

19 A. Well, again, having not been able to see
20 what the new features will offer, I don't know if
21 we can do that or not in this particular case.

22 Q. Let me get this straight, and if you

1 need to see Rhythms Ransom Cross Exhibit 14P to
2 confirm that your representatives asked for
3 multiple PVPs over a year ago, I can show it to
4 you, but.

5 A. Do I have authorization to see a
6 proprietary?

7 Q. Yeah, I hope so. It's your own company
8 document.

9 A. Okay.

10 MR. LIVINGSTON: Do you want him to look at
11 it? I don't think he argued with you about the
12 point.

13 MR. BOWEN: Okay.

14 Q. Well, you're not disagreeing that you
15 all asked for this over a year ago, are you?

16 A. I assume that that document is correct.

17 Q. Okay. All right. Well, based on what
18 you know and what you've asserted here, do you
19 think that the company was asking for multiple PVPs
20 without any means to control the size of those PVPs
21 a year ago? Does that make any sense to you?

22 A. Well, I would expect that our company

1 would have asked for those with the intent of being
2 able to control them.

3 Q. Okay. Isn't that kind of one of the
4 essential things that you want when you -- that's
5 one of the reasons you ask for multiple PVPs, so
6 you can control the size of each of them?

7 A. It's one of the base level things that
8 we would want.

9 Q. Okay. All right. So we can assume that
10 because you guys are smart, that you asked for that
11 a year ago, right? The ability to control the PVP
12 size. Isn't that a fair assumption?

13 A. I can only assume that we did.

14 Q. Okay.

15 Well, isn't it a fact that Release 10.2
16 of the software release was one that was mandated
17 by SBC itself? That is, it is you all who caused
18 10.2 to exist instead of just 10.1. Isn't that
19 right?

20 A. I believe we required 10.2 because of
21 some maintenance problems we were having with the
22 current release.

1 Q. Okay. But there would have just have
2 been a 10.1 but for SBC's problems with the
3 maintenance, right?

4 A. No. I think there would be a 10.1.1.2
5 --

6 Q. Sure.

7 A. I mean a whole string until all the
8 fixes. The software had some holes in it and had
9 some bugs in it, and we were asking for those bugs
10 to be fixed, and depending on the vendor, they
11 deliver their software and their fixes for their
12 software differently. Sometimes it comes in a ..
13 release and sometimes just a 1. release, and 10.2
14 was a fix for a 10.1.3 problem.

15 Q. Okay. But 10.2 was a fix that was
16 mandated by the problems that your company
17 identified to Alcatel. Isn't that right?

18 A. Working together with Alcatel, yes.

19 Q. Okay. All right. So I'm going to take
20 from that that you have enough powers of
21 persuasion, shall we say, with your major vendor
22 that if you want something like say multiple PVPs

1 with the power to control and manage the size of
2 those, and if you asked for it a year in advance,
3 they can give it to you. Isn't that a fair
4 assumption?

5 A. I don't think that's a fair assumption.
6 If there is a problem with software, then any
7 customer or any customer of a vendor would demand
8 that the software be fixed, and we do that with
9 switch -- Class 5 switches or anything else that
10 runs on software today, so, yes, any customer that
11 has a problem with their software does demand their
12 vendor fix their software, and that's what this
13 was.

14 Q. Do you know sitting here whether or not
15 you have asked for and Alcatel plans to deliver
16 multiple PVPs per channel bank assembly with
17 management features attached to those PVPs or not?
18 Do you know?

19 A. I do not know that we've asked for all
20 the things you list in that question.

21 Q. Okay.

22 Now, you give an example of your home

1 DSL line. I'm guessing that you probably don't
2 have Rhythms. You probably have an SBC -offered DSL
3 service. Is that fair?

4 A. That's probably a fair assumption.

5 Q. Okay. So it's going to be Alcatel
6 equipment, right?

7 A. That's correct.

8 Q. Is it home run copper-based or Project
9 Pronto-based?

10 A. Project Pronto-based.

11 Q. Okay. So you're using the ADLU card,
12 right?

13 A. Yes, I am.

14 Q. Okay.

15 A. A port on the ADLU card.

16 Q. Okay. And you have what flavor of
17 service? It's through what? SBC ASI?

18 A. I'm sorry?

19 Q. Is your service offered through the
20 advanced services sub of SWBT?

21 A. The DSL service?

22 Q. Yes.

1 A. The DSL service is provided by ASI.

2 Q. And which flavor do you have? There's
3 different flavors they offer. Which one do you
4 have?

5 A. I have ADSL.

6 Q. I know that, but which speed combination
7 of ADSL do you have?

8 A. When you talk flavors, I'm sorry; I got
9 confused between flavors and speed. The speed that
10 I have is 128 by 384, 128 upstream, 384 downstream.

11 Q. Now you know about the Alcatel
12 management system, right? What it can do?

13 A. The AMS?

14 Q. Yes.

15 A. Yes.

16 Q. Okay. Isn't it correct that you can set
17 either the upstream or the downstream
18 synchronization rates or transmission rates to be
19 either a point value or a range?

20 A. In the LiteSpan system itself, that's
21 where that is set.

22 Q. Okay, but you can do that. You can say

1 I want it to sync at 128 and no other speed. You
2 can do it that way, right?

3 A. That's correct.

4 Q. Or you can say I want it to sync between
5 zero and 128, wherever it can.

6 A. I think it's between 32K and up, and
7 above.

8 Q. It syncs in 32K increments, right ?

9 A. You can change the speed in 32K
10 increments.

11 Q. Okay. With that correction though, you
12 can set a range of synchronization speeds between X
13 and Y, right?

14 A. Yes. There's a range, a min and max
15 range that you can set.

16 Q. Okay. Now if you're being offered a 384
17 downstream service, you can set that to sync
18 anywhere between 32 and the maximum downstream
19 capability of that card. Right?

20 A. That's correct.

21 Q. Okay. Which is what? About 6 megabits
22 downstream, something like that?

1 A. Between 6 and 8.

2 Q. Okay. And you've managed, you said with
3 your little software, an observed throughput of 5
4 megabytes per second, right?

5 A. No, 500K.

6 Q. I'm sorry; 500K. Sorry.

7 A. Yes.

8 Q. So what does that tell us? That tells
9 us that the top of the range that's been set for
10 your modem is not 384, right? Since it achieved
11 above that.

12 A. It could be that, or it could be that
13 there was just enough bandwidth for me to spike
14 beyond that. Remember, I said that was a spike
15 that I saw on the download speed.

16 Q. I understand the spike, but isn't it
17 correct that the Alcatel management system will not
18 allow a modem to achieve, spike or not, a
19 throughput beyond the top set point?

20 A. Supposedly that is correct .

21 Q. Okay. So that means that somebody has
22 set your downstream speed range to be above 384,

1 doesn't it, since you achieved above 384?

2 A. Well, if you put a peak -- you could put
3 a peak parameter on there that might allow the peak
4 beyond that, but it could still be set with a
5 min/max range of 384.

6 Q. And you can set a peak parameter too,
7 can't you?

8 A. You can set a peak parameter.

9 Q. Okay. And if you wanted to, you could
10 set a peak parameter to be 384 down, right?

11 A. You could set that parameter.

12 Q. And then it wouldn't go above 384 even
13 on a spike, would it?

14 A. I don't know. I have not tested that,
15 so I don't know. It should not.

16 Q. Well, that's what it's designed to do,
17 isn't it?

18 A. It should not do that.

19 Q. To cut off those peaks, those spikes?

20 A. As long as the peak value is there, it
21 should not allow you to go beyond the peak.

22 Q. So then either you have a service at

1 home that has a top synchronization downstream rate
2 above 384 or else the peak setting is not 384.
3 Isn't that right?

4 A. That's possible.

5 Q. Well, if the peak setting were 384, you
6 wouldn't have gotten a 500K spike, would you?

7 A. That's possible.

8 Q. Is it possible or if the software works
9 as they've represented it, you would not get a 500K
10 spike, would you, Mr. Keown?

11 A. That's correct.

12 Q. So your example is not an example of a
13 managed system at all, is it?

14 A. I don't know that it's not an example.
15 I mean, again, not having looked at all the
16 parameters on my line or anybody else's line,
17 managing that bandwidth is still an issue within
18 the network.

19 Q. Well, in your case it would be an issue
20 that would be easily solved by setting the Alcatel
21 management system peak parameter at 384, wouldn't
22 it?

1 A. Well, if the peak parameter is set
2 correctly, it should not.

3 Q. Okay. So then tell me why you brought
4 this example to the Commission's attention. What
5 was the purpose of bringing this out?

6 A. Well, the purpose is that in a managed
7 or less than a managed bandwidth case, it could
8 still happen. For instance, on a UBR, you can set
9 that peak rate or you don't have to necessarily set
10 that rate on a UBR service. If it isn't set, then
11 you could peak beyond that -- we went beyond the
12 minimum or the maximum range that you have set in
13 the system.

14 Q. Okay, but you're on UBR at home, right?

15 A. Yes, I am.

16 Q. And you're agreeing that you can set --
17 well, that is SBC can set that peak parameter if it
18 wants to, right?

19 A. Yes.

20 Q. For your service.

21 A. Well, for my service SBC could.

22 Q. Yeah.

1 A. However, the problem is with the CLEC or
2 anybody else that's set that service on this
3 platform, it's not a requirement. The service
4 order flows through a system called, and I think
5 I've heard it here before, BOP, broadband ordering
6 profile, BOP GUI. I think I was in the hearing
7 when I heard that, and in that list of profiles
8 CLECs get to set how they want their service and
9 how they want their PVCs to behave bandwidth wise
10 as well as other characteristics. So I don't -- I
11 as SBC, the ILEC, or Ameritech the ILEC don't
12 control that. So, for instance, if you sold a PVP
13 and didn't put that peak value in there, then it's
14 possible for that to peak beyond what you have set
15 as min and max values.

16 Q. So why not just have business rules that
17 say, you know, we're concerned about peaks or we're
18 concerned about bursts of activity that might
19 occupy a bunch of capacity so, you know, valid
20 settings don't include ones where the peak value is
21 not set? Wouldn't that solve the problem you're
22 identifying here? A simple set of business rules?

1 A. Well, I don't know that I have the right
2 or the authority to impose those business rules on
3 the CLECs as they purchase the service. I guess --

4 Q. That wasn't my question. If there were
5 such a set of business rules, wouldn't that solve
6 your concern?

7 A. That would certainly alleviate some of
8 my concern.

9 Q. Well, wouldn't it alleviate this
10 particular concern totally?

11 A. Assuming it could be enforced, it would.

12 Q. Okay. Okay.

13 Now, you also testified about
14 Mr. Watson's testimony about upgrading to a
15 LiteSpan 2012 to increase capacity. Do you recall
16 that testimony?

17 A. Yes, I do.

18 Q. Okay. Were you here when Mr. Watson was
19 cross-examined?

20 A. No, I was not.

21 Q. Okay. I'll represent to you that
22 Mr. Watson testified in response to questions from

1 your counsel that by upgrading he meant placing an
2 additional LiteSpan 2012 in the same or in a new
3 enclosure next to existing LiteSpan 2000s. Can you
4 accept that for discussion purposes?

5 A. I can.

6 Q. Okay. Now you testified in response to
7 your counsel that you couldn't upgrade a 2000; that
8 you had to replace it. Do you recall saying that?

9 A. Yes, I do.

10 Q. Isn't it also correct and wouldn't you
11 agree with Mr. Watson that you don't have to
12 replace the LiteSpan 2000; that you can place a
13 growth LiteSpan unit if there's space in a CEV, if
14 there's not, next to an existing RT structure, for
15 growth and leave the LiteSpan 2000 that's right
16 there right now still operating?

17 A. Yeah, you can place a new LiteSpan 2012
18 if there's space and other environmental conditions
19 exist for it.

20 Q. Okay. And then you chatted with your
21 counsel about how many ADLU cards could be
22 supported in the LiteSpan configurations that we've

1 been talking about, and in particular you were
2 responding to Mr. Watson that heat is the limiting
3 factor, and you said that wasn't the only
4 constraint; that battery power also is one. Do you
5 recall that?

6 A. Yes, I do.

7 Q. Okay.

8 Were you here during the part of
9 Dr. Ransom's testimony when he testified that even
10 in a LiteSpan 2016, Alcatel supports an additional
11 300 plus port appearances beyond the 672 associated
12 with the three CBAs?

13 A. I was not here, but I've heard
14 Dr. Ransom's testimony.

15 Q. Well, don't you think that Alcatel and
16 Mr. Ransom or Dr. Ransom would have given some
17 account to battery power issues in testifying in
18 that fashion?

19 A. Well, I'll tell you that Alcatel has not
20 manufactured the card. He was referring to the
21 quad is my understanding.

22 Q. Yes.

1 A. And my understanding is that they are
2 engineering the quad card to require less power,
3 less battery power. The problem is they don't know
4 exactly what that less is right now, and
5 Dr. Ransom's testimony, while I'm sure he knows
6 what he's talking about, without having some actual
7 measurements, we don't know exactly what that
8 engineering or what that design is going to turn
9 out to be. With what we've looked at and what
10 we've been told, we can't get quite as many as --
11 we can't get quite 300 cards based on just the
12 design that we know of for the quad card and the
13 power requirements for the quad card and maintain
14 eight hours of battery reserve.

15 Q. Have you seen the document entitled SBC
16 Executive Meeting, an Alcatel presentation on April
17 10, 2001, that's been marked and admitted as
18 Rhythms Rehearing Ransom Cross Exhibit 16P?

19 A. Did I? I don't recall. I browsed
20 through a number of documents, but I don't recall
21 specifically which one.

22 Q. Okay. Well, this is one that actually

1 has a presentation to SBC's senior executives about
2 the platform in April of this year and talks about
3 lowering the quad card power consumption and
4 dissipation to match the dual card power numbers.
5 You've seen that document, haven't you?

6 A. I've seen a number of documents. I
7 don't recall that one specifically.

8 Q. Okay. You don't know that Alcatel told
9 your folks, your senior executives, that it was
10 planning to bring down the power levels so the quad
11 cards could equal those of the dual cards?

12 A. I haven't seen that.

13 Q. Well, then how do you know if power is
14 an issue or not if you haven't investigated whether
15 or not Alcatel is telling your company that it's
16 going to improve that situation?

17 A. I'm sorry. Your question is how do I --

18 Q. How do you know if there actually is a
19 power issue and a battery issue if you're not even
20 aware of the document where Alcatel is telling your
21 senior executives that they fixed it?

22 A. Well, two reasons; number one, I do know

1 what the power requirements are of the dual cards
2 today. I know what that impact is on my battery
3 reserve.

4 Q. Okay. What's the current power
5 requirements of the dual card right now?

6 A. It's 6.2 I believe watts.

7 Q. Okay, and what do you think the quad
8 power is going to be?

9 A. Almost a half watt or maybe six-tenths
10 of a watt less, if my memory is right.

11 Q. Okay. So once you get the quad cards,
12 it's going to be, in effect, a doubling of DSL
13 capacity with no additional heat load, right?

14 A. Well, again, it's heat and power that
15 determines how many we can actually put in a
16 cabinet location.

17 Q. Right, and on both of those measures,
18 aren't the quad cards going to be designed to be
19 equal to approximately both the power and the heat
20 thrown off by the dual cards?

21 A. The quad cards will give us more
22 capacity simply because of the nature --

1 Q. That wasn't my question, Mr. Keown.

2 A. I'm sorry.

3 Q. Card for card, I know the quad card has
4 twice the appearances of the dual card, but card
5 for card, isn't Alcatel telling you right now,
6 since April, that the quad card will have about the
7 same power draw as the dual card and about the same
8 heat thrown off as the dual card?

9 A. Which translates into I can get the same
10 number of quad cards as I can get dual cards in
11 today. If they lower that power, then I can get a
12 few more quad cards in my cabinet.

13 Q. Okay. And then the six channel bank
14 assembly point, do you recall that? Discussing
15 about installations in CEVs and huts?

16 A. Yes, I do.

17 Q. Okay. Now, these are structures that
18 generally have more space than the LiteSpan 2016
19 shrink-wrapped cabinet, right?

20 A. They typically have more space than
21 cabinets.

22 Q. Okay. And CEVs at least are

1 environmentally conditioned, right?

2 A. Physically they are.

3 Q. Meaning air-conditioned, right?

4 A. Typically they have air conditioning.

5 Q. And cabinets are not. Isn't that fair?

6 A. Cabinets are not air-conditioned.

7 Q. So in a CEV you can dissipate more heat
8 than you can in a cabinet. Right?

9 A. That's correct.

10 Q. And Mr. Watson was testifying, after his
11 review of Alcatel and SBC documents, that there is
12 a configuration that supports -- that Alcatel
13 supports that six of the nine channel bank
14 assemblies can be equipped with ADLU cards, and I
15 think you said that's not a number you use; you use
16 five. Is that correct?

17 A. We use five; that's correct.

18 Q. Okay. But will you agree with me that
19 Alcatel as the vendor supports in that kind of
20 environment six channel bank assemblies with ADLU
21 cards? Alcatel, not your deployment choices, but
22 Alcatel as the manufacturer.

1 six CBA load?

2 A. Well, --

3 Q. Again, let me make sure my question is
4 clear to you, Mr. Keown. I'm not talking about
5 what you currently have installed. I want you to
6 tell me, answer the question with respect to
7 whether or not there's other battery plant or
8 additional battery plant that you could deploy in
9 CEVs to handle additional power demands. That's
10 the context of my question.

11 A. I think I understand. The answer to
12 your question is yes, you can, but the problems
13 that it presents is, number one, there are space
14 constraints even within a CEV. There's also
15 additional rectifiers. If you add more batteries,
16 you have to add more rectifiers to keep those
17 batteries charged, and that would take up
18 additional space, so you'd have to be -- you'd have
19 to plan your facility and your housing so that you
20 can handle all of that, and adding more batteries
21 and adding more rectifiers reduces the amount of
22 space that's available in the hut or CEV.

1 Q. Okay. Well, that's a normal thing that
2 engineers do for CEVs is to plan those kinds of
3 additional requirements, right?

4 A. It is.

5 Q. Okay. And here we're talking about a
6 LiteSpan. Even with five CBAs, five of nine, and
7 quad cards, how many DSL services would that
8 support?

9 A. Well, five channel banks times 56 slots
10 times four.

11 Q. I don't want to try lawyer math, so you
12 do it. You're the engineer.

13 A. Whatever that math comes out to be. Did
14 you want that number?

15 MR. LIVINGSTON: What are the numbers?

16 MR. BOWEN: Five channel bank assemblies --

17 A. Five channel banks, 56 slots.

18 Q. Quad cards.

19 A. Times quad cards.

20 (Pause in the proceedings.)

21 A. 1,120.

22 Q. 1,120, and that's more than half of the

1 capacity of the whole LiteSpan to serve POTS,
2 right?

3 A. That's correct.

4 Q. Okay. Okay. And then you talked about
5 the Lucent 82G. Let me ask you, first of all, it's
6 not a secret that Lucent makes a cabinet called
7 82G, is it, Mr. Keown?

8 A. Not in my company.

9 Q. Okay. Can't you go out to Lucent and
10 say let me see your catalog and it has an 82G in
11 there?

12 A. As far as I know.

13 Q. Okay. So Mr. Watson's use of the term
14 at the top of page 13 is not disclosure in some
15 fashion of what you deem SBC's proprietary
16 information, is it?

17 MR. LIVINGSTON: I think he was relying on
18 Alcatel documents.

19 MR. BOWEN: That's not even an Alcatel
20 product. Okay?

21 Q. It's not a secret that the cabinet is
22 made by Lucent called 82G, is it?

1 A. It's not a secret that the cabinet, the
2 82G, is made by Lucent.

3 Q. Okay.

4 A. Actually it's Avaya now.

5 Q. Pardon me?

6 A. Avaya. They've changed names.

7 Q. Okay. And did I hear you testify that
8 the 82G is not approved by Alcatel for deployment?
9 That is, they don't approve the LiteSpan 2000 or
10 2012 to be placed in a Lucent 82G cabinet?

11 A. No, you did not hear me say that.

12 Q. Okay.

13 A. What you heard me say --

14 Q. Do you know whether or not they do
15 approve that?

16 A. It is currently approved now.

17 Q. Okay. And do you know whether or not
18 SBC has approved that cabinet for deployment?

19 A. We have tested it with a certain
20 configuration and have approved it for a certain
21 configuration.

22 Q. And that would be reflected in, for

1 example, your loop deployment guidelines, wouldn't
2 it?

3 A. It probably is reflected in there.

4 Q. Okay. But that's a confidential
5 document which we can't talk about on the open
6 record. Is that right?

7 A. That's correct.

8 Q. Okay. So we'll talk about that later.

9 A. Okay.

10 Q. And is it your understanding that
11 Alcatel supports the LiteSpan 2000 installation in
12 the 82G cabinet with five fully populated channel
13 bank assemblies using ADLU cards?

14 A. I don't know if Alcatel supports the
15 five channel banks.

16 Q. You don't know.

17 A. I don't know.

18 Q. Okay. Okay. And then finally on your
19 additional direct testimony, this cross talk issue
20 and your additional Direct Exhibit Number 1, do you
21 have that up there with you?

22 A. Yes.

1 Q. Now you're not the NRIC representative,
2 are you, Mr. Keown?

3 A. No, I'm not.

4 Q. And you get your information about NRIC
5 from the SBC NRIC rep. Is that right?

6 A. That's correct.

7 Q. Okay. Now, let me tell you what the
8 Rhythms' NRIC rep tells us is happening in your
9 contribution that you're talking about here. You
10 can set the noise margin ratio on these systems at
11 a variety of points. Is that right? Is that your
12 understanding?

13 A. That's correct.

14 Q. Okay. And it was 31 dBs, or decibels,
15 right?

16 A. That was the default.

17 Q. Okay, and now it's 10.

18 A. That's correct.

19 Q. And what that translates into, if I
20 understand this correctly, is that if you reduce
21 the noise margin, it has the effect of, at least
22 for some circuits, reducing the power required to

1 achieve that margin. Is that fair?

2 A. Within a certain length of copper that's
3 correct.

4 Q. Okay. So, in other words, to achieve a
5 31 dB noise margin ratio, you have to have that
6 ADLU card set at a higher power transmitting level
7 to achieve that. Is that fair?

8 A. The way the transceivers work,
9 particularly with DMT line coding, it will look at
10 the line and determine what it needs to send.

11 Q. Okay.

12 A. But it will be higher powered the longer
13 the loop is.

14 Q. Other things being equal though, it
15 takes more power to achieve the 31 dB noise margin
16 ratio than it does a 10 dB noise margin ratio.
17 Isn't that right?

18 A. Typically that is correct.

19 Q. Okay. And by setting that margin down
20 to 10 instead of 31 dBs, at least for some circuits
21 they'll use less transmitting power. Is that what
22 you're saying? What this is saying here?

1 A. Again, within a certain length of
2 copper, you can reduce the amount of power that's
3 required for that transmit.

4 Q. Okay.

5 A. That transmitter.

6 Q. Okay. And the context of this is, will
7 you agree, the fact that you're putting out in the
8 field, that is in the RT itself, a DSL transceiver
9 on the card that can have the strength of a central
10 office-based DSL transceiver? That's the issue
11 here, right?

12 A. That's true.

13 Q. Okay.

14 A. A remote transceiver.

15 Q. Right. And so for the circuits -- if
16 you think of a parallel circuit that Rhythms might
17 have on what I call home run copper, by the time
18 the signal gets out to that area, the signal
19 strength has attenuated or has lessened. Is that
20 right?

21 A. Typically that would be correct.

22 Q. Okay. And if that Rhythms pair rides in

1 the same distribution plant as this LiteSpan 2000
2 pair, that's going to run a lot hotter than the
3 Rhythms pair in terms of signal strength, right?

4 A. Depending on proximity in the cables and
5 a lot of other variables.

6 Q. But that's the issue here. That is, if
7 they're in proximity, the concern is that the
8 central office-based DSL signal will get stepped on
9 by the LiteSpan signal via cross talk. Is that
10 right?

11 A. Could get stepped on.

12 Q. Could get stepped on. Right?

13 A. Could.

14 Q. Okay. And that happens because of what
15 you talked about. That is, a signal is induced in
16 the Rhythms pair because of the strength of the
17 Pronto pair. Right?

18 A. Well, I think if you're talking about
19 this contribution that SBC made, what the noise
20 margin ratio actually does in the overall circuit
21 is two things. You mentioned the power as being
22 one. The other thing it really does is if you

1 think in terms of a a receiver, an AM/FM receiver,
2 they typically have what they call a signal to
3 noise ratio, and this max noise ratio says if you
4 can tolerate a little bit more noise and still
5 achieve a high bit error rate, then you haven't
6 hurt yourself any, and that's what this
7 contribution is based on, looking at the lines,
8 measuring various signals on the line, and
9 measuring essentially that signal to noise ratio,
10 so if the receiver can actually receive the signal,
11 even if you lowered that noise margin ratio, if it
12 can still receive the signal and de- code it, you
13 still have your data transmitting in a clean form,
14 and that's kind of the basis behind this
15 contribution.

16 Q. Okay. So what this is saying is, look,
17 I can achieve almost the same throughput or the
18 same throughput by lowering my noise margin ratio
19 from 31 dBs to 10.

20 A. Correct.

21 Q. And in doing so I'll transmit at least
22 for some loops less power to do so, right?

1 A. Correct.

2 Q. Okay. Well, our NRIC representatives
3 say to us that you're right, but that that effect
4 ends at about 3,000 feet. That is, beyond 3,000
5 feet of copper segment, you need to crank it up
6 enough that this effect is negated. Isn't that
7 what your folks tell you?

8 A. No, it is not.

9 Q. Okay. What do your folks tell you about
10 that?

11 A. Well, my folks tell me that on the
12 circuits that we've measured -- I think you're
13 representative is talking about where the power --

14 Q. Yes.

15 A. What he's saying, what he's saying or
16 what he's trying to describe I think is that at
17 3,000 feet, if you have a circuit that's 3,000 feet
18 or less, your DSLAM, for instance, or the RT would
19 use less power to power that line, send that signal
20 out. Beyond that, that power will go back up
21 again.

22 Q. Right. That's exactly what he's saying.

1 A. But that's only one of the variables in
2 the maximum noise ratio in that, again, the benefit
3 comes in if I can -- if I still have a high enough
4 signal to noise ratio on my line, no matter how far
5 I'm out, then I can still recover my signal and
6 provide the data.

7 Q. But you agree with our representative
8 that above 3,000 feet you've got to increase the
9 power to achieve the throughput. 3,000 feet of
10 copper I'm talking about.

11 A. Let me look.

12 Q. Okay.

13 A. Give me a minute to look.

14 (Pause in the proceedings.)

15 Q. And you might want to also focus, as
16 you're doing that, on the last page of your exhibit
17 in the summary section where it says -- can I read
18 this, the first part of this sentence? This is
19 public. I'm sorry. It says: "Based on the circuit
20 attenuation parameters, we can surmise that the
21 loops of the study are short compared to the
22 maximum loop length served from remotes of about 12

1 kilofeet."

2 A. I see that.

3 Q. Okay.

4 A. Yeah. I'm reading that.

5 Q. Okay.

6 A. And I think lowering the additional
7 noise margin ratio would be expected to exhibit the
8 greatest reduction in required power with the
9 lowering of the maximum noise ratio. I was looking
10 for the exact feet, how many feet out before you
11 actually power crank back up.

12 Q. Right.

13 A. And I don't see that in this particular
14 document.

15 Q. But you've heard that 3,000 foot number,
16 haven't you?

17 A. I don't recall the exact number. I
18 thought it was greater than 3,000 feet. That's why
19 I was looking for it in the document.

20 MR. BOWEN: Your Honor, this could be a good
21 point to break, given that we have the 12:30 with
22 Dr. Levin.

1 (Whereupon the proceedings were
2 hereinafter stenographically
3 reported by Carla Boehl.)
4 (Whereupon Ameritech Rehearing
5 Exhibits 11.0 and 11.1 were
6 marked for purposes of
7 identification as of this
8 date.)

9 JUDGE WOODS: Back on the record in Docket
10 00-0393 on Rehearing. We did have to take a brief
11 recess and we now have Ameritech Witness Levin on the
12 telephone for cross examination by Mr. Schiffman. Dr.
13 Levin, you understand that not being present it is
14 kind of impossible for me to swear you up, so I would
15 ask you on the record as to whether or not the
16 testimony you are about to give is being given as if
17 under oath.

18 THE WITNESS: Yes, it is.

19 JUDGE WOODS: Okay, Mr. Livingston.
20
21
22

1 DR. STANFORD L. LEVIN
2 called as a Witness on behalf of Ameritech Illinois,
3 having been first duly sworn, was examined and
4 testified as follows:

5 DIRECT EXAMINATION

6 BY MR. LIVINGSTON:

7 Q. Dr. Levin, you have your testimony, both
8 your direct and your rebuttal, correct?

9 A. Yes, I do.

10 Q. And we have marked your direct testimony
11 as Ameritech Rehearing Exhibit 11.0 and your rebuttal
12 testimony as Ameritech Rehearing Exhibit 11.1. Let me
13 ask you this. Do you have corrections or changes you
14 would like to make to your direct testimony?

15 A. No, I do not.

16 Q. Do you have corrections or changes you
17 would like to make to your rebuttal testimony,
18 Rehearing Exhibit 11.1?

19 A. I have two typographical errors I would
20 like to correct.

21 Q. Okay, sir, could you direct our attention
22 to the first one of those?

1 CROSS EXAMINATION

2 BY MR. SCHIFMAN:

3 Q. Good afternoon, Dr. Levin. My name is
4 Ken Schifman. I represent Sprint in this proceeding,
5 and I recognize we are on the telephone, so I will try
6 to work with you so we can keep the court reporter
7 sane here and she can understand what we are doing.

8 All right. Dr. Levin, can I take it from
9 your testimony that really one of the main tenants or
10 one of the main thrusts of your testimony is that
11 facilities-based competition is the best type of
12 competition?

13 A. Yes, I think that's correct.

14 Q. And, in fact, on page 11 of your direct
15 testimony, you state in the answer that continues over
16 on page 11, it is only with facilities-based
17 competition that customers get true choice, rather
18 than the choice of buying the same underlying service
19 from a selection of service providers. Do you see
20 that testimony?

21 A. Yes.

22 Q. Has this view been adopted by the FCC?

1 That is, has the FCC stated that only facilities type
2 of competition is the only type of competition that
3 should be present?

4 A. I don't think that I have said that, and
5 I don't think that the FCC has said that it's the only
6 type. But my understanding of the general thrust of
7 the FCC policy is that it is designed to get
8 facilities-based competition when possible.

9 Q. I misunderstood the last sentence of what
10 you said. It is designed to what?

11 A. It is designed to achieve
12 facilities-based competition when possible.

13 Q. Okay. And the method to get to
14 facilities-based competition is for carriers to,
15 competitive carriers, to lease unbundled network
16 elements from the incumbent LECs, right?

17 A. The way that you achieve facilities-based
18 competition is for competitors to build their own
19 facilities.

20 Q. Do you have the UNE Remand Order with
21 you?

22 A. I might. Do you want me to look for it?

1 Q. Yeah, that would be great.

2 A. Okay, hold on.

3 (Pause)

4 Yes, I have it.

5 Q. Okay, sir, could you please turn to
6 paragraph 5 of that order?

7 A. Okay.

8 Q. And I am going to read a part of
9 paragraph 5 and then I am going to ask you if you
10 agree that that's the methodology which the FCC has
11 taken. So let me start by reading, "We recognize that
12 there will be a continuing need for all three of the
13 arrangements Congress set forth in Section 251 to
14 remain available to competitors so that they can serve
15 different types of customers in different geographic
16 areas. We continue to believe that the ability of
17 requesting carriers to use unbundled network elements,
18 including various combinations of unbundled network
19 elements, is integral to achieving Congress' objective
20 of promoting rapid competition to all consumers in the
21 local telecommunications market. Moreover, in some
22 areas we believe that the greatest benefits may be

1 statement in paragraph 6 on the next page that states,
2 "Although Congress did not express explicitly a
3 preference for one particular competitive arrangement,
4 it recognized implicitly that the purchase of
5 unbundled network elements would, at least in some
6 situations, serve as a transitional arrangement until
7 fledgling competitors could develop a customer base
8 and complete the construction of their own networks."

9 Do you disagree with that statement?

10 A. Well, what the FCC is doing is giving
11 their interpretation of what Congress has done, and I
12 think that the FCC's interpretation of Congress'
13 position is correct. Notice that he says that they
14 are favoring facilities-based competition and so is
15 Congress. We may have a disagreement over how to get
16 there but not over the objective.

17 Q. Did you say it was the FCC's
18 interpretation was correct or incorrect?

19 A. I believe that the FCC's interpretation
20 of what Congress has said is correct.

21 Q. Okay. Dr. Levin, I believe you have a
22 discussion in your direct testimony and then there is

1 another discussion in your rebuttal testimony about
2 the Essential Facilities Doctrine. Do you recall that
3 discussion in your testimony?

4 A. Yes.

5 Q. And do you agree with me that the FCC has
6 gone beyond the Essential Facilities Doctrine in
7 requiring incumbent LECs to unbundle their networks?

8 A. Yes, they have done that, and they have
9 done that in order to comply with the
10 Telecommunications Act.

11 Q. We are going to move to your rebuttal
12 testimony now, okay?

13 A. Yes.

14 Q. Dr. Levin, on page 12 of your rebuttal
15 testimony, the first answer at the top.

16 MR. LIVINGSTON: You are on 12?

17 Q. Pardon me, page 2 of 12, lines 1 through
18 7. You talk, starting on line 4, "As a consequence I
19 continue to recommend that the Commission, if at all
20 possible, not unbundle the Project Pronto DSL
21 architecture," and then it goes on. Do you see that?

22 A. Yes.

1 Q. And can you tell me what you mean by "if
2 at all possible"?

3 A. The Illinois Commission must comply with
4 the law insofar as the Telecommunications Act is
5 concerned and with any orders that the FCC that take
6 precedence over the Illinois Commission's actions.

7 Q. So when you say "if at all possible," you
8 recognize that the Illinois Commerce Commission is
9 constrained by federal statute, federal rules, state
10 statutes, right?

11 A. Yes.

12 Q. In fact, the Illinois Commerce Commission
13 is a creature of statute, right?

14 A. Well, it is in place because of Illinois
15 statutes.

16 Q. Right. And you served as a commissioner
17 here in Illinois, sir?

18 A. That's correct.

19 Q. If you go down on page 2 of your
20 testimony, you talk about some alternatives that CLECs
21 have instead of the Project Pronto architecture. Have
22 you done an analysis of the economic costs for CLECs

1 in obtaining access to those alternatives?

2 A. I have not, but I understand that other
3 people in this case have done that analysis.

4 Q. So you -- did you base this analysis on
5 the analyses of other witnesses?

6 A. In part.

7 Q. Which witnesses?

8 A. Dr. Aron in particular.

9 Q. Dr. Aron did an analysis of how much an
10 engineered controlled splice costs?

11 A. I don't remember all the details, but she
12 did an analysis that suggests it would be feasible to
13 collocate a DSLAM at a remote terminal.

14 Q. So this discussion here, you are basing
15 your understanding on Dr. Aron's analysis, right?

16 A. Well, I said in part. In other words, I
17 was describing what is offered by Ameritech to its
18 competitors. You asked me if I had looked at whether
19 that was economically feasible and I replied that Dr.
20 Aron has looked at that question.

21 Q. And you have not talked, sir, to any
22 CLECs as to whether or not this arrangement is

1 economically feasible, right?

2 A. Well, I do know that in another context
3 that Sprint itself has asked for exactly these
4 arrangements. So I assume if they are asking for it,
5 they must assume it is economically feasible.

6 Q. You, sir, have not talked to any CLECs
7 about whether or not they determined this to be
8 economically feasible, is that correct?

9 A. I have heard Sprint ask for exactly this.

10 Q. Could you answer my question, sir?

11 A. Well, I don't know whether that qualifies
12 as talking with them about whether it's economically
13 feasible. I haven't directly done that, but I have
14 heard Sprint request these arrangements.

15 Q. And you understand Sprint's position in
16 this proceeding to be that the collocation of the
17 DSLAM at the remote terminal was over \$130,000?

18 A. I think that number is familiar to me.

19 Q. Okay. And do you understand in this
20 proceeding that Mr. Keown, a witness from Ameritech,
21 has described that CLECs, for purposes of his cost
22 study in determining how much the Project Pronto

1 architecture unbundling requirement would be, he
2 assumed that CLECs would have approximately 49
3 customers per central office?

4 A. Yeah, I don't remember that number
5 offhand.

6 Q. Let's just cut to the chase. You have
7 not done an analysis of Dr. Aron's numbers, Sprint's
8 numbers, and Mr. Keown's numbers to determine whether
9 or not a particular CLEC determines this DSLAM
10 collocation arrangement to be economically feasible
11 for a ubiquitous roll out, do you?

12 A. I have not done that financial analysis,
13 no.

14 Q. In your rebuttal testimony, sir, you talk
15 about the possibility that Ameritech will not even
16 roll out Project Pronto here in Illinois, right?

17 A. That's correct.

18 Q. Are you aware that the legislature passed
19 a law and the governor signed it here requiring
20 Ameritech to provide advanced services to 80 percent
21 of its customer base by 2005?

22 A. I believe it requires high speed access

1 by 2005, yes. I am familiar with that.

2 Q. Have you done an analysis of whether or
3 not Ameritech can accomplish that statutory
4 requirement without deploying Project Pronto?

5 A. I am sure that they can.

6 Q. Have you done such an analysis?

7 A. Yes. I mean, in terms of what it takes
8 to answer the question, yes.

9 JUDGE WOODS: Did he say can or can't? C-A-N
10 or C-A-N-T? I couldn't catch your answer to...

11 MR. LIVINGSTON: Could you repeat your
12 answer, please?

13 JUDGE WOODS: ..the previous question as to
14 the ability of Ameritech to meet that without rolling
15 out Project Pronto.

16 THE WITNESS: I believe that they can meet
17 that objective without rolling out Project Pronto.

18 MR. LIVINGSTON: Can, C-A-N, correct?

19 THE WITNESS: Yes, C-A-N.

20 JUDGE WOODS: Thank you.

21 Q. And you think so how?

22 A. I think that they can provide DSL service

1 to, I believe it was, around 55 or 60 percent of their
2 customers and they can provide high speed access to
3 the rest of their customers by reselling someone
4 else's service, for instance, cable modem service.

5 Q. Are you aware of any situations where
6 cable providers are reselling their service right now?

7 A. I am aware of Charter Communications, for
8 instance, making their network available to
9 competitors so that customers can have their choice of
10 ISPs.

11 Q. But that's not a situation of a carrier
12 leasing elements of Charter Communications' network,
13 is that true?

14 A. I said resale. I didn't saying leasing
15 elements.

16 Q. But the Charter situation is just the
17 ability to reach different ISPs, is that right?

18 A. That's correct.

19 Q. Dr. Levin, are you aware of the merger
20 requirements or the merger conditions between SBC and
21 Ameritech generally?

22 A. In a very general sense. I don't

1 remember all of them.

2 Q. Certainly.

3 MR. LIVINGSTON: Are you referring to the
4 federal or the ones proposed by the ICC?

5 MR. SCHIFMAN: I am referring to the federal
6 merger conditions.

7 Q. Sir, are you aware that generally that
8 the FCC, as part of approving that merger, required
9 SBC-Ameritech to go into 30 cities outside of its
10 region to provide local competition in R-boc regions
11 like Verizon and Qwest?

12 A. I think I remember that.

13 Q. Okay. Are you aware did the FCC require
14 SBC-Ameritech to do complete facilities-based
15 competition in those 30 cities? In other words, did
16 the FCC require SBC-Ameritech to do a complete
17 overbuild of Qwest facilities in Seattle, for example?

18 A. I don't know.

19 Q. And if the case were -- let's just assume
20 that the FCC did not require SBC-Ameritech to do a
21 complete facilities overbuild. Can you assume that
22 with me?

1 A. Okay.

2 Q. Would you agree with me that the FCC
3 still thought that the entry of SBC -Ameritech into
4 these 30 cities by facilities -based, by UNE-based,
5 entry would still bring competition to those
6 additional sites?

7 A. Well, it's hard for me to know what the
8 FCC thought, I suppose.

9 Q. But that would be a reasonable
10 assumption, right?

11 A. Well, I assume that by attaching this to
12 the merger condition, the FCC thought there was some
13 benefit.

14 Q. Some benefit to UNE-based competition,
15 right?

16 A. Well, that there would be some benefit to
17 consumers.

18 Q. Right. And the method by which a carrier
19 could do that doesn't necessarily have to be a
20 complete facilities -based methodology or business
21 plan, right?

22 A. I have not denied in my testimony that

1 there is some benefits to consumers of UNE -based
2 competition. My point is that there is a greater
3 benefit from facilities-based competition, and
4 mandating UNE-based competition may limit the
5 facilities-based competition that develops.

6 Q. Let's go to page 5 of your testimony,
7 sir.

8 A. The direct testimony?

9 Q. The rebuttal testimony. I am looking at
10 lines 7 through 9. You state, "If the Commission
11 finds, therefore, that it does not have to unbundle
12 the Project Pronto DSL architecture to comply with the
13 Telecommunications Act of 1996, then it should not do
14 so," do you see that?

15 A. Yes.

16 Q. Is the converse of that statement true as
17 well? In other words, if the Commission does find it
18 has to unbundle the architecture, then it should do
19 so, right?

20 A. Right.

21 Q. Dr. Levin, I am going to pose a couple of
22 scenarios to you and ask you if customers are

1 benefitted by a particular scenario, okay. I believe
2 Mr. Livingston should find this question familiar.
3 Scenario one is that Project Pronto is deployed by
4 SBC-Ameritech and CLECs cannot use it as unbundled
5 network elements. The only way they can get access to
6 that is the Broadband Service Agreement that Ameritech
7 gives CLECs and sets a particular type of service and
8 particular quality of service on, do you understand
9 that scenario?

10 A. I understand the scenario. I am not
11 entirely sure that your description of the broadband
12 service offering is accurate.

13 Q. Okay. Well, let's just call it the
14 broadband service. I will withdraw the part of the
15 scenario the way I described it. Just your
16 understanding of the Broadband Service Agreement,
17 okay?

18 A. Okay.

19 Q. Scenario two is Project Pronto is
20 deployed, CLECs can get unbundled access to this
21 architecture, and it turns out that the costs to
22 unbundle this architecture are negligible. It would

1 be something that's quite reasonable for the scope and
2 scale of this project. And the CLECs pay TELRIC rates
3 to obtain access to this Project Pronto. And one
4 further assumption, in this ability to unbundle it
5 gives CLECs the opportunity to offer differentiated
6 products to consumers and innovate in ways that they
7 are not permitted to do so under the Broadband Service
8 Agreement.

9 Which one of those two scenarios is
10 better for consumers?

11 A. Probably the first one.

12 Q. And the first one is Broadband Service
13 Agreement, no unbundling, CLECs can't have any type of
14 say as to what type of product they get from SBC,
15 right?

16 A. That's right. Because your second
17 scenario is going to probably prevent facilities-based
18 competition from arising. And as I pointed out in my
19 rebuttal testimony, consumers are harmed on balance by
20 that.

21 Q. Sir, my second scenario is that
22 SBC-Ameritech deployed Project Pronto here in

1 Illinois. So that's done, it's deployed. Is your
2 answer still the same?

3 A. Yes, I described in my length in my
4 rebuttal testimony why making the Project Pronto
5 architecture available is going to in this case
6 probably prohibit the competing facilities from being
7 developed. And consumers will in the end be harmed by
8 that, not benefitted.

9 Q. You are saying that CLECs won't
10 completely overbuild Ameritech's loop plant, is that
11 what you are saying?

12 A. What I am saying is that your second
13 scenario is anti-facilities-based competition, and
14 that is harmful to consumers.

15 Q. But we read at the beginning today that,
16 of our discussion today, that the FCC determined that
17 the use of unbundled network elements is a
18 transitional methodology to get to full
19 facilities-based competition, didn't we?

20 A. The problem with your scenario is that
21 that will not be a transition. It is most likely to
22 be a permanent state, and there won't be a transition

1 to facilities-based competition.

2 Q. So you think that CLECs were, once they
3 get a bunch of customers, that they will just be
4 content to ride Ameritech's network, right?

5 A. I think there is a very excellent
6 probability of that being the case.

7 Q. Okay. I understand your position. Let's
8 go to page 8 of your rebuttal testimony. There is a
9 sentence that talks about customer benefits starting
10 on line 9. However, it is more likely to be present
11 when network elements are voluntarily unbundled than
12 when they are mandatorily unbundled, and then it goes
13 on. Can you describe to me what you mean by
14 voluntarily unbundled?

15 A. Voluntarily unbundling would be a company
16 offering to make some of its network available in a
17 completely, uncoerced by regulators or legislation,
18 environment.

19 Q. Can you describe for me any instance
20 since the 1996 Telecom Act where Ameritech Illinois has
21 voluntarily unbundled its network?

22 A. Well, it has made an offer in this

1 particular instance to voluntarily provide service
2 over the Project Pronto network.

3 Q. But that's a resale service, right?

4 A. Well, they have offered two things. They
5 have offered a path from the central office to an end
6 customer, and they have offered access to a copper
7 subloop. Now, that isn't entirely voluntary because
8 of -- entirely voluntary but it has some aspects of
9 being voluntary.

10 Q. Are you talking about the broadband
11 service or are you talking about subloop unbundling?

12 A. I am talking about both of those.

13 Q. Okay. So subloop unbundling, Ameritech
14 has to provide it per the UNE Remand Order, right?
15 That's not a voluntary offering?

16 A. I am not going to agree with that because
17 I think it's a legal question as to whether that UNE
18 Remand Order applies in the instance of Project Pronto
19 network. But I do know that Ameritech has offered to
20 allow competitors to collocate DSLAMs at the remote
21 terminal to get access to copper subloops.

22 Q. Sir, let's talk about the broadband

1 service portion of your answer there. That is not an
2 unbundled network offering, network element offering,
3 by Ameritech, right?

4 A. Well, I am just sort of thinking as to
5 what that means. They have offered a path. They have
6 not offered it as a UNE.

7 Q. And you understand that Ameritech's
8 broadband service offering explicitly says that it is
9 not subject to Sections 251 and 252 of the Act?

10 A. I don't remember reading that, but I
11 would be willing to take your word for it.

12 Q. Section 251 of the Act is the part of the
13 Act that talks about unbundled network elements,
14 right?

15 A. That's correct.

16 MR. SCHIFMAN: I have no further questions.

17 REDIRECT EXAMINATION

18 BY MR. LIVINGSTON:

19 Q. Dr. Levin, do you have the UNE Remand
20 Order? This is Ted Livingston. I just have a few
21 questions for you.

22 A. Yes, I do.

1 Q. Could you turn to paragraph 104?

2 A. Okay.

3 Q. 104 reads in part, "We may also consider
4 how the unbundling rules we adopt will promote
5 facilities-based competition by competitive LECs," all
6 caps L-E-C. "We believe that it is the development of
7 facilities-based competition that will provide both
8 incumbent and competitive LECs with the incentives to
9 innovate and invest in new technologies. Such
10 innovation and investment will bring greater choices
11 of telecommunication services," telecommunications
12 singular, "and lower prices to a greater number of
13 consumers." Do you agree with that?

14 A. Yes.

15 Q. With respect to satisfying the 80 percent
16 by January 1, 2005, the advanced service requirement,
17 just to focus this, you are familiar with that?

18 A. Yes.

19 Q. Could Ameritech joint venture with a
20 satellite provider?

21 A. That's my understanding of the Act, yes.

22 Q. And that is certainly a possibility

1 commercially?

2 A. I don't see any reason why it wouldn't
3 be.

4 MR. LIVINGSTON: I have no further questions.

5 MR. SCHIFMAN: Nothing.

6 JUDGE WOODS: Okay.

7 MR. LIVINGSTON: Thank you very much.

8 JUDGE WOODS: Thank you, Dr. Levin.

9 (Witness excused.)

10 THE WITNESS: Can I hang up now?

11 JUDGE WOODS: Yes, you may. And we will all
12 go to lunch. Back at 2:00.

13 (Whereupon the hearing was in
14 recess for lunch.)

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1 A F T E R N O O N S E S S I O N

2 JUDGE WOODS: Back on the record.

3 JAMES E. KEOWN

4 previously called as a witness, was examined and
5 testified as follows:

6 CROSS EXAMINATION (Continued)

7 BY MR. BOWEN:

8 Q. Okay. Mr. Keown, let's move back to the
9 material that you had submitted in writing. And
10 before we get to your direct testimony, I have a
11 question for you. You have read your fellow
12 witnesses' testimony in this case, haven't you?

13 A. Yes, I have.

14 Q. You have read Mark Welch's testimony, for
15 example?

16 A. I skimmed through Mark's. I haven't read
17 Mark's.

18 Q. You know what the so-called engineering
19 controlled splice is, don't you?

20 A. Yes I am familiar with that.

21 Q. He said something which puzzled me.
22 Maybe you can clear it up for me. He testified -- let

1 me ask it this way. To your understanding is the ECS
2 a splice or is it a cross connect field? And if you
3 need me to define those terms, I will define them for
4 you.

5 A. Please.

6 Q. Okay. I think of a splice as something
7 where you open up a feeder cable sheath and take some
8 pairs and permanently connect them to other pairs. In
9 other words, you pull out 25 or 50 or a hundred and
10 you splice them to a different destination than the
11 back plane of the NGDLC. Are you okay with that
12 definition?

13 A. I am okay with that.

14 Q. I mean, it's not two binder posts with a
15 jumper between. Actually, the wire is spliced to go a
16 different direction.

17 A. I understand that.

18 Q. And I think as a cross connect field as
19 being a location that has -- I am going to call them
20 binder posts, but it has two termination points for
21 the wires coming from each side and then jumpers
22 between those two points, are you okay with that?

1 A. I think I am okay with that.

2 Q. Now, of those two descriptions, which is
3 your understanding of how the ECS works? Is it a
4 splice or is it a cross connect field?

5 A. Again, I don't know how Mr. Welch
6 answered that question. I am tell you how we looked
7 at it. As either.

8 Q. Pardon me?

9 A. As either. And the reason it was placed
10 that way, the reason it was built that way, is there
11 might be some CLECs that need two or three pairs. You
12 don't want to build an entire box for two or three
13 pairs. You might want to just put them in a splice.
14 There are other cases where a CLEC might want four or
15 five hundred pairs. In that case it might be a cross
16 connect box.

17 Q. Okay. So it sounds like the smaller
18 versions of this request would be a splice and the
19 larger versions would be a cross connect field, as we
20 talked about those terms?

21 A. It could be.

22 Q. Okay. Thank you. All right. Do you

1 have your direct testimony in front of you there?

2 A. Yes, I do.

3 Q. What we are going to try to do here is to
4 ask the questions that we can on the open record and
5 then I will have some questions for you on the closed
6 record. I will try to make those at the end.

7 A. That's fine.

8 Q. So we aren't going on and off the record.
9 And if you have to give an answer that involves some
10 information that you deem proprietary, let me know and
11 we will take a note and we will ask the question on
12 the closed record so you can answer that question for
13 us. Fair enough?

14 A. Sure, that's fair.

15 Q. All right. Now, we have chatted before,
16 have we not?

17 A. Several times.

18 Q. As I recall, your history is in central
19 office engineering, is that right?

20 A. Primarily central office engineering.

21 Q. Have you ever had a line, L-I-N-E,
22 position as an outside loop plant engineer?

1 A. No, I have not.

2 Q. And have you ever supervised line outside
3 plant loop engineers?

4 A. No, I have not.

5 Q. I have asked every witness those
6 questions so far, and I think I have run a possibility
7 of why is it, do you know, why the company didn't
8 present anyone amongst its witness panel that had
9 actual line OSP engineering experience, if you know?

10 A. I don't know that I can answer that. I
11 can tell you that from my background the company
12 deemed me at least capable of answering some of the
13 questions that were raised and the issues that were
14 raised in this hearing. I did supervise the outside
15 plant staff organization for about a year.

16 Q. And staff has the headquarters function,
17 is that right?

18 A. That is a headquarters function.

19 Q. All right. Now, if you look at page 5 of
20 your direct testimony, looking with me at lines 8
21 through 11, do you see your testimony? And, again, I
22 don't want to you disclose information you shouldn't

1 unless you feel like you can, but I think the capital
2 investment that Illinois Bell had planned to deploy
3 associated with Pronto in Illinois was or would have
4 been 519 million, is that right?

5 A. That is correct.

6 Q. Now, over what period is that number?

7 A. It would have started late last year and
8 it would go through 2003 or the first half or so of
9 2003.

10 Q. So by late last year, give me fourth
11 quarter, third quarter?

12 A. It was mid-fourth quarter.

13 Q. So fourth quarter of the year 2000 and
14 then continuing for just under three years?

15 A. That's correct.

16 Q. That's the span of that \$519 million?

17 A. Right.

18 Q. And would that have completed, absent the
19 suspension, would that plan have completed the initial
20 Project Pronto roll out in Illinois?

21 A. That would have completed the NGDLC
22 portion of Project Pronto.

1 Q. And when you say "that," there are other
2 pieces that you had planned, like VTOA, right?

3 A. VTOA, T1 rolls and other parts of Project
4 Pronto.

5 Q. And so you said that would complete the
6 NGDLC piece. Do you mean by that the deployment of
7 additional fiber in the loop plant, additional
8 Litespan 2000 and 2012 upgrades or new installs, new
9 RT locations, ADLU cards, copper feeder reinforcement
10 and so forth?

11 A. No. What I meant by that was the other
12 projects under Project Pronto would have gone beyond
13 2003. T1 rolls, for instance, wasn't slated to end
14 until 2003, nor the rehab work, rehabilitation work
15 that was scheduled.

16 Q. Okay. So I guess I need to ask you then,
17 the \$519 million is over the three-year time period
18 you just talked about, right?

19 A. It is.

20 Q. Which components of the total Project
21 Pronto approved plan are encompassed by the \$519
22 million?

1 A. The \$519 million would have covered the
2 central office work and the transport work required
3 for the NGDLC. That would have been power, batteries,
4 the frames and all those pieces of equipment, as well
5 as the NGDLCs themselves, including the right -of-way,
6 the fiber and the copper reinforcement, SAI boxes,
7 etc.

8 Q. When you say -- you said CO and then
9 transport, what transport do you mean there?
10 Interoffice or loop plant transport?

11 A. There is an inner office transport that
12 would have been required to haul traffic for CLECs
13 back and forth to their ATM cloud.

14 Q. Excuse me?

15 A. There was inner office traffic that we
16 would expect the CLECs would need to haul their
17 traffic from the OCDs back to their ATM cloud.

18 Q. Oh, and that was in the \$519 million?

19 A. Part of it. It's a real small part of
20 that money.

21 Q. And what kind of transport? Is that one
22 of these?

1 A. It would have been SONET.

2 Q. SONET-based ATM transport?

3 A. Well, yes, SONET-based ATM.

4 Q. But is it fair to say that of the \$519
5 million, with the exception of the interoffice
6 transport you mentioned, that the balance was for the
7 central office work on out...

8 A. That is correct.

9 Q. ..To the SAI?

10 A. That's correct.

11 Q. But it did not include T1 rolls; that was
12 part of the Pronto plan, right?

13 A. T1 rolls are a part of the Pronto plan
14 but it is not included in this 519 million.

15 Q. Okay. And you said you also mentioned
16 rehab?

17 A. Rehabilitation.

18 Q. What do you mean by that?

19 A. In some cases the outside plant, because
20 of splices and water and a number of other issues,
21 caused the copper to develop troubles. There might be
22 sections of cable that we might have to cut out and

1 replace with new sections of cable, as well as splices
2 that we might have to go in and rebuild those splices
3 to get water out to eliminate trouble reports.

4 Q. But this is rehab of copper plant, right?

5 A. That is rehab of copper plant.

6 Q. Copper loop plant, right?

7 A. That is correct.

8 Q. And was it part of Pronto to rehab that
9 plant or simply to replace it with the fiber-fed NGDLC
10 architecture?

11 A. Part of Project Pronto was to rehab that
12 plant.

13 Q. All right. And then what, do you know
14 about APONs and BPONs, these are all caps, A-P-O-N and
15 B-P-O-N?

16 A. I am familiar with BPON.

17 Q. It used to be called APON?

18 A. It used to be APON.

19 Q. And now it's BPON?

20 A. It's BPON today.

21 Q. In other words, it stands for Broadband
22 Passive optical Network, is that right?

1 A. That's correct.

2 Q. Is that part of the original Project
3 Pronto roll out?

4 A. The T1 roll portion of that is.

5 Q. And I take it that the fiber you talked
6 about being rolled out to support the NGDLC, as you
7 said, that will also support the BPON architecture?

8 A. The BPON part of a T1 roll, if I can
9 characterize it that way, has some money in the
10 business case for fiber itself. If we were deploying
11 the loop fiber and going past some of the locations
12 that we suspected would have T1 rolls, we would
13 include the fibers in the sheath of those T1 rolls.

14 Q. Now, you were here --

15 A. Excuse me. But it would have been coded
16 to the BPON part of the business case.

17 Q. You were here when Mr. Ireland testified,
18 were you not?

19 A. Just the morning part.

20 Q. Okay. Do you recall him giving a list of
21 what pieces had or had not been stopped or suspended?

22 A. Suspended, Illinois suspended?

1 Q. Yes. I think it was right there in the
2 morning. Do you recall that or not?

3 A. I don't recall specifically.

4 MR. LIVINGSTON: I think that was in the
5 afternoon.

6 Q. All right. We've had discussions with
7 other witnesses about technical capabilities of the
8 platform. Let me ask the question this way. Are you
9 aware of any difference of opinion between you and the
10 other witnesses in the case for Ameritech about what
11 that platform, that Litespan platform, can and can't
12 do?

13 A. If I could qualify that answer by saying
14 I am not sure what everybody else has said, I think
15 our agreement on what the platform can and can't do
16 should be in harmony.

17 Q. I won't re-ask one of the questions that
18 I asked Mr. Ireland then of you. All right. I want
19 to talk about your testimony at page 13 of your direct
20 testimony.

21 A. Just a second.

22 Q. Actually, then what I want to talk about t

1 starts on 12. This is the capacity issue that has to
2 do with the PVP. Do you have that general area?

3 A. Yes, sir.

4 Q. Now, I take it that when you wrote this
5 testimony that you weren't aware that Alcatel supports
6 ADLU cards residing in more than just the three CBAs
7 you are talking about here, is that fair?

8 A. That's correct, I was not aware when I
9 drafted this testimony.

10 Q. Now, if you wanted to put -- I want you
11 to keep in mind what you kind of think of as the base
12 configuration, nine CBAs at which three are enabled
13 for ADSL.

14 A. Okay.

15 Q. Is that a fair base configuration?

16 A. That's a base configuration.

17 Q. And to enable that, am I right that you
18 have to replace the band control unit cards with a
19 ABCU cards, first of all?

20 A. A little foundation here, are we talking
21 about retrofitting?

22 Q. Yes.

1 A. Well, you want me to kind of go through
2 the steps?

3 Q. Let me just try it. Tell me if I am
4 right. You have got to replace the BCU cards with
5 ABCU cards, right?

6 A. That's one of the preliminary steps. Of
7 course, the first one is to determine what kind of
8 cabinet we have out there and the number of working
9 lines that are in that cabinet to see if it can be
10 retrofit. But if you have one that is capable, you
11 certainly have to change the BCU to the ABCU.

12 Q. And is there one of those sets of cards
13 per each CBA?

14 A. That is correct. There is a set of ABCUs
15 per CBA.

16 Q. Okay. There is one active and one
17 backup, is that right?

18 A. One active and one standby.

19 Q. And then, dependent upon the cabinet
20 design, you would replay some of the channel bank
21 assembly chassis with ones that have a little fan
22 assembly beneath them, a PDFA, right?

1 A. Yes, you would typically have to put in a
2 fan assembly.

3 Q. If you do that with the three CBA
4 chassis, that would be the target CBAs for the ADLU
5 cards, correct?

6 A. If we were able to clear out three
7 channel banks, we would have to put in those type
8 channels banks and that would give us the three, that
9 is correct.

10 Q. This is all the same thing for new except
11 you are just going to do this on a new configuration
12 with no retrofit, right?

13 A. Of course, the new ones are much easier
14 than trying to retrofit.

15 Q. Sure. And then if you have an existing
16 Litespan 2000, you need to upgrade the system software
17 to Release 10.1 or above, right?

18 A. At least.

19 Q. Or even 11, right?

20 A. I am sorry?

21 Q. Even 11 when it comes?

22 A. One of these days it will be here.

1 Q. And then you have to have these ADLU
2 cards to plug in?

3 A. The ADLU cards provide the line
4 interface, that's correct.

5 Q. And then coming out of the back of one of
6 the ABCU cards you have got the two ATM fibers that go
7 to the OCD, right? You have got two more fibers?

8 A. That's correct, two more fibers that go
9 to the OCD.

10 Q. That's what's known as an unprotected
11 fiber system, correct?

12 A. That's correct.

13 Q. And that is how you are doing it; you are
14 not using a protected four-fiber system?

15 A. We are not using -- on the DSL portion?

16 Q. Yes.

17 A. We are not using a four-fiber system; we
18 are using a two-fiber system.

19 Q. So if one of those fibers goes out of
20 service, one is transmit and one is receive, right?

21 A. That's correct.

22 Q. What happens if one goes out of service?

1 A. Those three ADSL banks are out of
2 service.

3 Q. What if you have 30 daisy-chained behind
4 those channel bank assemblies? What happens to them?

5 A. Well, assuming that you could do that,
6 which you really can't and get away with all the VC --
7 meet the VC limitations, those channel banks would
8 also be out of service.

9 Q. I thought Alcatel supported 32 channel
10 bank assemblies daisy-chained together, is that right?

11 A. If you look at the entire Alcatel spec,
12 it talks about number -- and that's one of the
13 problems with talking about capacity in the packet
14 network. The capacities are multiple and they are
15 like three dimensional, in my mind. You can chain 32
16 channels banks as long as you don't exceed a certain
17 number of VCs. So it all plays into how many VCs you
18 intend to run over that fiber.

19 Q. Fair enough. But Alcatel does support up
20 to 32 daisy-chained CBAs, doesn't it?

21 A. Assuming you do not pass the VC maximum
22 for that daisy-chain, yes, they do.

1 Q. And if you have 32 chains, what happens
2 when one of those unprotected fibers goes out of
3 service?

4 A. Again, the 32 banks would be, if it is
5 chained, the fiber that goes from the last RT towards
6 the OCD, those channel banks would be out of DSL
7 service. The voice and the POTS service continues to
8 work, of course.

9 Q. Okay. Well, your most common
10 configuration for fiber is protected, is it not,
11 throughout your network?

12 A. For critical services, which we consider
13 POTS to be critical, it is protected.

14 Q. Isn't every one of the TDM side NGDLC
15 systems you have deployed a four-fiber system?

16 A. That's what I said. Critical services
17 and POTS, we do have protected fibers.

18 Q. Isn't every one of your office fibers
19 protected?

20 A. Either by ring or some other method, yes.

21 Q. Well, can you tell us why you are
22 deploying an unprotected two-fiber system for the DSL

1 side?

2 A. I can tell you kind of the reasoning for
3 it, yes. The current deployment of ADSL service isn't
4 considered to be a critical service. It is a service
5 that doesn't need 5/9 protection, excuse me, 99.999
6 protection, for service reliability. The voice
7 service absolutely has to be at least five nines, and
8 that's why we have the protection on the voice and did
9 not put it on the ADSL. I think the ADSL is about
10 three or four nines. I don't remember that number.

11 Q. When you say five nines, that's, what,
12 five minutes a year out of service?

13 A. Something like that. I don't remember
14 the combination.

15 Q. You are aware, are you not, that the
16 platform will currently support voice-over DSL?

17 A. Yes, I am.

18 Q. So if the CLEC want to run voice-over DSL
19 -- I am sorry, strike that. You are also aware that
20 outside Illinois, at least, that SBC is offering
21 CLECs one or two 96 kilobits CBR...

22 A. I am aware --

1 Q. ..PVCs?

2 A. I am aware that outside of Illinois we
3 are offering 96 kilobits VCs.

4 Q. And you can use that -- it's a CBR,
5 right?

6 A. It's a CBR.

7 Q. Constant bit rate?

8 A. Right.

9 Q. And you can use that for voice, correct?

10 A. Sure.

11 Q. If a CLEC wants to do that, he is not
12 going to get the 5/9 reliability of the TDM voice
13 side, is he?

14 A. He will not get -- the CLEC will not get
15 five nines, but at the same time, unless that is the
16 only line that a customer has in his house, and at
17 this point I don't know that anybody would go that
18 route, the voice service would still be on the low
19 frequency portion which would go up to the TDM part of
20 the loop.

21 Q. Well, what the CLEC is selling is not the
22 analog voice service, is that right?

1 A. That's correct.

2 Q. What the CLEC is selling is the
3 voice-over DSL service, right?

4 A. That's correct.

5 Q. So what can the CLEC offer the customer,
6 given your choice of configurations for the fibers?
7 Can they offer five nines to customers?

8 A. They cannot offer five nines today over
9 that architecture. However, again --

10 Q. Excuse me, they cannot?

11 A. They cannot offer five nines over that
12 configuration. However, again, the intent is or the
13 thought is that most customers will have a Lifeline
14 service and that's why the TDM portion is protected.

15 Q. Well, it's pretty easy to hook up two
16 more fibers, isn't it?

17 A. Describe easy.

18 Q. You hook them into the back of the
19 channel bank assembly and you hook them eventually
20 into the OCD card that sits in the OCD?

21 A. Yeah. Let me tell you kind of a problem
22 with that. First of all, you have to have an OCD or

1 some switch that will be able to switch all those VCs
2 at one time. We don't have a software in that OCD to
3 be able to do that. So if you grant the second fiber,
4 you do two things. Number one, you tie up another
5 port on the OCD which could drive us into an
6 additional capacity problem. The second thing you do
7 is you don't really guarantee your customers five
8 nines because they can't switch in case of some
9 failure on that fiber. You are still in the shape you
10 are in with one fiber.

11 Q. So you are going to leave the ATM side
12 unprotected for the duration of the Project Pronto
13 architecture, Litespan, is that right?

14 A. I don't know the answer to that.

15 Q. You are not aware of any plans at all to
16 use a protected fiber system once, for example, SBC
17 decides that its data affiliates like AADS are going
18 to offer voice services?

19 A. I haven't been involved in any
20 discussions to increase that.

21 Q. Okay. But your testimony at 12 and 13
22 presumes, does it not, the current status quo, Release

1 10.2, when you talk about a single PVC per channel
2 bank assembly, right?

3 A. My direct testimony doesn't address that,
4 but I have some rebuttal testimony that talks about
5 multiple PVPs.

6 Q. I am just sitting here on page 12 and 13
7 right now, Mr. Keown. Your assumption there is a
8 snapshot of today's capabilities, isn't that fair?

9 A. That's correct.

10 Q. And then I think, using that assumption,
11 you go on to talk about what you think would happen if
12 under this architecture CLECs got what this Commission
13 ordered you to give CLECs which is a PVP, but at page
14 13 you are talking about engineering jobs being
15 triggered, do you see that?

16 A. Yes, I do.

17 Q. So let me get this straight. If Rhythms
18 asked right now for a single PVP at a single RT
19 location, are you saying that that request would
20 trigger an engineering job, first of all?

21 A. It will start the engineers to looking at
22 deployment of another system. A one-third drop is a

1 significant drop, particularly if you are sitting here
2 today with about 90 percent capacity and tomorrow you
3 are down to one-third of that. It triggers a job in
4 our engineering force.

5 Q. And a job means that your engineers would
6 begin to plan for deploying an entire new NGDLC system
7 in a new RT closure?

8 A. Assuming the base configuration that we
9 have been discussing, that is correct.

10 Q. Okay. And what happens if one CLEC asks
11 for one PVP and a second CLEC asks for a different PVP
12 and they happen to be asking for those PVPs in
13 services served by two different channel bank
14 assemblies? How many jobs does that trigger under your
15 assumptions? Do you understand my example?

16 A. Let me make sure I understand your
17 example. I have an RT, an NGDLC, out here where I
18 have a CLEC that's requested a PVP. A second CLEC
19 comes along and asks for a second PVP in a different
20 channel bank. Then that triggers a job immediately.

21 Q. Is it one more NGDLC system or is it two
22 more NGDLC systems?

1 A. Well, again, the engineer would look at
2 what capacity he has lost, what is his intent, whether
3 he wants to serve the geographic area that the NGDLC
4 was designed to serve, and decide if he needs one,
5 two, or however many channel banks he needs to replace
6 the DSL capacity that he is losing.

7 Q. I understand how it works, but give me an
8 average assumed configuration and tell me, if two
9 CLECs want a PVP in two separate channel banks, does
10 that trigger one growth job or two?

11 A. Well, it would be one -- regardless, it
12 would be one job.

13 Q. One job for how many NGDLC systems,
14 Mr. Keown?

15 A. Again, it depends on what he says he
16 needs. If he only took two channel banks, then he
17 would trigger a job for one additional system to
18 replace those two channel bank capacity.

19 Q. What if three CLECs want a PVP and they
20 happen to be each one in a different one of current
21 ADLU CBAs?

22 A. Again, one job and again enough channel

1 banks to replace the DSL capacity.

2 Q. So it sounds like from your example with
3 your assumptions that you have here that in all three
4 cases, that is it is possible under your assumptions
5 to exhaust all three ADSL-capable CBAs, but if that
6 happened, it would still trigger a single additional
7 replacement of a Litespan 2000, is that right?

8 A. Let me see if I can parrot back what you
9 just asked me. Whether it is one, two or three PVPs
10 that are purchased, it will trigger a job, which is
11 correct. Because it felt kind of two questions in
12 that one. So it would trigger one job and that one
13 job would replace whatever DSL capacity is out.

14 Q. That wasn't my question. The question
15 was, whether it's one, two or three PVPs requested,
16 the biggest job that would happen is adding one
17 Litespan NGDLC system?

18 A. I would guess in most cases that would be
19 true.

20 Q. Okay. Just trying to understand what you
21 are saying to me. All right. Let's talk now about
22 what maybe we can term card slot exhaust. You talk

1 about that on page 15, do you not?

2 A. I do.

3 Q. And as you say, each CBA has 56 physical
4 slots, right?

5 A. Correct.

6 Q. Now, am I right that each of those slots
7 on the right side of the slot has four, if you will,
8 POTS pairs wired to the back of that slot?

9 A. There are four pairs, four POTS pairs,
10 attached to each slot.

11 Q. Okay. And on the left side there is two
12 pairs terminated, is that right?

13 A. Near our main stub.

14 Q. Pardon me?

15 A. Yes.

16 Q. And you can plug any card into any slot
17 in that Litespan, isn't that right?

18 A. Depending on how it's cabled out. The
19 other -- the additional pairs you mentioned are
20 typically used for like T1s and HDSL. If those pairs
21 aren't wired, you can plug an HDSL card in there but
22 it wouldn't have access to the right bus.

1 Q. What I am trying to establish is whether
2 or not you agree that there aren't slots that only
3 ADLU cards can fit into, are there?

4 A. Can you be a little bit more specific? I
5 am sorry.

6 Q. Think of a channel bank assembly and the
7 56 slots. An ADLU card will physically fit into any
8 slot in any of the nine CBAs, right?

9 A. Physically, it will.

10 Q. And it will physically contact all of the
11 pair terminations I just talked about?

12 A. Physically, it will connect to the cable
13 to the feeder pairs, yes.

14 Q. And then the issue you are edifying is
15 whether or not all of those terminations, which is six
16 pairs, actually are wired out to something beyond the
17 NGDLC, right?

18 A. That's correct.

19 Q. Now, do you always wire all four
20 right-side POTS pairs to the back of the slots?

21 A. With the exception of possibly one
22 channel bank, all four pairs are wired out to the SAI.

1 Q. And that one channel bank handles
2 four-wire circuits like T1s or HDSLs?

3 A. That's correct.

4 Q. All right. Now, on your testimony on
5 page 15 here you say that, if we own a line card, if
6 Rhythms owns a line card, and puts it in the slot, you
7 say all the ports and associated cable pairs that are
8 hardwired to that slot will become unavailable to use
9 by any other CLEC, do you see that?

10 A. I do.

11 Q. And that's your testimony that under any
12 conceivable configuration that's a fact, right?

13 A. If a slot -- if an ADLU card is plugged
14 in and we have the wiring the way we have it today,
15 four ports and four cable pairs are consumed by that
16 card.

17 Q. Okay. Well, what about if Rhythms owns a
18 line card and allows other CLECs to share that card?
19 Doesn't that make that card available for use by other
20 CLECs?

21 A. Assuming that Rhythms and the other CLECs
22 have some arrangement to make that work. But it

1 doesn't eliminate the fact that Rhythms has consumed
2 four ports and four pairs.

3 Q. Well, doesn't it in fact allow Rhythms
4 and Covad and Sprint and WorldCom, if it's a quad
5 card, to each occupy one port on that card via
6 cardsharing?

7 A. It does, and then it begins to look like
8 what we are selling as a broadband service if we are
9 able to assign the cards and assign the ports to
10 various CLECs.

11 Q. Okay. I tell you what, Mr. Keown, every
12 time I ask you a question and you say that looks like
13 the wholesale broadband service, we will be here til
14 Friday. Can I just ask you to -- I know what the
15 broadband service is and what it looks like. I want
16 to take you through step-by-step about what your
17 testimony is here and what the other possibilities
18 are, is that fair?

19 A. That's fair. I want to answer your
20 questions.

21 Q. Pardon me?

22 A. I want to answer your questions.

1 Q. Okay. Am I right that if CLECs can card
2 share, that that does make the ports on a single card
3 owned by a single CLEC available to others?

4 A. That will make them available.

5 Q. And have you ever heard of card pooling?

6 A. I have.

7 Q. Let's assume hypothetically that SBC at
8 one point considered a pooling scheme which went
9 something like this. A CLEC would buy a number of
10 cards, ADLU cards, and let's just -- these are Alcatel
11 cards so it's the same cards you put in for the
12 wholesale broadband service, same cards. We deliver
13 them to Ameritech and we get a port credit. If we
14 give you dual cards, if we give you ten dual cards, we
15 get 20 port credits. If we give you have 10 quad
16 cards, we get 40 port credits. You with me so far?

17 A. I am.

18 Q. And these cards go into your inventory
19 system, whatever that happens to be, and we can use
20 these port credits at any Project Pronto NGDLC
21 location. Can you assume that with me?

22 A. I can, I am okay, go ahead.

1 Q. Wouldn't that approach alleviate the
2 problem you are discussing here as well?

3 A. There are other issues around pooling.
4 And part of the problems come into the more
5 operational than anything else.

6 Q. I am just talking about slot exhaust
7 here. That's all we are talking about here right now.
8 I know everything else you are talking about. I am
9 just talking about slot exhaust. Wouldn't that
10 alleviate your concern about slot exhaust?

11 A. Assuming the pooling arrangement was
12 agreed upon by all parties, and that's a real big
13 assumption too, but assuming all the parties, all the
14 CLECs, agreed to use a pooling arrangement, that might
15 eliminate part of my problem, part of my concern. I
16 need to think about that a little bit more in detail
17 on that particular issue. There are a lot of
18 operational issues that crop up when you start
19 thinking about pooling arrangement and keeping track
20 of port assignments.

21 Q. I am just talking about slot exhaust,
22 Mr. Keown, one step at a time. That solves the slot

1 exhaust problem, doesn't it?

2 A. Again, with the assumptions that I gave
3 earlier, okay.

4 Q. All right. Now, isn't it also correct
5 that the issue you are identifying here about slot
6 exhaust is only an issue with respect to the last card
7 the CLEC puts in that serves a particular SAI?

8 A. Not necessarily just a CLEC.

9 Q. I am talking about one CLEC at a time. I
10 know there is more of us than one, at least I think
11 there is.

12 A. I don't know how to answer that question
13 without talking about the entirety of the box, all the
14 physical capacity.

15 Q. Don't you take this analysis a step at a
16 time and say if one CLEC puts one card in there to
17 serve one customer and one SAI, three-quarters of the
18 ports on a quad card are vacant?

19 A. I would say that about one CLEC.

20 Q. I want to stick with one CLEC first of
21 all, okay, can we do that?

22 A. Okay.

1 Q. Isn't that an issue only for the last
2 card that that CLEC installs?

3 A. For that particular CLEC and that
4 particular card, that's true.

5 Q. So if the CLEC, if Rhythms -- let's say
6 in today's snapshot world there is dual cards, right,
7 right now?

8 A. That's correct.

9 Q. No quad cards yet, right?

10 A. That's correct.

11 Q. So if Rhythms has seven customers and one
12 SAI, Rhythms could put in three cards, at two ports a
13 piece, have them fully occupied and have the fourth
14 card have the seventh customer on it, is that right?

15 A. For Rhythms, that would be true.

16 Q. And then the same would be true for every
17 other CLEC, right? Each CLEC would say I have got all
18 my cards occupied except for the last one I put in to
19 serve the SAI, right?

20 A. When Ameritech Illinois looks at it, it
21 has to add all those CLECs and see what the total
22 utilization becomes.

1 Q. Isn't the same analysis true for each
2 CLEC?

3 A. It is for each CLEC, but again when you
4 accumulate it and look at how many vacant or stranded
5 ports are available, then it becomes an issue of
6 entire capacity you have to look at.

7 Q. All right. Well, I take it then that,
8 since this is such a big concern, that you don't want
9 there to be any such stranded capacity in your
10 Litespan units, right? You don't want us to, even for
11 the last card, to have any spare ports out there,
12 right?

13 A. I don't know that that's quite what I
14 said.

15 Q. Well, isn't that your concern?

16 A. We certainly try to utilize -- maximize
17 the utilization of the Litespan box along with the
18 ADLU cards that are in them.

19 Q. Isn't that your concern, though? You
20 want to try and keep, at least for CLECs, as few as
21 possible the number of unused ports on those cards?

22 A. It is our concern about the

1 over-utilization of the box, yes.

2 Q. Okay. Does that concern extend to SBC's
3 own deployment of cards?

4 A. The concern over the utilization, it
5 certainly does.

6 Q. You don't want to have any spare cards
7 out there, right, not being utilized; they are stuck
8 in those slots with no services on them, right?

9 A. If we could achieve just-in-time, we sure
10 would be trying to shoot for just-in-time delivery.
11 But we do have some spare slots for service orders
12 that are flowing through.

13 Q. Isn't it a fact that you actually deploy
14 cards that you own in the NGDLC card slots per the
15 Pronto guidelines for expected demand for the next 6
16 to 12 months, Mr. Keown?

17 A. It is not 12 months. It is typically
18 four to six.

19 Q. Four to six months. Do you know what
20 your daily take rate is or has been for DSL in the 13
21 states?

22 A. Which platform?

1 Q. Pronto.

2 A. Just Pronto platform, I do.

3 Q. What is it?

4 A. I don't know if that's a number I can
5 give out.

6 Q. Well, you tell me. I don't know either.

7 A. I know what the number is, but it's a
8 number -- it kind of goes to our selling strategy. I
9 am not sure that's one I want to throw out for the
10 record.

11 Q. Is the number in the thousands?

12 MR. LIVINGSTON: Would you feel more
13 comfortable putting this on the confidential record?

14 THE WITNESS: I would.

15 Q. Okay. Well, is it fair to say that six
16 months worth of demand is a significant number of
17 cards in any NGDLC? It's not one, is it?

18 A. It isn't one card, no, you are right. It
19 depends on the DA and how fast services are selling in
20 the DAs, the distribution areas.

21 Q. Well, why is it okay for you to put out
22 six months worth of demand of cards and have those

1 cards be idle at least in part for those six months,
2 and it's not okay for us to put out even one card that
3 has one empty port on it?

4 A. Because of the way we have tried to
5 forecast and deploy the cards in Project Pronto, us
6 putting those cards out allows a smooth transition, a
7 smooth flow of orders, so that no one CLEC's order
8 gets held up because of lack of facilities. It's the
9 same engineering principles that's been applied to the
10 telecommunications industry for years. You estimate
11 or forecast your demand and put out the capacity you
12 think you need to satisfy that engineering period that
13 you are looking at.

14 The other thing that makes it easier for
15 us is that it's easier for us to take those cards and
16 redistribute, for instance, if we find a DA that's
17 going really slowly. So instead of having that
18 capacity stranded and buying new cards, we can
19 redistribute those cards to other DAs that might be
20 running hotter.

21 Q. Well, that's nice, but isn't that a CLEC
22 concern? If a CLEC owns the card, isn't that the

1 CLEC's business as to how they want to deploy their
2 cards?

3 A. It is certainly teh CLEC's business as to
4 how they want to deploy that card, but it's Ameritech
5 Illinois' business to manage the capacity of the
6 boxes.

7 Q. Well, you don't think CLECs need a mom or
8 a dad to help them out with their business, do you?

9 A. I don't know how to answer that.

10 Q. Okay. Well, would it be fair to say that
11 the same engineering principles and standards apply to
12 a CLEC's card placement as applied to Ameritech's card
13 placement, the general approach as to how you do
14 things?

15 A. Could you give me an example?

16 Q. Yeah. You don't want to roll a truck
17 every time you get an order and neither does Rhythms.
18 Does that sound reasonable?

19 A. That's very reasonable.

20 Q. So wouldn't it make sense for both
21 companies to avoid trying to do that?

22 A. Sure would.

1 Q. I take it there has to be -- your concern
2 repeatedly throughout your testimony is -- I am
3 bumping up against the capacity of whatever it is I am
4 talking about, whether it's the through-put of the
5 OC-3c or the card slots in the NGDLC? Isn't that the
6 thrust of all your testimony here? I am bumping the
7 capacity here somehow.

8 A. It is a concern of mine and a concern of
9 ours.

10 Q. That is an explanation question. I will
11 get to the real question here.

12 A. Okay.

13 Q. With respect to the card slot capacity,
14 don't you have to give some account to the expected
15 take rates from the customers who are served by the
16 NGDLC to see if you really have a real problem or not?

17 A. If you are referring to a forecast of
18 some type?

19 Q. No. I am saying -- you are saying, geez,
20 I let the CLECs put their cards out there, I could run
21 out of DSL slots here in these three channel bank
22 assemblies, right?

1 A. Right.

2 Q. You have got 168 of those things, right?

3 A. Right.

4 Q. They will support right now 336 DSL
5 services and soon 672, right?

6 A. Correct.

7 Q. So before you decide you actually have a
8 problem, have a theoretical problem, don't you have to
9 look at what you think the total DSL demand is going
10 to be first of all for that Project Pronto RT?

11 A. Yes, we will.

12 Q. And what's a good take rate number, do
13 you think, without disclosing actual projections?
14 What's a good working number for initial take rates on
15 Project Pronto?

16 A. I know what numbers we are using in the
17 Project Pronto build, and I think that's in that loop
18 deployed planning guideline which I think is in our
19 confidential record right now.

20 Q. Let's do a hypothetical and we can talk
21 about the actual numbers on the closed record. Can we
22 talk just hypothetically about 15 or 20 percent?

1 A. Okay. Twenty percent would be fine.

2 Q. Twenty percent, okay. So you have got 20
3 percent of the customers served by that NGDLC, right?

4 A. Actually, the way the engineers will
5 calculate that is 20 percent of the assigned lines in
6 the NGDLC.

7 Q. I probably said that, but if I didn't, I
8 am on the same page as you are.

9 A. There is a difference between working and
10 an assigned line, counsel.

11 Q. Fair enough. So these are Litespan
12 2000s, meaning the maximum working line capacity for
13 POTS is 2016 lines?

14 A. That's correct.

15 Q. So give me just a good working average,
16 working line number, for this kind of Litespan. Just
17 pick an average, you know, an average one out there.

18 A. Well, if we are playing with assumptions,
19 we will just pick -- I think you used 1500 with
20 Mr. Boyer last week so.

21 Q. That was my number. I don't know if it
22 is any good or not.

1 A. If we are assuming, we will run an
2 assumption, we will go with the 1500. Again, that
3 average bears across each of the NGDLCs.

4 Q. Sure. But just pick a representative one
5 for me. I want you to do it, not me this time. You
6 pick a number that you think is representative.

7 A. Anywhere between 15 and 1800.

8 Q. Well, maybe I am in the range at least.

9 A. You are close.

10 Q. Let's use 1500. So 1500 working -- or I
11 am sorry, assigned lines, right? That's POTS lines,
12 right?

13 A. That's correct.

14 Q. How many POTS lines?

15 MR. LIVINGSTON: He said that's correct.

16 Q. Okay, that's POTS, okay. Twenty percent
17 take rate is what?

18 A. Three hundred lines.

19 Q. Three hundred lines. All right. And
20 that's total demand, right, all DSL, not just SBC's
21 wholesale broadband service platform DSL?

22 A. Over the engineered period.

1 Q. That's the mature demand, that's the life
2 cycle demand?

3 A. I don't believe that's the life cycle
4 demand.

5 Q. That's an initial demand leve, 20
6 percent?

7 A. Yes.

8 Q. And then what's that good -- of that 20
9 percent give me your representative guess as to what
10 percent the CLEC would get?

11 A. Your guess is as good as mine on that
12 one.

13 Q. I thought maybe you would have an actual
14 estimate because you are talking about what horrors
15 are going to happen here if we get to collocate our
16 own line cards. So you must have had some idea of
17 what that would be.

18 A. I guess we will talk about my horrors,
19 but I made some assumptions on what that would be.

20 Q. You assumed one customer per SAI,
21 correct?

22 A. Correct.

1 Q. Well, let's assume we do better than
2 that. If there are 300 DSL lines out there, could we
3 get ten percent of that, do you think?

4 A. If we are assuming, we can assume that
5 you get ten percent.

6 Q. All right. So that's 30, right?

7 A. Uh-huh, that's correct.

8 Q. Thirty lines for Rhythms. And let's
9 assume a normal distribution across four SAIs, is that
10 fair?

11 A. That's fair.

12 Q. So that's seven point something, let's
13 just say eight lines per SAI?

14 A. That's correct.

15 Q. Well, if we had eight lines per SAI on
16 dual cards, that would be four cards, right?

17 A. That would be four cards.

18 Q. With no spare ports, right?

19 A. With no spare ports. But that makes
20 another assumption. That makes the assumption that
21 however many CLECs are out there are sharing those
22 cards equally.

1 Q. No, this is just Rhythms owning cards and
2 putting them out there. And on an average basis we
3 are going to have eight lines per SAI so we are going
4 to use four cards, right?

5 A. If Rhythms is the only CLEC in that.

6 Q. So I don't see any problem with card slot
7 exhaust even with dual cards right now, do you?

8 A. I am sorry?

9 Q. I don't see a problem with card slot
10 exhaust using my hypothetical numbers, do you?

11 A. Well, the problem I see is that in your
12 assumption you said ten percent for CLECs which is
13 more than -- I view that as more than one CLEC.
14 Therefore, if you have more than one CLEC that has 30
15 lines and these eight per SAIs, so if I assume that is
16 spread across four CLECs, that implies to me that what
17 is actually happening is I have four CLECs that have
18 two customers per card so I still have a 50 percent
19 stranded capacity. So I still have a problem.

20 Q. We are talking about dual cards right
21 now. Two customers per card means no unused capacity,
22 even in your example, doesn't it?

1 A. Well, you have asked me a question about
2 dual cards and quad cards.

3 Q. We will get to quads in a minute. Right
4 now we are talking about duals?

5 A. On dual cards, assuming that that was the
6 case and I have four CLECs with two customers apiece,
7 that's eight ports used.

8 Q. No unused ports, no problem, right?

9 A. No unused ports with the dual card.

10 Q. And there are 300 lines total and right
11 now the three CBAs can handle 384, right?

12 A. That's correct.

13 Q. So there is 84 ports of headroom right
14 now with the dual cards under this example, right?

15 A. Under this assumption.

16 Q. With the initial take rates that we
17 talked about. And then when Release 11 is out, it's
18 going to be 672 lines, right?

19 A. That's correct. 672 will be the total
20 capacity.

21 MR. LIVINGSTON: When you said 384, did you
22 mean 336?

1 THE WITNESS: 336.

2 MR. BOWEN: 336, sorry. Lawyer math again.

3 Q. So 36 lines of head room right now?

4 A. 36 lines, yes, that's correct.

5 Q. And once Release 11 is out and the quad
6 cards are available, it's still the same take rate,
7 right? It's still 20 percent of 1500, right?

8 A. Correct.

9 Q. Still 300 lines, right?

10 A. Correct.

11 Q. Lawyer math warning, now it's 672 -- I am
12 sorry, 372 ports of headroom, right?

13 A. Under that scenario, that's correct. The
14 difference comes in over the entire engineered life of
15 the NGDLC. Today, again, that take rate is
16 engineered, and I don't remember the time period
17 specifically, but it is something less than the life
18 of the NGDLC box. That take rate is likely to go up.

19 Q. Well, wouldn't you agree that 372 out of
20 672 ports is a lot of headroom?

21 A. If it's utilized efficiently and assuming
22 that it is all plugged up. But, again, this assumes

1 that all the cards are in there, all 56 per channel
2 bank.

3 Q. Well, let's do some more math.

4 A. Okay.

5 Q. If you have, you said, two to five CLECs,
6 right, that's what you are assuming?

7 A. Three to five, four, kind of average.

8 Q. Pick four CLECs. Four CLECs and four
9 SAIs, and let's pick your worst case which is one card
10 with only one appearance on it, leaving three spare,
11 right?

12 A. Right.

13 Q. So you have go three spare ports times
14 four SAIs times four CLECs, right?

15 A. Uh-huh.

16 Q. What does that math work out to?

17 A. That's 12. You have got three port
18 slots, four SAIs times four, I'm sorry, that's 48.

19 Q. Forty-eight. That's your worst case,
20 right? CLEC's got a card with one customer on it,
21 right?

22 A. That's correct.

1 Q. So I have got 48 spare ports here on the
2 system now, right?

3 A. That's correct.

4 Q. And if I am in Release 11, that's going
5 to use up 48 of the 372 spare ports, right? These are
6 quad cards we are talking about now.

7 A. Are we going back to the 300 take rate,
8 to subtract three from 672?

9 Q. Yeah.

10 A. That's correct.

11 Q. So I have still got more than 300 spare
12 ports in headroom, don't I, even with your worst case
13 scenario?

14 A. Well, again, that's assuming that you
15 plug is completely up, yes, there are still 372 ports
16 spare?

17 Q. So what's the problem?

18 A. Well, the problem is, again, that's some
19 lost capacity that we can't control. And again -

20 Q. I am sorry.

21 A. I am trying to answer your question.

22 Q. I didn't mean to cut you off.

1 A. And, again, the take rate that we are
2 working with is an assumed take rate that stops at
3 some short period of time. That take rate we expect
4 to be higher than some 20 percent over the next two
5 years. And if it is, we could have an entire channel
6 bank filled up with, we hope, all of us hope I guess,
7 with DSL customers. So if we have lost capacity in
8 that channel bank because of these stranded 48 ports
9 or however many ports there are, then it creates a
10 problem for us.

11 Q. Well, have you figured out what take rate
12 you have to get to to actually hit the ceiling of the
13 quad card configuration under your worst case
14 assumption?

15 A. Well --

16 Q. You understand the math I am talking
17 about, right?

18 A. Yeah, 672 divided by whatever the number
19 of households behind it are, assigned lines behind
20 that DLC.

21 Q. No, I am saying, have you figured out --
22 in a 20 percent take rate with this representative

1 NGDLC installation, I think we have agreed that with
2 quad cards you are going to have 372 lines, ports of
3 headroom?

4 A. Under this example, assuming that nothing
5 else changed, you are right.

6 Q. And if you use your worst case scenario
7 with one appearance and then three spare appearances
8 on a quad card, you use up 48 of those 372 spare
9 ports, right?

10 A. True.

11 Q. Okay. So if you use a higher take rate,
12 you will eat up that headroom faster, right?

13 A. Correct.

14 Q. Do you know -- you haven't figured out
15 what the take rate would be that would actually create
16 the problem you are identifying here, that is, out of
17 capacity?

18 A. Well, assuming -- the average that we
19 assume on the number of households and assigned pairs
20 behind the DLC, divided by the 672 is the assumed take
21 rate that it would take to reach this capacity
22 problem.

1 Q. I am saying have you ever bothered to sit
2 down and figure out what the number is?

3 A. I have calculated it. I just don't
4 remember what the number is.

5 Q. What is it?

6 A. I just don't remember what the number is
7 in my head.

8 Q. Well, you could support -- I will do this
9 in my head. A 40 percent take rate gets you 600
10 lines, right?

11 A. Correct.

12 Q. With 72 of headroom?

13 A. Uh-huh.

14 Q. The same worst case scenario of
15 three-quarters of a card per CLEC per SAI is there,
16 uses up 48 more, you still got headroom, don't you?
17 You have got 600 -- 40 percent take rate, 600 used
18 ports, 48 wasted ports, you are still below your
19 ceiling, aren't you?

20 A. In that scenario, yes, I am.

21 Q. So are you aware of any take rate
22 estimations for the next two years that exceed 40

1 percent/.

2 A. Not for the next two years, but beyond
3 two years there are projections beyond that.

4 Q. So would you agree with me that this
5 particular problem that you are asserting here is not
6 a problem for at least the next two years?

7 A. It might not be a problem in some RTs or
8 in some of our NGDLCs. It could very well be a
9 problem in others.

10 Q. Okay. Now, on page 18 of your direct
11 testimony, I think you are trying here to
12 differentiate the effects of the Commission's Order on
13 CLEC line card collocation and the PVP UNE, is that
14 fair?

15 A. Page 18?

16 Q. Right. It queues the chart at line 5 and
17 the answer thereto.

18 A. Yes, I believe that's one of the
19 Commissioner's questions.

20 Q. And then if I understand what you are
21 saying here, you look back at JEK-4, which I won't
22 talk about in the open record. Do you mean by that to

1 refer us to -- would you turn back there with me?

2 A. Yes.

3 Q. To page 4 and page 5 of that exhibit, the
4 last two pages?

5 A. Mine aren't numbered but.

6 Q. The one that says, "IL Totals (One Type
7 Card)" and "IL Totals (Two Type Cards)"?

8 A. Uh-huh.

9 Q. Do we see the effects, at least part of
10 the effects, of line card collocation on the left-hand
11 side of the page that says, "C&E For Card Ownership"?

12 A. Yes.

13 Q. And then to the right of that I see other
14 numbers that say, "C&E For PVP UNE"?

15 A. Correct.

16 Q. And there is some stuff below that, but
17 are you referring to those differential calculations
18 when you testified on page 18 that you would still
19 have what you think are increased capital expense
20 requirements even if the Commission didn't require
21 line card collocation? In other words, are you
22 pointing at the right-hand side of that page on JEK-4?

1 A. Yeah, if you could give me just a minute.

2 Q. Okay.

3 A. The intent of that Q and A is that, if
4 the only thing that was alleviated was just the card
5 level collocation and we still have the obligation or
6 the order that stated PVP and PVC unbundling, then
7 that still is a likely possibility.

8 Q. Okay. And the "that" you are talking
9 about is the right-hand side of these pages?

10 A. The right-hand side of JEK-4.

11 Q. And I take it, conversely, if the
12 Commission decided there wasn't a concern about PVP
13 UNEs but it wanted to maintain its order that you
14 allow CLEC line card collocation, you would suggest
15 the numbers on the left-hand side of the page as being
16 the relevant numbers, is that right?

17 A. As an analysis, that's correct.

18 Q. I know you have got numbers below that
19 for OSS and so forth; we will talk about that, too.
20 But just at the top of the page I want to understand
21 what you are presenting here.

22 A. That's correct.

1 Q. Okay. On page 19 of your testimony, your
2 direct testimony, here you are talking about
3 unchaining channel bank assemblies, right?

4 A. Correct.

5 Q. And you say on line 32 and 33, I am
6 quoting you here, "There is not an approved method to
7 unchain channel banks, and attempting to do so would
8 involve reliability risks," do you see that?

9 A. I do.

10 Q. Now, do you think that if I looked in
11 your, say, your loop deployment methods and procedures
12 documents, I would see anything at all about how to
13 daisy-chain or undaisy-chain CBAs?

14 A. You would probably see something in there
15 how to chain CBAs, uh-huh.

16 Q. So I guess once they are chained, they
17 can never be unchained, is that your testimony?

18 A. No. My testimony is that there is not an
19 approved method for unchaining it.

20 Q. Approved by whom?

21 A. By SBC, as well as Ameritech -- excuse
22 me, by Ameritech as well as Alcatel.

1 Q. Okay. Okay, let's turn to your prefiled
2 rebuttal testimony, page 2. I am going to use my page
3 numbers and lines, since I think they work with yours.

4 A. Yeah, they match.

5 Q. I am looking at lines 3 through 5 on page
6 2, Mr. Keown. And I want to read for the record just
7 for context a couple sentences. You say, "After
8 Pronto NGDLCs are deployed, the existing facilities
9 generally are not retired. Customers will not" --
10 that's our change today -- " will not be moved to the
11 Pronto NGDLC network unless they purchase DSL service
12 from a provider. Leaving the existing facilities in
13 place and continuing to provision services over them
14 is a characteristic of an overlay network," do you see
15 that?

16 A. Yes, I do.

17 Q. All right. Now, I want to understand the
18 time frame that you are speaking of here. What is
19 your understanding about the expected useful life of
20 the Project Pronto NGDLC deployment?

21 A. Useful life, longer than five years.

22 Q. Okay. Would you agree that it's ten

1 years or more?

2 A. It's hard to say with this technology,
3 but I would say at least longer than five.

4 Q. You don't know what the business case
5 assumed by any chance?

6 A. The business case is, of course,
7 amortized over ten years.

8 Q. So can we just use ten for discussion
9 purposes?

10 A. I can -- we can do that.

11 Q. All right. Are you saying that over the
12 next ten years -- strike that. In line 3 and 4 when
13 you refer to existing facilities, do you mean existing
14 homerun copper loops?

15 A. Or whatever facilities is serving that
16 particular area.

17 Q. Well, let's -- if it's homerun copper
18 loops, is that what you mean by existing facilities?

19 A. If it's homerun copper, that's what I
20 mean.

21 Q. So are you testifying here that for the
22 next ten years for areas that prior to Pronto are

1 served by all copper loops, that none of those loop
2 facilities will be retired over the next ten years?

3 A. That's not what I am saying here.

4 Q. So some will be retired?

5 A. That's possible.

6 Q. Okay. You are aware of some regulatory
7 commitments your company has made to the FCC
8 concerning retirement of existing copper, are you not?

9 A. I am.

10 Q. And do you recall what percent of copper
11 loop facilities SBC has agreed to cap its retirement
12 at for the next year or so?

13 A. I don't remember the specific percentage.
14 I know that there is a percentage that we put in the
15 agreement.

16 Q. Okay. And is it your understanding that
17 there is, after a certain date, that there is no
18 commitment not to retire copper facilities when Pronto
19 is rolled out?

20 A. A certain date not to retire copper?

21 Q. Right. In other words, the commitment
22 not to retire whatever it happens to be expires or

1 runs out after a date certain, isn't that your
2 understanding?

3 A. We have a commitment that we will not
4 retire any copper up until September 1st of this year,
5 I believe.

6 Q. Okay. And then it's, what, five percent,
7 no more than five percent a year up until when? Just
8 roughly, a couple more years, 2003?

9 A. Until the expiration of the agreement.

10 Q. Which is when?

11 A. I don't know the exact date on that.
12 It's sometime in 2003. I am not sure when.

13 Q. 2003, okay. But you don't see any
14 commitment not to retire copper plant beyond that,
15 whatever that date is, do you?

16 A. No, I do not.

17 Q. Let's assume that happens in 2003 then.
18 After that date, if I understand what you are saying
19 correctly, SBC is free to retire existing copper loop
20 facilities when it rolls out Pronto, isn't that right?

21 A. It's my understanding that after that
22 2003 date we would be back to our normal business as

1 usual operation.

2 Q. Okay. And that normal -- that's what you
3 call the BAU assumption, right?

4 A. Business as usual.

5 Q. Business as usual, right?

6 A. Yes.

7 Q. And the BAU assumption has plant
8 retirements as part of it, a normal part of it, right?

9 A. Typically, in the BAU what we would do is
10 retire sections of plant, not entirely terminate it
11 from the frame out to some SAI. But there are section
12 retirements for certain.

13 Q. Okay. Well, let me ask the question this
14 way. Project Pronto is not an overlay network as you
15 use that term for the entire -- for the next ten
16 years, is it?

17 A. For the next ten years?

18 Q. Yeah, our discussion point of the useful
19 life of a Pronto asset?

20 A. Let me see if I have got the question
21 straight in my head. Are you asking will the existing
22 facility be out there along with the Pronto facilities

1 for at least the next ten years?

2 Q. Let me ask it this way. Do you think
3 it's likely that SBC will leave in place and maintain
4 to current standards all the existing copper loop
5 plant, and then deploy and maintain the entire Pronto
6 overlay for the next ten years?

7 A. I don't know what's going to happen in
8 the next ten years. I can just tell you that we don't
9 have any current plans to roll customers off the
10 existing facilities onto the Pronto platform.

11 Q. Yeah, I read that a million times
12 already. I want to talk about the useful life of the
13 asset, Mr. Keown. You are an engineer; you are aware
14 of ten-year planning horizons, aren't you?

15 A. Absolutely.

16 Q. Can you imagine the case where it would
17 make economic sense to maintain two separate loop
18 networks for the entire useful life of Pronto?

19 A. I don't know if this will answer your
20 question. I will tell you that we have Pronto out
21 there today that is paralleling copper that's been out
22 there for 20 years. So will the copper be there for

1 longer than ten years, it is very likely.

2 Q. So you are testifying under oath today
3 that you expect the company to maintain its current
4 copper loop plant for the next ten years and overlay
5 Pronto onto that and only roll customers onto Pronto
6 when they take DSL, is that your testimony?

7 A. I think you mischaracterized what I said.
8 I said that -- I am sorry.

9 Q. Help me out then. I don't understand.

10 A. I can tell you that we have copper that's
11 been in the loop for years and years and years. The
12 Pronto architecture is rolling by copper that's been
13 out there for more than 20 years. I don't know if
14 it's going to come out any time soon.

15 Q. Well, let's just be clear. I am not
16 talking about taking it out. I am just talking about
17 not using it any more. Is that fair?

18 A. That's fair.

19 Q. If you retired the copper, you are just
20 going to cut it dead and let it lay there, right, in
21 most cases?

22 A. In most cases.

1 Q. I am talking about retiring in place
2 copper plant. Isn't it a fact that Pronto is designed
3 to be a more efficient loop plant topology and to
4 replace expensive copper loops as soon as you can do
5 so legally?

6 A. That wasn't the initial design intent
7 that went into Pronto.

8 Q. So your testimony under oath is that the
9 company has no plans to do wholesale replacements of
10 copper loop plant with Pronto-served facilities during
11 the next ten years?

12 A. I am not aware of any plans to wholesale
13 move customers off of the existing facilities to
14 Pronto.

15 Q. That wasn't what I asked you. I asked if
16 you were aware. Isn't the company going to move
17 customers on a wholesale basis for engineering reasons
18 off of copper onto Pronto as soon as it can?

19 A. I can only answer what I know. And if I
20 am going to be truthful, that's what I have to do. I
21 do not know of any plans the company has to wholesale
22 roll customers from the existing serving vehicles to

1 Pronto.

2 Q. Did you ask anybody in the company before
3 you testified today what the plans were over the next
4 ten years for Pronto?

5 A. No, I have not.

6 Q. Did you ask anybody before you came in
7 here today, any outside plant engineers, for example,
8 planners and so forth, whether they plan to do
9 wholesale rolls of customers from copper to Pronto
10 over the next ten years?

11 A. I have been in meetings with several
12 outside planners and engineers, and none of them have
13 expressed a concern or a desire at this point to roll
14 all the customers over.

15 Q. Did you ask that question, Mr. Keown?

16 A. I did not ask that specific question.

17 Q. Okay. Now, is it a correct statement
18 that over the ten-year life of Pronto, that as you
19 testify at page 2, line 4 and 5 of your rebuttal, that
20 customers will not be moved to Pronto NGDLC network
21 unless they purchase DSL service from a provider? Is
22 that a true statement in all cases?

1 A. There might be some few exceptions, but
2 they will be very, very rare.

3 Q. So we would see the business case
4 documents would be consistent with that sworn
5 testimony, is that your testimony?

6 A. Under those -- with some rare exceptions,
7 yes.

8 Q. What do you mean rare? What kind of
9 customer?

10 A. If there is some uneconomic serving
11 vehicles out there, for instance, copper that is
12 corroded or -- I don't know if you are familiar with
13 pulp cable that's gotten soaking wet that you simply
14 can't repair it, some of those customers might be
15 moved over to the Pronto architecture if it's out
16 there.

17 Q. So I think you said customers who are not
18 economically served by their current serving
19 facilities would be moved, without being DSL
20 customers, did I hear you say that?

21 A. There might be some of those.

22 Q. I thought you said there would be some of

1 those?

2 A. There could be some of those.

3 Q. I thought you said there would be some of
4 those?

5 A. On uneconomical facilities to repair some
6 of those would occur.

7 Q. And uneconomic simply means that it's
8 cheaper to serve them on Pronto than it is to try and
9 repair and maintain the current copper, isn't that
10 right?

11 A. That's correct.

12 Q. I thought Pronto in every case was going
13 to be cheaper to serve a voice grade line than the
14 copper facilities; that's why you are doing it, isn't
15 that right?

16 A. It's not cheaper if the customer service
17 already exists.

18 Q. Well, isn't it cheaper -- if you set
19 Pronto side by side with copper, isn't it on an
20 average loop basis cheaper to serve on Pronto than it
21 is on copper, even a voice grade loop?

22 A. If the customer service already exists,

1 it is not cheaper. You have already got the copper
2 there. You have already got the customer service
3 turned up. It doesn't make economic sense to go buy a
4 line card and cut the customer service over to the
5 Pronto architecture if the copper is good.

6 Q. Under whatever calculus SBC would use, if
7 copper-served customers were not economically served,
8 those customers would go to Pronto without taking DSL,
9 is that your testimony?

10 A. If the facilities that the customers are
11 served on are in such terrible shape that we can't
12 repair them, then those customers will probably be
13 moved to Project Pronto, assuming it's there.

14 Q. It's not just can't repair. Isn't it the
15 case that if you have cable like you talked about, the
16 pulp cable with water damage, that even if you can
17 repair it, it's going to fail continually, you are
18 still going to move those kinds of customers onto
19 Pronto?

20 A. I need to add something to my last
21 statement then, can't repair economically.

22 Q. You can repair it; it's just that it

1 doesn't pay you to do so?

2 A. If it doesn't pay us to do so, we
3 wouldn't want to do that.

4 Q. Aren't there always such cables out there
5 in loop plant that are just troublesome, they just
6 have lots of trouble tickets on them?

7 A. There are some, but most of those are on
8 the distribution side.

9 Q. All your feeder cables are great?

10 A. I didn't say all. I said some. But a
11 lot of our feeder cables that are really troublesome
12 are on the distribution side.

13 Q. Okay. Then back on page 9 and 10 of your
14 rebuttal testimony, please.

15 A. Okay.

16 Q. I am looking at the question that begins
17 on line 16 and your answer thereto?

18 A. Uh-huh.

19 Q. This is open record, right?

20 A. I believe this is.

21 Q. This is public record testimony, right?

22 A. Yes.

1 Q. And here you are testifying about how you
2 develop your kind of base line estimate of the number
3 of CLEC customers per central office and then per SAI,
4 is that right?

5 A. Yes, ultimately the SAI, though.

6 Q. Pardon me?

7 A. Ultimately the SAI.

8 Q. Right. You start with the number of CLEC
9 DSL customers per CO, is that correct?

10 A. That's correct.

11 Q. And you said you reviewed a chart -- and
12 this is JEK-R3, right?

13 A. That's correct.

14 Q. So you took a look at this TeleChoice
15 chart, right?

16 A. It is marked confidential.

17 Q. I don't want to talk about the numbers.
18 I just want to talk about the chart.

19 A. Okay.

20 Q. And is this something -- who is
21 TeleChoice?

22 A. TeleChoice is a company that does a lot

1 of analysis and reports on the deployment of DSL
2 services throughout the world as well as in this
3 country.

4 Q. Okay. And did you go to the DSL forum
5 meeting in December of 2000 you are referencing there?

6 A. I did.

7 Q. Did you just look at this one page or was
8 there a report?

9 A. It was a report. It was -- actually, it
10 was a presentation.

11 Q. A Power Point presentation?

12 A. A Power Point presentation.

13 Q. Do you recall how many slides were in it?

14 A. I don't.

15 Q. This is page 3, right?

16 A. Yes, I believe that's correct.

17 Q. Of the presentation?

18 A. Uh-huh.

19 Q. Do you know whether this is just ADSL
20 numbers or not?

21 A. Actually, this talks about inclusion of
22 IDSL, HDSL and others.

1 Q. I'm sorry?

2 A. This also -- if you look at the note on
3 the bottom, it says includes ADSL, SDSL and IDSLs.
4 Probably can't read it through the --

5 Q. I can read that. So tell me which number
6 you pulled off here to get to your -- which numbers
7 you used on this chart, without giving the actual
8 numbers, just give me the cells to get to your 49
9 customers per CLEC equipped CO.

10 A. Sure. If you go down to the third row
11 and the second column from the left, you will see the
12 total quantity of lines that were in service as of the
13 third quarter as of 2000. If you look over to the far
14 right on that same row, you will see the total number
15 of COs that were equipped by CLECs.

16 Q. Okay. And you divided one by the other?

17 A. I divided the COs Equipped by the total
18 number of lines.

19 Q. All right. And that got you to your 49
20 customers per CO?

21 A. Correct.

22 Q. So how did you then correct for the fact

1 that these numbers include non-linesharing kind of
2 DSL, meaning SDSL and IDSL?

3 A. Actually, I call myself given the benefit
4 of the doubt, that more of these services would
5 eventually start leaning towards ADSL. If I back
6 those out, that number goes even smaller. So instead
7 of being one line per SAI, it goes down to something
8 minuscule. So I just left the IDSL and the ADSL in
9 the count. I did not try to normalize it.

10 Q. You made no adjustment to try to
11 recognize ADSL only?

12 A. No, I did not.

13 Q. Well, then if you think of our discussion
14 a little while ago of a 20 percent take rate yielding
15 300 lines and Rhythms getting ten percent of that,
16 that would be 30 lines, I guess that would be way too
17 high?

18 A. For one company?

19 Q. Yeah.

20 A. For Rhythms, yes.

21 Q. You think it would be less than, in my
22 example, less than four at this RT, right?

1 A. Well, I think if you consider the context
2 of what this chart is, it isn't actually NGDLC -based
3 ADSL service. It is throughout the entire CO. So
4 that means some of your service would be on the
5 CO-based DSLAMs. If you back that out, that number
6 goes even smaller.

7 Q. Good point. So if -- let's do some more
8 math. 49 customers per CO, you are estimating an
9 average of 20 RTs per CO, 16 and 24, right?

10 A. The average is 20.

11 Q. So 20 into 40 goes roughly two and a
12 half?

13 A. Two and a half.

14 Q. Two and a half CLEC customers per RT,
15 okay. And then there is four SAIs per RT?

16 A. Roughly four SAIs per RT.

17 Q. And that's about .6?

18 A. Yes.

19 Q. But we haven't backed out the CO -based
20 services, is that correct?

21 A. That's correct.

22 Q. So what's that worth? About half that,

1 do you think?

2 A. Well, I would guess half.

3 Q. Okay. So now we are down to .3?

4 A. Yes.

5 Q. .3 CLEC customers on Pronto per SAI?

6 A. Correct.

7 Q. And is that a mature number, do you
8 think?

9 A. I think it will grow. That's why I chose
10 one.

11 Q. Maybe it will grow to .6 or .7?

12 A. Well, I assumed that that number would
13 grow. And again this was a third quarter number
14 versus an end of year 2000 number.

15 Q. Well, if the number tripled, it would be
16 .9, right?

17 A. Yes.

18 Q. So it sound likes your slot exhaust
19 problem is never going to actually be there since,
20 even if we tripled our take rates under your own
21 assumptions -- let me finish the question -- even if
22 we tripled our take rates under your assumption, we

1 would only still have one customer per SAI on average.

2 A. Which is the basis of JEK-4, the
3 assumptions in JEK-4.

4 Q. Well, there is even more headroom, isn't
5 there, because we are only going to take one card slot
6 per SAI per CLEC; that's four slots?

7 A. Yes. I think that's better explained
8 under JEK-4, if we go through that analysis.

9 Q. Oh, we will get to JEK-4, I assure you.

10 A. This chart was used to, at least, lend
11 some basis for why I chose one customer per CLEC per
12 SAI.

13 Q. You don't think this is actually a good
14 number for the actual take rate, is that what you are
15 saying?

16 A. No. What I am saying is this was a good
17 number to determine, at least based on assumptions, on
18 how many customers a CLEC might expect on an SAI.

19 Q. This is the best data you could bring to
20 bear, this page right here, right?

21 A. That's all that's attached to my
22 testimony.

1 Q. Did you ask your internal business
2 development folks who do competitive analysis to give
3 you any help on this?

4 A. No, I did not.

5 Q. They do do that, don't they? They try to
6 figure out where Rhythms is going and where Covad is
7 going and where Northpoint was going?

8 A. I don't know if they do that
9 specifically. I know they look at other competitors.
10 They do look at other competitors in the network, yes.

11 Q. And did you ask TeleChoice anything at
12 all about where they got their data, what the basis
13 for gathering it was, whether these estimates were
14 real installs, or anything like that?

15 A. Well, I know that -- no, I did not.

16 MR. BOWEN: Your Honor, I am about ready to
17 address some materials that are deemed proprietary but
18 I want to -- before we do that, I want to ask your
19 indulgence on something. The list of assumptions that
20 is the first page of JEK-4 attached to the witness'
21 direct testimony, is what it says. That is, it's the
22 assumptions that Mr. Keown used to create the actual

1 numbers, the dollar numbers and the quantities, that
2 are found on the next pages which total to some very
3 large numbers that we are all very well aware of,
4 including the Commission.

5 It struck me in looking at this that,
6 frankly, there first of all is no reason to keep the
7 assumptions themselves confidential, simply because
8 they are what Mr. Keown or someone else who helped him
9 thought were the right bases for the actual
10 calculations of numbers which are confidential. At
11 the same time it strikes me that, given the
12 significance of Mr. Keown's estimates, throwing off
13 hundreds of millions of dollars effect for the
14 Commission's actions below, I personally think that
15 that was one of the biggest bases on which the
16 Commission granted rehearing in this case.

17 And I think that the public record
18 deserves to contain the examination of the assumptions
19 and not have that be on the sealed record that nobody
20 can access and will not be open to public scrutiny. I
21 think this is a very important issue in the case. And
22 so I would suggest, I would ask the company to waive

1 the confidentiality claim on the assumptions page so
2 that I can cross on the open record on that. And if
3 they fail to agree, I would ask Your Honor to rule
4 that the assumptions page should not be confidential
5 but it should instead be public.

6 JUDGE WOODS: Let me see a copy of his
7 testimony, please.

8 MR. BOWEN: I think what you see there are
9 most of these assumptions that we already talked about
10 in the open record.

11 MR. LIVINGSTON: Can I ask for a
12 clarification? You are just asking us to waive the
13 rest of the assumptions?

14 MR. BOWEN: Yeah.

15 MR. LIVINGSTON: You are not going to follow
16 this up with a request for the rest?

17 MR. BOWEN: No, I understand your position on
18 the actual numbers that flow to the assumptions that
19 are on the next pages. I would love to have those be
20 open, too, but I am not going to ask for that. I am
21 asking for the assumptions to be in the open record.

22 MR. LIVINGSTON: Can I consult with my client

1 while Your Honor reviews the paper?

2 JUDGE WOODS: I am not going to review it if
3 I don't have to, so sure you can consult with him,
4 please.

5 (Pause)

6 MR. LIVINGSTON: We would agree that the
7 entire assumptions page, with three exceptions, could
8 be made public. And those three exceptions are, Item
9 9, the number.

10 MR. BOWEN: Well, counting down --

11 MR. LIVINGSTON: Assumption Number 9.

12 MR. BOWEN: I had to number them my own way.
13 I don't know which one is your number.

14 MR. LIVINGSTON: The expense trailer.

15 MR. BOWEN: Okay. And then the capital for
16 CO and the capital for RT.

17 MR. LIVINGSTON: Yes.

18 MR. BOWEN: I am okay with those three.

19 MR. LIVINGSTON: Those three numbers. With
20 those exceptions we will go ahead and agree that you
21 can treat that as part of the public record, as long
22 as you don't state in the public record those three

1 numbers.

2 MR. BOWEN: Okay.

3 MR. LIVINGSTON: Is that a good counter?

4 MR. BOWEN: Yeah, I am okay with that.

5 MR. LIVINGSTON: Good.

6 JUDGE WOODS: I guess then we should probably
7 prepare a redacted attachment JEK-4 so we can put it
8 in the public record.

9 MR. BOWEN: Yeah, I think that's probably the
10 best thing to do.

11 MR. LIVINGSTON: We will cooperate with
12 Mr. Bowen and get that done, and that will be part of
13 the public record. But for examination purposes you
14 can treat it on the public record now with the
15 exception of those three.

16 MR. BOWEN: I will just do those three as
17 part of the sealed record.

18 JUDGE WOODS: I didn't know if that was going
19 on the public record or not.

20 (Laughter)

21 MR. BOWEN: And a nice clean record it is.

22 JUDGE WOODS: I don't think anybody said the

1 numbers so.

2 MR. LIVINGSTON: No, nobody said the numbers.
3 I thought it was on the record.

4 Q. Mr. Keown, we are going to try -- and I
5 don't want you to reveal the numbers that your counsel
6 said that you shouldn't. I want to talk about the
7 rest of these assumptions on the open record and then
8 we will go on the closed record and talk about the
9 three we can't talk about plus the rest of the
10 numbers.

11 A. That's fine.

12 Q. First of all, JEK-4 in total is the basis
13 for your assertion of -- let me ask you this. Is
14 there a public number that you put in your testimony
15 that you think is the total cost of implementing the
16 Commission's Order?

17 A. No.

18 Q. Or is that all on the secret part?

19 A. That's all on the secret part.

20 Q. We will just say hundreds of millions of
21 dollars, is that fair?

22 A. That's correct.

1 Q. JEK-4 is the totality of your
2 calculational basis for that assertion, is that right?

3 A. JEK-4 is an analysis that I prepared for
4 my management of possible impact over this, the Order
5 that was issued by the Commission.

6 Q. But this is the support for your hundred
7 million dollar number?

8 A. This is the support for that analysis.

9 Q. Let me ask you, are you a cost study
10 expert? Do you think of yourself as a cost study
11 expert?

12 A. Not a cost study expert.

13 Q. Have you ever done a cost study before?

14 A. In the traditional sense of pricing
15 services for a CLEC or something along that line, no.
16 But in the sense of pricing out projects for
17 engineering work, yes.

18 Q. Have you ever done a regulatory embedded
19 cost analysis, for example?

20 A. No, I have not.

21 Q. How about a regulatory TELRIC analysis?

22 A. No, I have not.

1 Q. Do you know what TELRIC is?

2 A. I know what TELRIC is, generally familiar
3 with TELRIC.

4 Q. Do you know what it stands for?

5 A. Total element long range incremental cost
6 or something. I don't remember the last C.

7 Q. What is your understanding of what that
8 means? What kinds of costs are TELRIC costs?

9 A. Well, again, I am not a TELRIC expert,
10 and I am just giving you my general understanding of
11 TELRIC. The cost of what it takes to provide a
12 service over some economic life or some life that's
13 determined for that product with some added cost in
14 there, some added costs, some utilization factors, I
15 know there is several calculations that go into
16 TELRIC. Again, I am not an expert so I can't --

17 Q. Just to get your understanding. Do you
18 understand TELRIC to include a concept that the
19 technology deploys forward-looking?

20 A. Yes, I do.

21 Q. I take it you are not putting forward
22 this analysis as a TELRIC analysis, is that correct?

1 A. This document was not prepared as a
2 TELRIC document. Again, it was an analysis of the
3 impact of the Order on Project Pronto.

4 Q. Okay. And do you know what costing and
5 pricing standard this Commission employs?

6 A. I am not sure I understand the question.

7 Q. Do you know what costing and pricing
8 standard this Commission employs in determining what
9 the relevance costs of anything are?

10 MR. LIVINGSTON: I object. That sounds
11 incomprehensible. Are you referring to unbundled
12 network elements?

13 MR. BOWEN: It is incomprehensible. I will
14 withdraw the question.

15 Q. Do you know what costing standards this
16 Commission uses in determining the relevant cost of
17 UNEs right now?

18 A. I am not certain. I assume that the
19 Commission uses TELRIC or something along the TELRIC
20 methodology.

21 Q. Okay. Now, you have got a costing group
22 in St. Louis, right, at SBC?

1 A. I think that's were the bulk of them are
2 headquartered.

3 Q. Your fellow witness Ms. Mears is from
4 there, right?

5 A. Ms. Mears is from St. Louis, that's
6 correct.

7 Q. Anybody from the St. Louis costing group
8 help you out with this analysis?

9 A. No, they did not.

10 Q. Anybody else help you out with the
11 analysis?

12 A. Besides the list of folks that I
13 submitted to one of your data requests, there were no
14 other folks. Our CFO in the Project Pronto group, her
15 assistance.

16 Q. She helped you with it or you submitted
17 it to her?

18 A. I am sorry?

19 Q. She helped you with it or you submitted
20 it to her?

21 A. She helped me with it.

22 Q. How did she help you with it?

1 A. She was one of those looking at the costs
2 to deploy the DLCs and all the other ancillary
3 equipment that goes along with building Project
4 Pronto.

5 Q. And what is her title again?

6 A. I call her our CFO. She is our
7 comptroller for broadband.

8 Q. And what did she give you, the investment
9 numbers to use?

10 A. No, she gave me the cost per RT or NGDLC,
11 the cost per CO, and the basis for that.

12 Q. Can't talk about those numbers on the
13 record open record. Okay, I have got you.

14 A. I can't.

15 Q. Now, your analysis throws off one set of
16 numbers assuming one card type and a different set of
17 numbers assuming two card types, right?

18 A. That's correct.

19 Q. I might think of that as a sensitivity
20 analysis. That is, what if I have two card types
21 instead of one card type, is that fair?

22 A. That's one type of analysis, yes.

1 Q. Did you do any other kind of analysis
2 that you would call a sensitivity analysis to vary
3 your assumptions?

4 A. Yes, I did.

5 Q. Did you supply those other analyses to
6 the Commission?

7 A. I did not.

8 Q. What was your charge here? That is, were
9 you asked to or did you ask yourself to present a
10 representative analysis or a best case analysis or a
11 worst case analysis?

12 A. Well, I certainly didn't ask myself. I
13 would not put myself through that kind of punishment.
14 What I was asked to do was to take a look at the
15 Commission's order and look at the range of
16 possibilities and then ask what is the worst thing
17 that can happen to us on a business case basis for
18 Project Pronto. So I gave a scale.

19 Q. So this basically is kind of a worst case
20 analysis, is that fair?

21 A. The analysis on the PVP is certainly a
22 worst case analysis.

1 Q. Is the same true as to the CLEC card
2 ownership issue?

3 A. I don't know if there is a worst case.
4 If there were three types, it gets worse. If there
5 are four types, it gets worse. But within the scope
6 of every slot and every RT being occupied, that can be
7 considered worst case.

8 Q. Within the scope of looking at either one
9 or two cards on the line card ownership issue, is it
10 fair to say that that analysis is worst case?

11 A. Again --

12 Q. With the three or four card option?

13 A. Again, looking at the one and two card
14 analysis and a collocation of that line card at every
15 RT is certainly one of the worst case analyses.

16 Q. Okay. Let's go through these assumptions
17 on the public record then. And I happen to have your
18 spreadsheet up on my laptop here so I can see cell
19 forms and so forth. It's not a very complicated
20 study, so you probably have it in your head, right,
21 what the assumptions were?

22 A. I have them here in front of me.

1 Q. My first question was that you referenced
2 Tabs one and two in the printout, but I see only -- I
3 see four Excel workbooks in here on the electronic
4 version. I see one called Assumptions. Number 2 is
5 IL (Single Type Card). Number 4 is IL (Two Type
6 Card). Number 8 is IL Total Capital Expense, does
7 that sound right to you?

8 A. That's correct.

9 Q. What happened to one, three, five, six
10 and seven?

11 A. Those other tabs are all entire SBC
12 13-state analyses.

13 Q. So this is the Illinois piece of that
14 then?

15 A. This is the piece that relates directly
16 to Illinois.

17 Q. Okay. So Tabs one and two, you simply
18 mean the pages that follow, is that right?

19 A. In reality, Tabs one and two are the
20 pages in this -- should be the pages in this thing,
21 although they might be labeled different on the
22 original spreadsheet that you have.

1 Q. The electron version?

2 A. The electronic version.

3 Q. Okay, all right. Now, okay, assumption
4 one, I am just going to read it, says, "Tabs one and
5 two, Each CLEC will have at least one customer in each
6 SAI of the same type service," do you see that?

7 A. Yes, I do.

8 Q. And it's not at least one, it's only one
9 CLEC customer per SAI, isn't that right?

10 A. One customer per CLEC, that's correct.

11 Q. One customer per CLEC per SAI?

12 A. That's correct.

13 Q. And was that your decision to assume
14 that?

15 A. Well, again, based on the information I
16 had looked at it from TeleChoice and visiting with
17 some other -- with Michelle as we looked at some of
18 this stuff, that seemed reasonable to me.

19 Q. Right. But who made the decision to
20 assume one CLEC customer per SAI?

21 A. I did.

22 Q. And that is the worst case you could

1 think of, right?

2 A. That's the worst case on that particular
3 scenario, yes.

4 Q. And then do you also assume that each
5 CLEC has a customer, a single customer, in each of
6 four SAIs?

7 A. Yes, I do.

8 Q. And you are using four, it's just the
9 average we talked about, right?

10 A. That's correct.

11 Q. Why didn't you -- why didn't you assume
12 that each CLEC had one customer in each of one or two
13 or three SAIs?

14 A. Well, I told you I played with some more
15 sensitivity analyses just to see what this number
16 does, and I did increase -- I don't recall making an
17 analysis where it was just one or two or three. I
18 figured I could use a percentage to get to that
19 number. For instance, I said if they collocated at
20 just 50 percent of the RTs, I could take 50 percent of
21 what I calculated and come up with a number .

22 Q. But you supplied the worst case analysis

1 here, right?

2 A. That's what I provided.

3 Q. And was that your decision or somebody
4 elses?

5 A. To --

6 Q. Who decided to assume one customer in
7 each of four SAIs?

8 A. I made that decision.

9 Q. All right. Assumption number two says,
10 "Tabs three and four, Each CLEC will have two
11 customers in each SAI with different types of DSL
12 service, i.e. one ADSL, another G.SHDSL," do you see
13 that?

14 A. Yes, I do.

15 Q. And, again, if I understand what you are
16 doing here on this assumption, you are assuming only
17 two CLEC customers, that is one ADSL, one G.SHDSL per
18 SAI, is that right?

19 A. Excuse me, that's correct.

20 Q. And that again is the worst case, right?

21 A. For that type of analogy, it is.

22 Q. Who made that decision?

1 A. I did.

2 Q. And then don't you also assume, if I
3 understand what you are saying here, that the CLEC
4 that has the two customers, one of each type of DSL,
5 has those customers in each of four SAIs?

6 A. That's correct.

7 Q. And isn't that the worst case?

8 A. That is correct.

9 Q. Who decided that?

10 A. Again, me. And, again, I had other input
11 from other folks but ultimately I made the decision.

12 Q. Okay. Well, can you explain to me how
13 G.SHDSL is relevant to linesharing given that it's a
14 type of DSL that can't be lineshared?

15 A. Well, this wasn't an analysis just on
16 linesharing. This was an analysis on capacity.

17 Q. Well, do you believe the scope of this
18 case to be beyond linesharing?

19 A. Well, I have heard other testimony for
20 other types of services in this proceeding, so I did
21 not think it unwise to choose another type as I would
22 look at the capacity of the box. In addition to that,

1 because the Order didn't say specifically that the
2 cards had to be lineshared, I assumed any card would
3 be capable of going into the NGDLC.

4 Q. Well, if I tell you that the scope of
5 this case is linesharing, would you agree with me that
6 G.SHDSL is not relevant to linesharing because it
7 can't be lineshared?

8 A. I would agree that G.SHDSL certainly
9 cannot be lineshared.

10 Q. And if the Commission limits its decision
11 in this case on rehearing to linesharing, your two
12 card example then becomes irrelevant, doesn't it?

13 A. Assuming that no other card comes out,
14 for instance, if a G-lite card that requires a
15 different type of card, assuming that doesn't happen,
16 it goes back to a one card analysis.

17 Q. Okay. All right. Then assumption three
18 says the number of CLECs will vary between two and
19 five, do you see that?

20 A. I do.

21 Q. What's the basis for that assumption?

22 A. Well, back during the era when we were

1 negotiating with the FCC for the Pronto Order, a lot
2 of discussion came up with how many CLECs might want
3 to participate in the Pronto architecture or have
4 access to the Pronto architecture. In addition, when
5 I looked some of the NPRMs, the more recent NPRMs from
6 FCC, there were several CLECs that expressed a desire
7 to do card level collocation, and urged the FCC to
8 pass an order for card level collocation. So three to
9 five was quite reasonable.

10 Q. Actually, you said two to five?

11 A. Or two to five, excuse me.

12 Q. All right. Any other bases that you used
13 to develop that range?

14 A. No.

15 Q. Okay. Well, you don't present numbers
16 that are ranges; you present one set of numbers for
17 the one card scenario, right? So you must have chosen
18 somewhere within that range as the number of CLECs you
19 are going to assume, right?

20 A. I did.

21 Q. Which was that?

22 A. Four.

1 Q. Four. And I want to understand how this
2 works. If -- are you assuming --

3 A. Excuse me, I used five CLECs, excuse me.

4 Q. That's what I thought, okay. Saved me a
5 question. So you assumed the top of your range,
6 between two and five, is that what you are saying?

7 A. That's correct.

8 Q. So that would be a worst case assumption,
9 right?

10 A. For this analysis it would be.

11 Q. And who decided upon using the five
12 instead of something in the middle of the range, is
13 that you?

14 A. Well, again, it is after taking some
15 input from some other folks, I chose the five. And
16 when I looked at the number of CLECs that advocated
17 card level collocation, it was significantly higher
18 than five. I just chose five.

19 Q. Now, how does this work? Are all of
20 these assumptions we have gone over so far, each of
21 which is worst case, do they all accumulate in your
22 analysis? That is, are you looking at five CLECs,

1 each of whom have only one customer per SAI, each of
2 whom serves all four SAIs, each of whom serves all the
3 SAIs and all the RTs in Illinois?

4 A. They are all used in the calculations.

5 Q. In that fashion, that is, these all
6 accumulated together to be worst case upon worst case
7 upon worst case upon worst case, is that fair?

8 A. I don't know if it's fair to characterize
9 it that way.

10 Q. All right. Well, do they multiply ahead
11 of that? In effect, are you assuming for the ones I
12 have gone through so far that five CLECs are serving
13 every RT in Illinois that's Pronto capable and that in
14 each RT they only have one customer per SAI and they
15 serve all the SAIs that subtend that RT?

16 A. Being able to take that calculation and
17 apply the five percentage to it to see what the
18 sensitivity would be, you would normally start what is
19 the maximum and then track back so, yes, that works
20 out right.

21 Q. That's how you would work it, okay.

22 A. Uh-huh.

1 Q. Okay. The next -- we will skip the UBRs,
2 the only quality of service. The next assumption
3 says, "Slots used by CLEC only serve one SAI," do you
4 see that?

5 A. I do.

6 Q. Is what you mean by that that any
7 particular slot is assumed to be hardwired to feeder
8 pairs that all go for the same SAI?

9 A. That's correct.

10 Q. And that assumption, I guess, precludes a
11 CLEC who had four customers at an RT being able to
12 serve all four of those with a single quad card,
13 doesn't it?

14 A. If the customers were not in the same SAI
15 that that particular card was wired to, the CLEC would
16 have to have another card.

17 Q. Would have to?

18 A. If the CLEC was serving customers that
19 were not in the same SAI that that particular card was
20 not wired to, you would have to have another card.

21 Q. Or you could assume a cross connect field
22 at the RT, couldn't you?

1 A. I did not price out cross connect in this
2 analysis.

3 Q. That wasn't my question. I said you
4 could assume a cross connect field could be placed at
5 the RT to which you could, via that cross connect
6 function, allow one quad card to address one pair
7 going to each of four SAIs, couldn't you?

8 A. I could certainly assume that, but I
9 would have to add some more cost in for the cross
10 connect.

11 Q. Isn't this the kind of what if analysis
12 you would think about doing if you weren't doing worst
13 case? Wouldn't you say well, gee, I could either
14 exhaust my NGDLC as a card capacity or I could look at
15 what it would cost me to put in a cross connect field
16 or an ECS at the RT and let CLECs use their spots more
17 efficiently that way. You could have done that,
18 right?

19 A. I could have, but I assumed since the ECS
20 is already in our commitments, it was already
21 available to CLECs.

22 Q. So given that, why didn't you study the

1 differential effects of assuming the presence or not
2 of an ECS?

3 A. And that's one of those chicken and eggs
4 deals. Because the ECS, you don't take the pairs that
5 are already hardwired to your SAIs and shift them
6 around in the card slots themselves. The other reason
7 you don't want to do that is that if you take a pair
8 and start shifting that card across multiple SAIs,
9 what you end up doing is splitting the cable counts
10 which confuses our technician in figuring out exactly
11 which pair goes to what SAI. So I did not put that
12 analysis in here. It adds some additional levels of
13 complication that would have taken me a lot longer to
14 try to compile than I had time to do this in.

15 Q. How much time did you have to do it in?

16 A. I had a couple weeks.

17 Q. A couple weeks, the last two weeks before
18 you filed your testimony?

19 A. No, it was before then but it was out of
20 my control at that point. It was in the hands of my
21 management.

22 Q. Management, okay. Well, when were you

1 first aware of the Commission's Order either in the
2 arbitration or in the tariff case that you were
3 required to allow line card collocation?

4 A. The line card collocation I knew about, I
5 believe it was, last September.

6 Q. Okay. I guess you could have done a lot
7 more thorough an analysis if you had started last
8 November to do it?

9 A. If I had been involved at that point, I
10 could have.

11 Q. If it actually was important to SBC to
12 get this right, you could have begun nine months ago,
13 right?

14 A. If I had been involved, I could have.

15 Q. Who asked you to do your analysis?

16 A. My management.

17 Q. I suppose if you were aware of the
18 Commission's Order last August or September, so were
19 they, isn't that fair?

20 A. I assume they would be.

21 Q. Well, did you tell them?

22 A. Well, again, the order came down, I was

1 not involved in that initially. So I did not tell
2 them.

3 Q. It wasn't important enough for you to
4 tell them, is that what you are saying?

5 A. No, that information is not typically
6 transmitted through me. Again, I am not in that main
7 chain for orders coming out of the Commission's
8 office.

9 Q. Well, you are in the chain for figuring
10 out the effects of the order, at least you are now,
11 aren't you?

12 A. When I got involved, that's true.

13 Q. Do you know why it was that it took the
14 company seven or eight months to get you into the
15 chain?

16 A. I can't answer that. I don't know.

17 Q. Did you tell your management, gee, this
18 could cost us a lot of money to implement, once you
19 found out about it?

20 A. Yes, we did.

21 Q. And nobody said well, maybe you are
22 right, James, why don't you do a study on that, until

1 just before your testimony in this rehearing, is that
2 what you are saying?

3 A. I was not asked to put together an
4 analysis until this year.

5 Q. Okay. All right. The next assumption
6 says, "Assumes Alcatel nine band config," that's
7 configuration, right?

8 A. Configuration.

9 Q. "With three DSL banks," do you see that?

10 A. Yes, I do.

11 Q. Now, we talked already in both your
12 prefiled testimony and in your additional live direct
13 testimony about configurations for Alcatel Litespans
14 that equip more than three CBAs for DSL, haven't we?

15 A. Are you referring to the huts and CEV
16 arrangement?

17 Q. I am indeed.

18 A. Yes.

19 Q. And you have huts and CEVs in Illinois,
20 don't you?

21 A. I do have some.

22 Q. And they contain Litespan equipment,

1 don't they?

2 A. Yes, they do.

3 Q. Am I correct that there are 1,913
4 Litespan 2000 RT systems and 349 Litespan 2012 RT
5 systems in Illinois?

6 A. I don't know the exact numbers.

7 Q. I am reading from your response -- not
8 you, the company's response to Covad/Rhythms/Sprint
9 9th Set of Data Requests, Data Request 24.

10 A. Do I have a copy of that?

11 Q. I can show you one. May I approach, Your
12 Honor?

13 JUDGE WOODS: Yeah.

14 (Whereupon a document was
15 provided to the witness.)

16 Q. Did I read that correctly?

17 A. Yes, I assume those are correct. The way
18 I read that is those are the existing systems.

19 Q. Okay. I have another data response
20 that's confidential that has breakdowns so we will get
21 to that later.

22 A. Okay.

1 Q. I guess you could have done a weighted
2 average that took account of the fact that CEV to hut
3 located Litespans can actually handle more than three
4 CBAs worth of cards, right?

5 A. I could have done that. Again, it would
6 have taken more time.

7 Q. I guess you could have also considered
8 that Alcatel supports ADLU cards installed outside
9 those three CBAs, right?

10 A. I am not sure I knew that information at
11 the time of this analysis.

12 Q. Well, did you ask Alcatel whether or not
13 there was any hard limit, that is three CBAs worth of
14 ADLU cards in terms of what they would support?

15 A. I believe when I did this analysis, the
16 power and heat dissipation and things that we were
17 working with were and still are the design parameters
18 for the quad card. I didn't see anything changing.

19 Q. But you are aware that Dr. Ransom, the
20 CTO of Alcatel, testified that Alcatel supports over
21 300 additional DSL services outside those three CBAs,
22 even in a Litespan 2016 cabinet?

1 A. I am aware that Dr. Ransom has testified
2 in this hearing that that is the case. But, again,
3 Dr. Ransom and Alcatel, they design their equipment
4 but we the ILEC have to be concerned with a lot of
5 other things other than just the number. As I stated
6 earlier, there is power, there is power reserve, there
7 is network reliability issues that we have to be
8 concerned about when we start populating these cards.

9 Q. Are you testifying, Mr. Keown, that you
10 don't think Alcatel considers power and heat
11 dissipation issues in its 2016 cabinet when it
12 specifies that it will support over a thousand DSL
13 ports? You don't think it considers power or heat
14 dissipation when it makes that representation to you
15 as a client?

16 A. I am saying that I don't think that
17 Alcatel -- because each company has a different
18 requirement for network reliability and battery
19 backup. I don't know that when Alcatel made their
20 allocation that they knew what our battery reserves
21 were, our requirements for battery reserve in our RTs.

22 Q. Do you think that SBC's reserve

1 requirements are somehow unusual compared to, say,
2 Bell South's or Verizon's or Qwest's?

3 A. They could be.

4 Q. You don't know that, though, do you?

5 A. I don't know that for a fact.

6 Q. You don't know whether Alcatel considered
7 or not SBC's particular battery reserve requirements
8 in representing that it could support over a thousand
9 DSL ports, do you?

10 A. I don't know if they calculated battery
11 reserve that would allow us to maintain eight hours of
12 reserve.

13 Q. Isn't that a pretty standard battery
14 reserve time duration?

15 A. It depends, and it depends on sites and
16 whether you have backup power readily available. If
17 you have an emergency portable engine that's close, it
18 might be that you reserve four to six hours. Most of
19 our sites don't have that capability.

20 Q. Okay. So, again, this is the worst case
21 assumption, three CBAs that will handle ADLU cards,
22 right?

1 A. This is a standard cabinet configuration
2 for our deployment.

3 Q. Well, don't you have deployed
4 configurations that will support more ADLU cards than
5 three channel banks worth?

6 A. Not in a cabinet.

7 Q. In all your RT sites, Mr. Keown, don't
8 you have CEV and hut-based configurations that will
9 support more than three CBAs with ADLU cards?

10 A. I think I answered that before. I said
11 yes in huts and CEVs there are more, but in cabinets
12 this is the standard configuration.

13 Q. Not considering the huts and CEVs you
14 have deployed in Illinois and considering only
15 cabinets, isn't it fair to say you have made the worst
16 case assumption here?

17 A. I wouldn't characterize it as worst case
18 because of the number of huts and CEVs that are being
19 deployed with Project Pronto.

20 Q. I take it from that answer you think
21 that's an insignificant number, not worth worrying
22 about in terms of the weighted average, is that right?

1 A. Well, it's not enough to spend a whole
2 lot of time doing the calculations on.

3 Q. Give me an idea of what your threshold is
4 for significant. How many CEVs and huts would you
5 have to have deployed in Illinois to make it worth
6 your while to look at that?

7 A. More than 25 percent.

8 Q. More than 25 percent?

9 MR. LIVINGSTON: You have to answer audibly.
10 She doesn't get a --

11 THE WITNESS: Yes, sorry.

12 Q. Now, the next assumption, and again on
13 that nine, on the previous assumption, the nine
14 channel banks with three DSL banks, it was your
15 decision to study only the cabinet version, is that
16 right?

17 A. Again, along with input from other folks
18 and assistance of other people, yes.

19 Q. Next assumption says, "No cross connect
20 facility exists at the RT site." Do you see that?

21 A. Yes, I do.

22 Q. I think you said you didn't study the

1 cost of a cross connect field, right?

2 A. That's correct.

3 Q. Do any of your RT sites have cross
4 connect facilities?

5 A. There are probably some that do have
6 cross connect facilities.

7 Q. Did you look at those?

8 A. No, I did not.

9 Q. So this is a worst case assumption; there
10 is no cross connect facilities that exist under your
11 assumption even though some do actually exist in the
12 field in Illinois?

13 A. Well, some of those that might have
14 existed with cross connects probably wouldn't -- well,
15 my understanding of the way, if they deployed a cross
16 connect, would not have enough pairs to be able to
17 make that kind of adjustments or those kinds of cross
18 connects to swap pair per pair across the SAIs. So I
19 did not look at that.

20 Q. How do you know that if you didn't even
21 study it, Mr. Keown? How can you reach that
22 conclusion if you didn't even study it?

1 A. I do know what our guidelines at least
2 attempt to say about that, so I made the assumption
3 that they were small cross connect fields at best .

4 Q. But you didn't study them, is that right?

5 A. I did not study them.

6 Q. That was your decision that you made not
7 to study them, is that right?

8 A. Again, with input from other folks, but I
9 made the ultimate decision.

10 Q. Then do you see the -- this is part of
11 the same assumption I want to understand that you said
12 differently, "75 percent of ports per card lost but a
13 hundred percent of the slot," do you see that?

14 A. Correct.

15 Q. What is a hundred percent of the slot
16 mean?

17 A. That just simply means that, once you put
18 the card in, the slot is occupied.

19 Q. And because of your assumption discussed
20 above of only one customer per SAI and because of your
21 assumption about pairs being wired, hardwired, only
22 the one SAI, that gets you your 75 percent of ports

1 per card lost?

2 A. That's correct.

3 Q. I am sorry. You also have to assume a
4 quad card?

5 A. Also have to assume a quad card.

6 Q. Even though you are only deploying duals
7 now?

8 A. Correct.

9 Q. So you think it's safe to assume a card
10 that isn't out yet but will be out in Release 11 for
11 this purpose, isn't that right? Strike that. You
12 need Release 11 to support quad cards, don't you?

13 A. Yes, I do.

14 Q. So it's okay to assume that those are in
15 existence right now to estimate the cost of the
16 Commission's Order's limitation, but it's not okay to
17 assume those being out there right now for PVPs beyond
18 one for CBAs, is that what you are saying?

19 A. Again, I addressed that 11.0 somewhere in
20 my testimony, so that didn't seem unusual to me to
21 have that in here.

22 Q. So it's okay for some purposes to assume

1 that Release 11 is here right now, is that what you
2 are saying?

3 A. I think that's a mischaracterization of
4 what I said.

5 Q. Aren't you doing that right here?

6 A. No. I am assuming that 11.0 and the quad
7 card would be available with this. But you have to
8 understand that our NGDLCs, even though the quad card
9 is the only thing that is there now, we actually wire
10 the four pairs out in anticipation. Because at the
11 time we initially started deploying, Alcatel had in
12 their schedule that the quad cards would have been
13 ready last year. So we were counting on that
14 deployment.

15 Q. You are talking about using feeder pairs,
16 right?

17 A. Yes.

18 Q. Those are cross connected at the SAI to
19 the distribution pairs, right?

20 A. They are.

21 Q. So you aren't occupying idle distribution
22 pairs then, are you?

1 A. I am not sure I understand your question.

2 Q. Well, you say 75 percent of the ports per
3 card are lost and you said that means that you have
4 wired out feeder pairs to the back of those cards four
5 at a time, right?

6 A. That's correct.

7 Q. So I guess the implication is that you
8 can't use in your example three out of four of those
9 feeder pairs because they are idle, right?

10 A. On this assumption, that is correct.

11 Q. But they are only idle out to the SAI,
12 isn't that right?

13 A. That's correct.

14 Q. Because that's a cross connect field
15 itself, right?

16 A. It is.

17 Q. And, again, you recall our discussion
18 about CLEC card sharing and card pooling and the port
19 credit and so forth?

20 A. Yes.

21 Q. You didn't consider any of those options
22 to address what your conclusion is here that 75

1 percent of the ports were lost, did you?

2 A. No, I did not. I was aware of the
3 earlier analysis that took place that said just card
4 pooling and card sharing, those things are
5 uneconomical, so I did not choose to put that in here
6 again.

7 Q. So, again, isn't this the worst case you
8 could think of?

9 A. Most practical case for the deployment we
10 have, yes.

11 Q. I am sorry?

12 A. It's the most practical case for the
13 deployment we have, yes.

14 Q. Isn't it the worst case given what you
15 call your practical deployment on this issue?

16 A. Number 8 that is, one CLEC per port.

17 Q. Again, was it your decision to use this
18 case?

19 A. Again, with input from other folks,
20 ultimately I made the decision.

21 Q. The next assumption, please don't say the
22 number, but you are adding an expense trailer, right?

1 A. Correct.

2 Q. What's that based on?

3 A. It's based on a capital distribution in
4 our company where, when you do capital work, part of
5 that, because of the nature of capital type projects
6 you have people that charge you time to expense or
7 there is other miscellaneous expense items. This
8 calculation would be about this number.

9 Q. And you are trying to get to a capital
10 number here, right?

11 A. Yes.

12 Q. All this is working towards a capital
13 investment number?

14 A. Primarily capital numbers, yes.

15 Q. Is this what people called the Engineered
16 Version Installed, the EF&I, non-capital component or
17 not?

18 A. No, it's not.

19 Q. Well, then what is it? What's this
20 number I can't say? What's it trying to pick up?

21 A. Well, what it's trying to pick up is
22 that, whenever we do work on a capital job, there are

1 people that work on that capital project that can't
2 charge a hundred percent of their time to that capital
3 project. So there is an expense trailer to all of our
4 projects. In addition to that, when you start
5 ordering and purchasing materials, some of the
6 material is minor expense material. So this is just
7 trying to capture the expense portion of the project.

8 Q. Okay. And did you supply supporting
9 documentation for the derivation of the number that we
10 can't say on the record?

11 A. I believe you have all that information.

12 Q. No, did you supply it in your testimony?

13 A. No, I did not.

14 Q. Was that your choice not to supply that?

15 A. I did not include it in my testimony.

16 Q. Was that by your choice?

17 A. The supporting information?

18 Q. Uh-huh.

19 A. Yes.

20 Q. The next one says, "Fiber may be in the
21 ground for a small percentage of new RTs," do you see
22 that?

1 A. Yes, I do.

2 Q. I don't know what that means. I don't
3 know what the significance of that statement is.

4 A. The assumption has to -- the assumption
5 that this is based upon is that if we had to place a
6 new RT, there might be some cases where fiber already
7 exists, where we don't have to, at least, deploy new
8 fiber. There would be a lot of cases or at least
9 cases that we talked about as I put this analysis
10 together where the new RT may or may not be
11 collocatable at the -- excuse me, strike that term.
12 We might not be able to place that same RT on the same
13 plot of ground that we have the existing RT. So we
14 might have to go somewhere else or split the
15 distribution area. So we might have to place new
16 fiber.

17 Q. Okay. And how did you quantify this
18 particular assumption in the study?

19 A. The study actually assumes that for the
20 most part you will be placing new fiber to a new site,
21 and that's why this assumption says just for a small
22 percentage, just visiting with some of the outside

1 plant engineers on what we had done with some of our
2 newly deployed NGDLCs in other states.

3 Q. So are you saying that the study actually
4 assumes that for all the Pronto RTs you are going to
5 lay new fiber and ignore what's there?

6 A. No, the assumption is that for -- if I
7 had to build a new RT site, there is a strong
8 possibility I will not be able to build that at the
9 existing site, that I have to do something else with
10 that DSA. And in order to do that, I have to lay some
11 new fiber.

12 Q. That's my question. I asked you how you
13 quantified this fact in the study and your answer is
14 you didn't attempt to capture the fact that some fiber
15 may be there for some RTs. You simply said I need to
16 assume I am running new fiber to a new RT location.

17 A. After visiting with some outside plant
18 engineers, that was my assumption, yes, sir, that for
19 the most part we would be running new fiber.

20 Q. The effect of that assumption is to
21 ignore the case that you identify here that there may
22 be some fiber that you can use for some RTs, is that

1 right?

2 A. The input I got is that would be a small
3 percentage so, yes, I ignored it.

4 Q. And that was your decision?

5 A. Again, with input from others that was my
6 ultimate decision.

7 Q. All right. The next one says, "Capacity
8 replaced based on DSL capacity loss," do you see that?

9 A. I do.

10 Q. What does that mean?

11 A. Since the base configuration contains
12 nine channel banks with six of those channel banks
13 being POTS, the only impact on capacity is really the
14 DSL capacity. So in order to replace that capacity I
15 wouldn't need nine channel banks in the field to do
16 that with. I would only need the requisite number of
17 DSL channel banks to replace that capacity.

18 Q. Okay. So now does this -- the one I just
19 read you, does that hit -- it hits the line card
20 collocation issue, right, the slot occupancy issue?

21 A. Either.

22 Q. I know. It hits that one, right?

1 A. It hits that one.

2 Q. Does it also hit the PVP calculation?

3 A. It does.

4 Q. So, in other words, you are assuming that
5 you have to replace a hundred percent of the capacity
6 that you think you will lose, is that right?

7 A. I would have to replace the capacity that
8 I would lose either because of card level collocation
9 or PVP.

10 Q. And you are assuming you would have to
11 replace that whether you actually need that capacity
12 or not, is that right?

13 A. No, it assumes that I need that capacity,
14 otherwise, I would not have deployed it initially. So
15 once it's gone, I need to replace it.

16 Q. Well, do you recall our example of take
17 rates and representatives?

18 A. Been through that.

19 Q. DLC and so forth? You are assuming that
20 in the face of that kind of discussion then and real
21 take rates that you need to replace all the capacity
22 that you say you will lose by the line card

1 collocation and the PVP issue, right?

2 A. Yes, I did.

3 Q. So that means you took no account of
4 expected DSL take rates, is that fair?

5 A. I did not.

6 Q. So isn't that the worst case you could
7 have assumed?

8 A. I don't know if it's characterized as
9 worst case, but it certainly is -- there might have
10 been some adjustments to be made on that.

11 Q. Can you think of a worse case sitting
12 here right now on this point?

13 A. Replacing all the POTS capacity along
14 with that DSL capacity would have been much worse.

15 Q. On the DSL side can you think of a worse
16 set of assumptions than you made on these issues?

17 A. No, this will give me -- this analysis
18 will give me a basis on which I can apply percentages
19 to see what the ultimate variations of what this
20 ordered impact might be.

21 Q. And was this decision -- were these your
22 decisions to make?

1 A. Yes, they were, ultimately, after input
2 from other folks.

3 Q. All right. Then the next one says, "This
4 analysis is based on card ownership and PVPs," do you
5 see that?

6 A. Yes, I do.

7 Q. Are you saying there card ownership
8 meaning we own the line cards?

9 A. Based on the Order that was rendered from
10 the Commission that CLECs could own the line card,
11 yes.

12 Q. And does this analysis assume that, not
13 only can we, but we always do own the line cards? Put
14 it a different way, that we never -- no CLEC ever
15 takes the wholesale broadband service?

16 A. This assumes that CLECs will buy their
17 own line card, will own their own line card.

18 Q. Including AADS?

19 A. If they were one of the five in that
20 calculation, it would apply to them also.

21 Q. Well, aren't they an independent? Aren't
22 they supposed to be an independent CLEC?

1 A. They are an independent CLEC.

2 Q. But they aren't asking for line card
3 collo, are they?

4 A. To my knowledge they are not.

5 Q. Aren't they taking wholesale broadband
6 service?

7 A. Today that's my understanding.

8 Q. And don't they have more volume than all
9 other CLECs combined under DSL?

10 MR. LIVINGSTON: You are asking if AADS is
11 taking broadband service here in Illinois?

12 Q. In general. Before you suspended Pronto,
13 wasn't AADS the one CLEC that had more volume than all
14 the other CLECs combined in Illinois?

15 A. In Illinois AADS did not have any Pronto
16 ADSL.

17 Q. How about in the other Ameritech states?

18 A. In the other Ameritech states AADS does
19 have some volume?

20 Q. Don't they have more volume than anybody
21 else combined?

22 A. To my knowledge.

1 Q. Okay. But you made no adjustment for the
2 presence of AADS taking DSL via the wholesale
3 broadband service in this calculation, did you?

4 A. No, I did not.

5 Q. Was that your decision to make?

6 A. Again, along with the inputs from others
7 it was my ultimate decision.

8 Q. Did you consider whether to make an
9 adjustment for AADS's DSL takes via the wholesale
10 broadband service in your calculations?

11 A. Well, again, if you look at what this
12 total analysis does, it tries to give me a base number
13 to start with so I can apply percentages backwards to
14 see what the effect would be of this Order. So, no, I
15 did not take this initial calculation into
16 consideration.

17 Q. Okay. So, again, you assumed that all
18 CLECs owned all the cards and that SBC owns none,
19 right?

20 A. I assumed that five CLECs would collocate
21 cards at the RTs and based my analysis on that.

22 Q. But are you assuming that SBC owns any

1 cards or not?

2 A. I did not. I just made the assumption
3 that five CLECs would own cards. I did not put names
4 with them.

5 Q. Well, SBC is not a CLEC. SBC is an ILEC,
6 right?

7 A. Excuse me, I misspoke. I assumed that
8 AADS was not in this analysis unless they were one of
9 the five CLECs that were going to collocate cards. I
10 did not put names with those five CLECs. I just put
11 five CLECs.

12 Q. And when you say this analysis is based
13 on PVPs, do you mean one PVP per CBA?

14 A. Correct.

15 Q. And how many PVPs were you assuming on an
16 average NGDLC CLECs would request?

17 A. One PVP per CLEC and three CLECs would
18 consume the entire capacity.

19 Q. So that the other two CLECs are just out
20 in the cold?

21 A. Yes.

22 Q. All right. And, again, was that your

1 decision to make?

2 A. Again, with input from others it was my
3 ultimate decision.

4 Q. The next one says, "Total pages (tabs 6,
5 7, 8, 9) assume 50 percent PVP locations and 50
6 percent card ownership," do you see that?

7 A. I do.

8 Q. Let's take those one at a time. Why did
9 you assume 50 percent PVP ownership?

10 A. After consulting with folks, we couldn't
11 come up with a better split, not knowing exactly how
12 CLECs would use PVP. We decided the best analysis to
13 get a cost center, you have to -- if you have got the
14 spreadsheet electronically, then you know how the
15 formulas play together to make these calls come out.
16 Then that was the best way to start this type of
17 analysis, with a 50/50 split between card ownership
18 and 50 percent to a PVP.

19 Q. Well, it wasn't just the best way to
20 start in your opinion; it was the best way to start at
21 NDL, wasn't it?

22 A. Well, again, if you have the electronic

1 version, you will notice that field can be played with
2 and changed. And I played with and changed that field
3 several times.

4 Q. What did you file with the Commission?

5 A. I filed with this Commission this JEK -4.

6 Q. Okay. So that was your best estimate of
7 what, of the RT locations where three CLECs would
8 request a PVP?

9 A. Correct.

10 Q. Did you do any surveys of CLECs before
11 you did that?

12 A. No, I did not do any surveys. I assumed
13 that was in a sense what the Commission ordered, and
14 that would not have prevented CLECs from ordering
15 them. So, again, in analyzing what the Order will --
16 the impact the Order will have on the Project Pronto,
17 I just made the calculations based on what I have.

18 Q. Do you have any empirical basis
19 whatsoever for a 50 percent PVP assumption, Mr. Keown?

20 A. No, I do not.

21 Q. So it's a guess?

22 A. It's an assumption.

1 Q. It's an assumption without any basis,
2 isn't that right?

3 A. This one has -- this is just my
4 assumption along with input from others.

5 Q. It has no basis, isn't that right?

6 A. I do not have a basis for that.

7 Q. And that was your decision?

8 A. Along with input from others, it was my
9 ultimate decision.

10 Q. Okay. And the second half of this is an
11 assumption of 50 percent card ownership, do you see
12 that, same line?

13 A. Yes.

14 Q. I ask you the same question, why 50
15 percent?

16 A. Again, it was a place to start to look at
17 what this might be on a worst case basis to be able to
18 apply -- on a maximum case basis to be able to apply
19 percentages to later.

20 Q. Okay. Is this where you took account of
21 the existence of AADS and its demand?

22 A. No, I did not. Again, it was just five

1 CLECs collocating cards, whoever they happened to be.

2 Q. You are aware that AADS has signed the
3 Wholesale Broadband Services Agreement, aren't you?

4 A. I am.

5 Q. You are not aware of any requests from
6 them to own and collocate line cards, are you?

7 A. No, I am not. But I am also aware that
8 Rhythms has signed the broadband service, and I didn't
9 take that into consideration.

10 Q. Does Rhythms take any service under that
11 Wholesale Broadband Service Agreement?

12 A. To my knowledge they have not yet.

13 Q. And you said AADS does outside of
14 Illinois, right?

15 A. Outside of Illinois.

16 Q. So did you take any survey of CLECs to
17 say do you think you actually want to own those line
18 cards or not before you came up with your number?

19 A. Could you repeat the question? I am
20 sorry.

21 Q. Did you take any survey of CLECs, make
22 any phone calls, write any letters, send any e-mails

1 to CLECs saying please give me your best
2 forward-looking estimate as to whether you actually
3 want to own and place linecards?

4 A. No, I think I answered earlier that,
5 having looked at the responses from multiple CLECs to
6 the FCC NPRM, they requested the FCC allow card level
7 collocation so I didn't take a survey.

8 Q. Do you have any empirical basis
9 whatsoever for your 50 percent assumption?

10 A. No, I do not.

11 Q. So isn't it correct that your assumption
12 is without basis?

13 A. That particular one is without basis.

14 Q. Was that your decision to make?

15 A. Along with input from others that was my
16 ultimate decision.

17 Q. Then we get to the Illinois -specific
18 assumptions, do you see those?

19 A. Yes, I do.

20 Q. And you are assumptint, first of all, that
21 the percent, I think you are trying to say,
22 under-utilization in Illinois is comparable to the

1 rest of the company, do you see that?

2 A. Yes.

3 Q. Why did you make that assumption?

4 A. Well, again, as I described earlier, this
5 spreadsheet has some other tabs that talk about
6 overall company. As I calculate what this looks like
7 across the company, what would be the at-risk, so the
8 under-utilization is still 75 percent, unused stranded
9 capacity is one-fifth.

10 Q. Well, let me put it this way. Why do you
11 need to make that assumption for an Illinois
12 calculation?

13 A. It was just my way of saying that
14 everything looks the same to me.

15 Q. So you are assuming that every RT
16 throughout 13 states has the same characteristics, is
17 that right?

18 A. For the most part our deployment is
19 fairly homogeneous in that a vast majority of the more
20 cabinetized locations with a nine channel bank
21 configuration and three of those being DSL capable.

22 Q. And so basically you are looking -- you

1 did a, what, 13-state study for this or what,
2 12-state?

3 A. Not really a study of the 13-state. I
4 just -- after I got through with Illinois and I looked
5 at some other things, I went to throw all of it in one
6 big bucket. So I did look at it on a 13-state basis
7 ultimately.

8 Q. So am I correct then that if we saw all
9 the tabs of your study, you would be assuming that
10 there are five CLECs owning line cards in every one of
11 SBC's RTs in 13 states, is that what your study says?

12 A. That would have been ultimately what it
13 would have said.

14 Q. Would the rest of the same assumptions...

15 A. All the same.

16 Q. ..One customer per SAI and so forth?

17 A. All the same.

18 Q. All the same?

19 A. Uh-huh.

20 Q. Okay. But if I understand you correctly,
21 you are stating that you don't actually need to assume
22 this for this particular study. That is, you don't

1 need to assume anything about the relative
2 under-utilization percent in Illinois versus
3 elsewhere?

4 A. You don't need that.

5 Q. And is that because you have available to
6 you Illinois-specific investment numbers?

7 A. That's correct.

8 Q. Okay. And the next assumption says,
9 "Pronto build in Illinois is similar to the rest of
10 the company," do you see that?

11 A. Yes, I do.

12 Q. Now, do you need that assumption to be
13 valid for your study to be done?

14 A. No.

15 Q. You simply did this so you can use the
16 same formula across the 13 states?

17 A. Yes, once I calculated the stranded
18 capacity based on the Illinois number, I figure the
19 rest of the company, if I want to take a look at a
20 company number, would follow the same trend.

21 Q. I am curious. The result of 13 states,
22 is that higher than the U.S. gross national product?

1 MR. LIVINGSTON: Argument, object.

2 Q. I will withdraw it. All right. The next
3 assumption says, "Investment dollars are calculated
4 for a total project in Illinois," do you see that?

5 A. Yes, I do.

6 Q. What does that mean?

7 A. When I look at the number of RTs times
8 the cost per RT and the number of central offices
9 times the cost to deploy Project Pronto in the RTs,
10 that's what that total number comes up to be.

11 Q. I need that one more time?

12 A. Let me say it slower. I am sorry for the
13 confusion. This line is just saying that the total
14 investment dollars in Illinois is calculated based on
15 the total number of RTs times the cost per RTs plus
16 the total number of central offices that we were doing
17 Pronto in times the cost per central office.

18 Q. I have got you. What you are saying is
19 you aren't ignoring some central offices and some RTs;
20 you are trying to pick them all up in the calculation?

21 A. Yes.

22 Q. I understand. And are you using -- we

1 asked you some data requests in the 10th set where we
2 said give us your capital budget for Pronto in
3 Illinois and give us your actual expenditures and so
4 forth. You are familiar with those responses, aren't
5 you?

6 A. Yes, I am, generally.

7 Q. Are you using those numbers -- are you
8 using the actual capital budget or the actual
9 expenditures in Illinois for your calculation or
10 something different than those?

11 A. The assumption and the numbers in line
12 number 17 are composite of what we felt, some actuals
13 and then some model costs.

14 Q. So we shouldn't expect to see the
15 investment dollars that you use for the total project
16 close to any of the -- either the budgeted amounts or
17 the actual expenditures, is that what you are saying?

18 A. I am sorry, repeat the question.

19 Q. We shouldn't expect -- again, I am
20 harking back to the data response. We have got
21 budgeted dollars for Pronto in Illinois and we have
22 got actual expenditures. And you are saying you

1 didn't use either one of those. You used some of that
2 and then some modeling stuff. So given that, we
3 shouldn't expect, I take it, if we look at those
4 numbers, that the numbers that you use for investment
5 will close or be equal to either of those budgets
6 versus actual numbers, right?

7 A. Our expectations is that the numbers that
8 I use will be close to the budgeted numbers.

9 Q. Budgeted numbers?

10 A. And actuals. We are tracking actuals
11 through budget and this is the target for Pronto to
12 bring our central offices and RT-build into these
13 numbers.

14 Q. Okay. Well, I think we will get on the
15 closed record some more detail about the actual
16 numbers. But wouldn't you agree that the number you
17 assumed for capital per CO and per RT is remarkably
18 round?

19 A. It is a model number, yes.

20 Q. In fact, both numbers have five zeros
21 before any significant digit, isn't that right?

22 A. I rounded them up or rounded them down

1 actually in some cases.

2 Q. All right. We will talk about that in
3 more detail on the closed record, Mr. Keown.

4 A. Okay.

5 Q. The next assumption past those capital
6 dollars it says, "Additional MLAC help 2090," that's
7 2090 RTs, "16 minutes/slot provision = 4." There is a
8 note one, do you see that?

9 A. Yes, I do.

10 Q. Now, MLAC is the Mechanics List
11 Assignment Center, is that right?

12 A. That's right.

13 Q. That is a work group inside SBC?

14 A. It is.

15 Q. And they are the ones that help assign
16 outside plant facilities when things don't get
17 processed on a flow-through basis, is that right?

18 A. And also build the records in the LFACS
19 system.

20 Q. So they handle fallout and they enter
21 stuff in the LFACS, right?

22 A. Correct.

1 Q. So describe what's happening here. In
2 the note that goes with this, it says, "2090 RTs, 168
3 slots, 16 minutes per slot to assign and track," do
4 you see that?

5 A. I do.

6 Q. What are you trying to capture here?

7 A. Well, as we looked at what process there
8 might have to be in case of a CLEC card collocation
9 arrangement, the MLAC would have to handle the fallout
10 because our systems today won't be able to capture a
11 specifically-owned card. So that order would have to
12 be assigned by somebody in the MLAC, and this is just
13 trying to capture what additional help might be needed
14 in the MLAC system to do that work.

15 Q. You get to a number that says equals 24.
16 What is that? 24 people?

17 A. Twenty-four people.

18 Q. So 24 additional full time equivalent
19 people?

20 A. Yes.

21 Q. For manual assignment of the slots?

22 A. Correct.

1 Q. Don't you also have an estimate that you
2 got from Mr. Waken or somebody about hundreds of
3 millions of dollars in OSS improvements that would be
4 required to track on a mechanized basis card
5 ownership?

6 A. Yes, I did.

7 Q. Isn't this double accounting then if you
8 are talking about manual assignment?

9 A. I think Mr. Waken also says that takes a
10 long period of time to get to that point to where you
11 have your systems out and deployed. In the meantime
12 if you are handling orders, you have to have somebody
13 in there to pick those orders up off the floor and put
14 them back in the system to assign them. So you would
15 have to have help there.

16 Q. We will get back to the details, but your
17 study doesn't say for the first year or two it's this
18 and then it goes over to that, does it? It says both.
19 It hasn't been given.

20 A. Yes, it does.

21 Q. Isn't that double counting?

22 A. It double counts a little of that money,

1 yes, it does. After the time that the systems are
2 turned up, I don't know what that number calculated
3 out to be as far as dollars, but that was in there, in
4 my example.

5 Q. Excuse me?

6 A. That was in my analysis.

7 Q. Okay. And this applies -- I guess, is
8 2090 RTs designed to be the total population of RTs in
9 Pronto, 2090?

10 A. That's the plan. That was the plan
11 number for Ameritech Illinois.

12 Q. You are trying to capture them all?

13 A. Correct, and the time that would be spent
14 to handle orders at each one of those sites.

15 Q. Okay. So you are capturing all the RTs
16 for the 2090. That's worst case, right?

17 A. That's all the RTs, that's correct.

18 Q. Well, that's worst case; all the RTs is
19 the worst case?

20 A. All the RTs is worst case if you are
21 talking about handling orders on them.

22 Q. And you have got, note one says, 168

1 slots, right?

2 A. Correct.

3 Q. That's all the slots in three channel
4 bank assemblies, right?

5 A. That's correct.

6 Q. So that's worst case, right?

7 A. That's all of the slots; that's worst
8 case in the channel banks.

9 Q. And what does that mean? Does that mean
10 that you are assuming that we would take up all the
11 slots in three channel bank assemblies?

12 A. It means that that's a possibility that
13 all 168 slots could have some level of card
14 collocation in them, yes.

15 Q. No, not what it could. Doesn't the
16 assumption state that by using 168 that we will use
17 all the slots in all three channel bank assemblies for
18 collocated line cards?

19 A. I am sorry. I thought that's what I
20 answered.

21 Q. Is that a yes?

22 A. I thought that's what I answered, that

1 this 168 would mean that all card slots would have
2 some level of card collocation.

3 Q. Meaning that you have to have MLAC
4 personnel manually assign all the DSL slots in all the
5 channel banks in all the RTs in Illinois, right?

6 A. That's what this number captures.

7 Q. Sounds like worst case, right?

8 A. Again, in order to build an analysis that
9 would start with the maximum and then be able to apply
10 percentages to, yes, that's where I started.

11 Q. And you decided that yourself?

12 A. Again, along with input from others I
13 did.

14 Q. And were did you get the 16 minutes to,
15 what you say here, to assign and track?

16 A. That input came from another person in
17 our group, if I remember correctly.

18 Q. In the regulatory group?

19 A. No, I am not in regulatory. I am in
20 Project Pronto.

21 Q. Did it come from the MLAC?

22 A. The person that got it got it from the

1 MLAC staff manager.

2 Q. Do you know what question was asked?

3 A. I am sorry?

4 Q. Do you know what question was asked which
5 yielded a 16 minute per slot estimate?

6 A. I don't know the specific question.

7 Q. Did you ask somebody to go find out the
8 answer to this?

9 A. For the 16 minutes?

10 Q. Uh-huh.

11 A. No, I did not.

12 Q. It just descended upon you out of the
13 blue; it just showed up?

14 A. No, again, this input came to me from one
15 of the other members from the Project Pronto team who
16 had worked with somebody else on MLAC. I trusted the
17 person's input.

18 Q. Was it based on a time and motion study?

19 A. I think it was -- again, I would be
20 speculating to say what I think it was based on.

21 Q. Just want what you know. But is this a
22 one time event or is this every time you place a DSL

1 order this happens?

2 A. This was more just pro rated across all
3 the DLCs and all the slots to build the basis for the
4 cost.

5 Q. No. What I am saying is, you have got in
6 your -- which we will get to on the closed record --
7 you have got a calculation which has what you call OTE
8 which is one time expense and OGE which is ongoing
9 expense, right?

10 A. Right.

11 Q. Where does this hit? Does it hit one
12 time expense or does it hit ongoing expense or both?

13 A. It falls under the ongoing expense.

14 Q. Okay. So this is assigning every DSL
15 order manually to every slot there?

16 A. Correct.

17 Q. Okay. The next one says, "Additional
18 tech," that's technicians, right?

19 A. Technicians, correct.

20 Q. "Needed to place card = 31," do you see
21 that?

22 A. Yes, I do.

1 Q. And note two that goes with that says,
2 "Minimum one hour to place card, replacing 12 percent
3 lost capacity," correct?

4 A. Correct.

5 Q. Is 31 the number of additional
6 technicians?

7 A. That is.

8 Q. And when you say one hour to place card,
9 you mean you are assuming it will take them one hour
10 to place each card?

11 A. Yes.

12 Q. In each of the 2090 RTs?

13 A. Yes, it assumes that all the orders don't
14 come in the same day for every CLEC. So if an order
15 came in that required a card replacement, the
16 technician would have a trip to the RT to place that
17 card, and that's a minimum of one hour.

18 Q. I understand that. But I am trying to
19 see what the scope of this is. You are assuming that
20 this involves technician visits to each of the 2090
21 RTs, right?

22 A. To each of the 2090 RTs, that is correct.

1 Q. And to each of the 168 card slots in each
2 of those RTs, right?

3 A. I would have to check my formula to see
4 if I calculated that in all the 168 slots. I don't
5 recall.

6 Q. Can you check that right now?

7 A. I don't have my --

8 Q. Do you want to see my laptop?

9 A. Sure. What else do you have on your
10 laptop.

11 (Laughter)

12 Q. Tell me where to go look for the cell
13 note and I will tell you what it is. Is it back there
14 in the OTE and OTG section?

15 A. Is there a little red dot on the cell
16 note?

17 Q. Yeah, on the assumption page?

18 A. Yes.

19 Q. Yeah, but it's just a printout of what
20 you already have there. It says, "JEK, minimum one
21 hour to place card, replacing 12 percent lost
22 capacity.

1 A. I am afraid I would have to go back and
2 trace my -- it's been too long since I have played with
3 this thing. I would have to go back to the terminal
4 and try to track through my formulas.

5 Q. Well, you are assuming, I take it, that
6 when you say a minimum one hour to place card, that's
7 a truck roll to place a single card, isn't it?

8 A. That's correct.

9 Q. So you are assuming in your study that a
10 technician for each card that gets placed that the
11 CLEC owns does a -- there is a separate truck roll,
12 right?

13 A. Yes.

14 Q. That's got to be worst case, right?

15 A. I don't know if that's worst case.
16 Again, the only other assumption you can make is that
17 all the orders for the CLECs come in at the same time
18 and that they have the cards ready to go and they all
19 go to the same place. Now, is it worst case for all
20 2090 RTs, yes, I will concede that that is worst case.

21 Q. Even if you have five CLECs that own
22 cards, as you have assumed here, I mean these guys

1 ride on trucks, right, with space in the back of them,
2 right?

3 A. Our technicians?

4 Q. Yeah.

5 A. Sure do.

6 Q. They have got racks in the back of their
7 trucks, right?

8 A. Yes, they do.

9 Q. They could carry more than one CLEC card
10 at a time, couldn't they?

11 A. They could if they had the order to carry
12 that card. Again, my assumption is that all the CLECs
13 orders wouldn't come in simultaneously to a particular
14 site so.

15 Q. In fact, you are assuming that none of
16 them come in simultaneously, aren't you?

17 A. That's correct.

18 Q. That they all come in sequentially to the
19 point where a separate truck roll is required for each
20 CLEC DSL order, right?

21 A. That is correct.

22 Q. Do you think you have enough technicians

1 and enough trucks to actually do this?

2 A. That's why we try to calculate some
3 additional ones.

4 JUDGE WOODS: They are 31 short.

5 Q. But you don't know whether you are
6 assuming -- well, I guess you are assuming that they
7 are only doing one card at a time, right?

8 A. Again, assuming that the order comes in
9 sequentially, if I can say that, but comes in one at a
10 time, so they would have to go out there and place
11 those cards.

12 Q. But you are actually not assuming they
13 are going to do this when an order comes; you are
14 going to assume that just to replace the lost
15 capacity, right? Isn't that what you say there?

16 A. That is a misnomer. It is really to go
17 out and place the card for the service order.

18 Q. So we should cross off replacing card to
19 replace capacity, right?

20 A. Yes.

21 Q. Because if you did that, you would sell
22 more than one card at a time, wouldn't you?

1 A. I am sorry.

2 Q. If you are going to roll a truck to
3 replace 12 percent capacity of lost capacity caused by
4 PVP requests, you are going to replace a lot of cards,
5 wouldn't you?

6 A. If I am going out to replace Ameritech
7 Illinois' card based on what I thought the take rate
8 would be, I would replace enough cards to handle that
9 take rate.

10 Q. So this is a truck roll for a onesy CLEC
11 order, right?

12 A. Yes.

13 Q. So we should cross off that note there?

14 A. Yes, my mistake.

15 Q. You say yes?

16 A. Yes, I am sorry.

17 Q. Okay. And where did you get that number,
18 the one hour to place a card?

19 A. The same person that provided the number
20 on the MLAC help.

21 Q. Who did he or she ask?

22 A. I am not sure exactly who she got her

1 information from.

2 Q. So you don't know if it was based on a
3 time and motion study or not?

4 A. I don't know. I do know that the average
5 truck roll is about an hour for us, so it made sense
6 to me that that number seemed reasonable.

7 Q. Doesn't the average truck roll include
8 truck rolls to customer premises?

9 A. Some do.

10 Q. Serving terminals?

11 A. Some do.

12 Q. SAIs?

13 A. Some do.

14 Q. What are there more of, RTs or serving
15 terminals?

16 A. There are more serving terminals than
17 RTs.

18 Q. What are there more of, SAIs or RTs?

19 A. There are more SAIs than RTs.

20 Q. And what are closer to the central
21 offices, RTs or SAIs?

22 A. RTs are typically closer to the central

1 office.

2 Q. And what are closer to DLs, serving
3 terminals or RTs?

4 A. Closer to the office?

5 Q. Yeah.

6 A. The RTs, typically.

7 Q. The next assumption says, "Help desk to
8 track and answer CLECs' questions = 8," do you see
9 that?

10 A. Yes, I do?

11 Q. Where is this help desk supposed to be
12 under your assumption?

13 A. Well, I think it kind of *R corresponds
14 with what Mr. Hamilton had in his testimony. We
15 needed somewhere to be able to take the field calls
16 from CLECs. The assumption is that, as we get cards,
17 there would be a requirement to be able to answer
18 questions about have you received the card, has it
19 been set in the -- placed in the RT or NGDLC. So
20 someone would be needed to handle those type calls.

21 Q. What kind of questions? Questions saying
22 is it there yet or what?

1 A. Is it there yet, have you got the card,
2 is it placed, can I place my order for service.

3 Q. And you are assuming under note three 15
4 calls per month, averaging 12 minutes per?

5 A. Right.

6 Q. Where did you get those numbers?

7 A. The same person that provided the other
8 two inputs.

9 Q. Do you know where she got her numbers?

10 A. I don't know where that specific number
11 came from.

12 Q. Do you know if it was based on a time and
13 motion study?

14 A. I do not know that.

15 Q. But the eight is eight more people,
16 right?

17 A. Eight more full time equivalents?

18 Q. And just so we are clear, you don't know
19 what the basis is either for the 15 calls per month or
20 the 12 minutes per call, do you?

21 A. No, I do not.

22 Q. All right. Then the next note says, "For

1 system work IL," that's Illinois, right?

2 A. Correct.

3 Q. "Would be cost causer," right?

4 A. Right.

5 Q. What's system work? Is that the OSS
6 stuff we are talking about?

7 A. That's the OSS work.

8 Q. And Illinois is the cost causer because
9 it's first?

10 A. It's the only one.

11 Q. Well, does your 13-state study take that
12 number times 13?

13 A. No, it does not.

14 Q. So it's Illinois' fault and everybody
15 else gets a free ride on the OSS upgrade, is that what
16 you are saying?

17 A. What I am saying is no other state has
18 ordered me to do what's been ordered for Project
19 Pronto, so Illinois is the cost causer, therefore, the
20 charge is to Illinois.

21 Q. Well, the system work, did you get those
22 estimates from Mr. Waken?

1 A. I got these estimates from Mr. Waken.

2 Q. And you have read his testimony?

3 A. Yes, I have.

4 Q. Does he testify to system upgrades that
5 would be useful across the SBC 13-state region?

6 A. He said it could be useful, I believe.

7 Q. Isn't SBC pursuing a 13-state integrated
8 OSS deployment?

9 A. I am not aware of it.

10 Q. Did you read Mr. Mitchell's testimony?

11 A. I don't recall reading Mr. Mitchell's. I
12 skimmed through it, but I did not read it with any
13 detail.

14 Q. Have you ever heard of a Plan of Record?

15 A. I have heard of the Plan of Record.

16 Q. Is it your understanding that in the Plan
17 of Record SBC has committed to a uniform 13-state OSS
18 deployment going forward?

19 A. I read that in Mr. Mitchell's testimony.

20 Q. Well, if you assume that Mr. Waken is
21 telling us the truth about the costs and the
22 applicability across 13 states, do you think it's

1 correct to identify all of the OSS costs to Illinois
2 specifically?

3 A. If the features and functions that are
4 being provided by the OSS is strictly used in one
5 state, I think it's fair to assume that those costs
6 would be associated with that state.

7 Q. What happens if more states go the way
8 Illinois has gone? Do you want to divide that up and
9 pro rate across the states? Would that be fair?

10 A. Then I think that Mr. Waken's testimony
11 would stand for itself in that it could be used across
12 the other states?

13 Q. It's your study. I want to know what you
14 think about the number I can't say on the public
15 record. Would that be divided by the number of states
16 that go Illinois' way on this for OSS?

17 A. We would certainly have to look at doing
18 that.

19 Q. So you have assumed the worst case here
20 too, haven't you?

21 A. I assumed what I have and that's the one
22 state that's given me an order.

1 Q. Okay. Then at the very bottom you have
2 got the notes about the PVP and PVC and so forth?

3 A. Correct.

4 Q. Again, you note here the single PVP per
5 channel bank assembly. And we have established
6 already that that's based on ignoring Release 11.
7 What if you had assumed say 50 PVPs per CBA,
8 Mr. Keown? What would that do to your study results?

9 A. I would have to take in consideration,
10 number one, the size of those PVCs and the impact of
11 those PVCs on the channel bank, and the impact of
12 those PVCs on the fiber systems.

13 Q. Okay. Is it possible -- I am not asking
14 for likely -- is it possible that if you assume 50
15 PVPs per CBA that the entire chunk in the upper
16 right-hand corner we talked about of the Illinois
17 totals under the Category C and E for PVP UNE would
18 not be there? Is that possible?

19 A. It's possible that part of that might not
20 be there.

21 Q. Is it possible that none of it would be
22 there?

1 A. I don't know if it's possible that none
2 of it would be there.

3 Q. Well, if you had 50 PVPs per channel bank
4 assembly available for use and you had five CLECs and
5 they each wanted a five megabit PVP, that would be 25
6 megabits, right?

7 A. Twenty-five megabits.

8 Q. And that would leave you with, if you
9 assume 20 megabits of overhead in the OC-3c, that
10 would leave you with over a hundred megabits per
11 second for everything else, right?

12 A. For the remaining services?

13 Q. Right.

14 A. That's correct.

15 Q. Under those assumptions do you think you
16 would need any additional NGDLC?

17 A. It's possible that I still might need
18 some additional capacity, because if the other
19 services are CBR, for example, 96 kilobits CBR, and
20 the PVPs are using some hard band width out of the
21 remaining 110, that might impede on the UBR services.
22 It's possible that I still might need some additiona l

1 capacity.

2 MR. LIVINGSTON: Can we take a break at some
3 point here, Your Honor?

4 JUDGE WOODS: Sure. Where are you at before
5 you get to the closed record? I was going to try to
6 get to the closed record before we break.

7 MR. BOWEN: I am close to being done with the
8 assumptions, but I have a couple of questions on the
9 study itself and then I have some exhibits as well.

10 JUDGE WOODS: Let's take a half an hour.
11 (Whereupon the hearing was in
12 a recess.)

13 JUDGE WOODS: Back on the record.

14 MR. BOWEN: Okay. Still on the open record,
15 I think, Your Honor.

16 JUDGE WOODS: Yes.

17 Q. The notes down here at the bottom,
18 Mr. Keown, of the assumptions page, you don't mean --
19 when you say each nine channel bank cabinetized
20 Litespan NGDLC has three DSL-capable channel banks,
21 therefore, three PVPs per NGDLC, that's just repeating
22 the same assumption we talked about above, number 5,

1 is that right?

2 A. That's correct, it is.

3 Q. There is nothing different you are adding
4 by saying that?

5 A. No.

6 Q. Okay. Then when you say -- you go
7 through the inability to map customers from one
8 channel bank to another on a PVP basis and then you
9 say, "Therefore, if a CLEC had customers throughout
10 the geographic area served by the NGDLC, the CLEC
11 could take all three PVPs, thereby eliminating any
12 other CLEC from serving customers in that NGDLC," do
13 you see that?

14 A. Yes, I do.

15 Q. This is the same thing we discussed
16 before, the single PVP per CBA issue?

17 A. That's correct.

18 Q. What are you assuming in the study
19 itself? Are you assuming that one of the five CLECs
20 takes a PVP in all three of the CBAs or no?

21 A. Well, actually the study only assumed --
22 an analysis is what it really is. It has been

1 characterized as a study, but it really is an analysis
2 of the impact of this order. But the analysis assumed
3 that three PVPs were taken. It doesn't matter exactly
4 who gets them, but three PVPs.

5 Q. You are assuming that, because of the PVP
6 order of the Commission, that in the existing Litespan
7 Pronto-equipped NGDLCs, that one or a combination of
8 CLECs will take all three CBAs up and then put a new
9 one in?

10 A. That's correct.

11 Q. All right. And who made that decision?
12 Was that you?

13 A. Again, provided with input from our
14 management I made the ultimate decision.

15 MR. BOWEN: All right. Your Honor, I think
16 this is the spot where we should go on the sealed
17 records.

18 JUDGE WOODS: Why don't we go ahead and have
19 the remaining counsel ask their open record questions,
20 if we could, please.

21 MR. SCHIFMAN: So we are going to do the
22 remaining questions in the public record?

1 JUDGE WOODS: I think so.

2 MR. BOWEN: Actually, I have one that was
3 referred from Mr. Boyer to Mr. Keown. Because I think
4 it's open record.

5 JUDGE WOODS: All right.

6 Q. Mr. Keown, I asked Mr. Boyer -- you have
7 read his testimony, right?

8 A. Yes, I have.

9 Q. And he talks about the new Project Pronto
10 architecture components, one of which he says is the
11 copper feeder pairs between an SAI and a Project
12 Pronto RT. We had a discussion about that and he
13 wasn't sure and he referred the question to you about
14 whether in every case you are laying new copper feeder
15 pairs even for RTs that are upgraded, do you know the
16 answer to that?

17 A. We are not laying new copper cable for
18 every upgraded -- we are not laying new copper cable
19 for every upgraded NGDLC.

20 Q. So that means that you are using -- for
21 an upgraded NGDLC that's a Litespan 2000, for example,
22 you are simply going to use the existing copper feeder

1 that already serves that NGDLC, is that right?

2 A. We will use the vast majority of it.
3 There might be cases, for instance, where a channel
4 bank needs to go to a different SAI that requires
5 different copper if it is not wired that way. It
6 might require us to place new copper at that point.

7 Q. But with that exception for the existing
8 Litespan 2000 upgrade, you will simply use the copper
9 feeder that's in place right now?

10 A. Well, there are exceptions. That's what
11 I was just explaining. There might be cases where we
12 upgrade an NGDLC where the existing pairs off that
13 NGDLC, the channel banks that have been made
14 DSL-capable, may not go to the proper SAIs.
15 Therefore, we might have to lay new copper. But it is
16 an engineered item. Engineers have to look at it and
17 see.

18 Q. But there are at least some situations or
19 perhaps frequent situations where existing upgrades,
20 upgraded NGDLCs, will not be required to overbuild
21 additional copper feeder?

22 A. There are some cases where we will not

1 have to lay new copper.

2 Q. What about for new RT locations? Will
3 you always have to install new copper feeder in total
4 from there to the subtending SAI?

5 A. Again, that's one of those engineered
6 items. The answer is no, we will not always have to
7 do it. If we can find clear binding groups in the
8 existing feeder, we will use those existing binders.
9 But there are many cases where we have to lay new
10 copper.

11 Q. Okay. So in both those cases it's
12 sometimes you will put new stuff in, sometimes you
13 will use existing stuff?

14 A. Right, that's an engineered item.

15 Q. Okay. Now, are you also -- do you have
16 also have to expand existing SAIs to handle the
17 additional terminating feeder pairs?

18 A. Some might have to be. Again, that's an
19 engineered item. It would depend on if we have to
20 reinforce the copper and that exhausts the box, then
21 the SAI would have to be upsized. But it's
22 engineered. It's on a case-by-case basis.

1 Q. Okay. Well, if you have to do that to
2 the SAI, is that part of the overlay as you use the
3 term? Is that part of the Pronto overlay?

4 A. Reinforcing the SAIs is part of the
5 Pronto overlay.

6 Q. Is reinforcing or riding new copper
7 feeder between RT locations and SAIs part of the
8 Pronto overlay?

9 A. For DSL cable pairs that is. And the
10 other part I believe is stablization, which is in the
11 business case, is also part of the Pronto build.

12 MR. BOWEN: Okay. Thank you.

13 CROSS EXAMINATION

14 BY MR. SCHIFMAN:

15 Q. Mr. Keown, Ken Schifman from Sprint.

16 A. Mr. Schifman, how are you?

17 Q. Good. How are you? I just had a few
18 questions. In our discovery we requested how much
19 space is available for collocation at cabinets, CEVs,
20 or vaults in which SBC has deployed Project Pronto
21 NGDLCs. Can you tell me for each one of those
22 configurations how much space is available for CLECs

1 for collocation?

2 A. I can only speak to the huts and CEVs. I
3 cannot tell you about the cabinets.

4 Q. Okay.

5 A. For the new huts and CEVs deployed under
6 Project Pronto and the Pronto commitments, I believe
7 it was -- and I will get this percentage wrong so I
8 will need to verify the percentage -- 16 to 20 percent
9 additional space. But I need to verify that
10 percentage.

11 Q. It's in the Project Pronto Waiver Order?

12 A. It certainly is.

13 Q. And that's both for huts and CEVs?

14 A. That's both for huts and CEVs.

15 Q. Can you identify in currently installed
16 Pronto NGDLC cabinets, how much space is available for
17 CLECs for collocation?

18 A. I don't know. That would have to be
19 looked at on an individual case basis to see if space
20 existed.

21 Q. In the 2016 cabinet typically is there
22 space available for CLEC collocation?

1 A. If the full nine channel bank
2 configuration is deployed, there probably -- there may
3 not be space. There might be a little space in there,
4 but I am not sure how much.

5 Q. Enough space for a CLEC to put a DSLAM?

6 A. Again, I don't know.

7 Q. The full nine -- well, let's just talk
8 typical nine channel bank configuration, 2016 cabinet,
9 typical CLEC DSLAM. Is there space for it?

10 A. Again, I don't know. There is a slot in
11 a full nine channel bank configuration, but I don't
12 know if that's there for air flow or not, so I can't
13 say.

14 Q. You don't know if that's big enough for a
15 CLEC DSLAM?

16 A. I don't know how many mounting spaces
17 that is. I don't recall that.

18 Q. And here is another question we asked in
19 discovery. If you don't know the answer, please tell
20 me. For locations that will not accommodate
21 collocation, please identify which locations have
22 adjacent collocation space available to accommodate a

1 CLEC enclosure of approximately five by eight feet?

2 A. I don't know the answer to that.

3 Q. Do you know how many Pronto locations, RT
4 locations, have any adjacent collocation space
5 available?

6 A. I do not know.

7 Q. You haven't done any analysis of that,
8 right?

9 A. No, I have not.

10 Q. Also, I believe Mr. Boyer got some
11 information for you in response to some questions that
12 I asked him about SBC Telecom collocating a DSLAM in
13 Plano, Texas?

14 A. Yes.

15 Q. He did get some information from you?

16 A. Yes, he did.

17 Q. What was that information?

18 A. Excuse me. I had some price information,
19 cost information, for what it cost SBC Telecom to
20 deploy a remote DSLAM in Verizon's territory.

21 Q. What was that amount? \$61,000 is I
22 believe what you said.

1 A. That might have been the maximum. There
2 was some in there for 40, and I don't remember the
3 other numbers specifically.

4 Q. But 61,000?

5 A. \$61,000, I think that was the high
6 number.

7 Q. Okay. And how did you get that
8 information?

9 A. Through a group that engineered that
10 site.

11 Q. A group who works for SBC Telecom?

12 A. Yes.

13 Q. And did they place their DSLAM in the
14 Verizon remote terminal?

15 A. Actually, it wasn't a Verizon remote
16 terminal. The arrangement in north Texas where the
17 SBC ILEC is operating as a CLEC, or however that is
18 arranged -- I don't know the legal structure of that
19 -- had already been placed. It was facilities-based,
20 so they had already placed their -- actually, it was
21 just a regular DLC system and they just added the
22 DSLAM onto that.

1 Q. So this was --

2 A. The telecom part, excuse me.

3 Q. So this was an occasion where SBC
4 Telecom -- you understand that to be the CLEC, right?

5 A. Well, yes, out of region I understand
6 they operate like a CLEC.

7 Q. Okay. So that entity placed the DSLAM or
8 the NGDLC?

9 A. It wasn't a NGDLC. It was just a regular
10 DLC, and they purchased and located near their DLC
11 site a remote DSLAM.

12 Q. Was this SWBT Texas, the ILEC that had
13 that site already?

14 A. It is in Verizon's territory.

15 Q. Well, I think I am confused and I am sure
16 the record is, too. But I am not sure how much
17 difference that makes right now. On page 7 of your
18 testimony of your -- let's see which one it is,
19 rebuttal testimony.

20 A. Page 7 of my rebuttal.

21 Q. I believe we have a little bit of
22 pagination differences, but I am going to be referring

1 to a sentence that starts, "As Mr. Dunbar should be
2 aware, placing a new NGDLC."

3 A. Okay.

4 MR. LIVINGSTON: What page are you again?

5 THE WITNESS: That's page 7, line 8, of my
6 testimony.

7 Q. It's line 2 of mine but I believe you
8 know where I am referring to here. These things that
9 you are talking about, securing new rights of ways or
10 easements, placing additional fiber in conduit, those
11 are things that also could describe what instances a
12 CLEC would have to do when collocating a DSLAM at a
13 remote terminal, right?

14 A. Well, relating to what this question is
15 about, which says this was rebutting a statement of
16 Mr. Dunbar that said I would not need or Ameritech
17 Illinois would not need additional power CO equipment,
18 that's what this answer is related to.

19 Q. Okay. But I am just taking that answer
20 and trying to relate it to DSLAM collocation which I
21 believe you talk about in your testimony.

22 A. Okay.

1 Q. And my question is, are these the types
2 of things that, for example, if the CLEC can't get
3 collocation in the remote terminal, that they would
4 have to go through in order to obtain access to
5 subloops at that location?

6 A. Yes, if a CLEC wanted to collocate and
7 there was no space and they had to go out and secure
8 their own right-of-way, these are the steps they would
9 have to go through.

10 MR. SCHIFMAN: I don't have anything further.
11 I believe Mr. Bowen has covered everything else.

12 JUDGE WOODS: Okay. Ms. Franco-Feinberg?

13 MS. FRANCO-FEINBERG: Thank you.

14 CROSS EXAMINATION

15 BY MS. FRANCO-FEINBERG:

16 Q. Good evening, Mr. Keown.

17 A. Good evening, Ms. Feinberg.

18 Q. Okay. I just have a few questions for
19 you. I would assume you would agree with me that
20 Ameritech today routinely manages capacity in its
21 network?

22 A. Where Ameritech has control, it does

1 manage the capacity.

2 Q. And so, for example, I assume you would
3 agree with Mr. Gindelsberger that, for example,
4 Ameritech routinely manages capacity over its
5 interoffice transport systems?

6 A. Ameritech does manage the capacity over
7 its interoffice transport facilities.

8 Q. Did you say central office or
9 interoffice?

10 A. Interoffice.

11 Q. And CLECs today can purchase interoffice
12 transport as an unbundled network element, is that
13 correct?

14 A. I don't know the answer to that one.

15 Q. Can you assume with me that that's true?

16 A. I can assume with you that they do.

17 Q. And so is it true that Ameritech manages
18 capacity over interoffice transport by relying on CLEC
19 forecasts, do you know?

20 A. I don't know the answer to that.

21 Q. So you also wouldn't know if you monitor
22 usage of your interoffice transport facilities that

1 CLECs are using?

2 A. I am sorry, could you repeat the previous
3 question? I might have misheard.

4 Q. The forecast question?

5 A. Yeah, the forecast question.

6 Q. Okay. Isn't it true that Ameritech
7 relies on forecasts from CLECs in order to manage the
8 capacity of its interoffice transport systems?

9 A. I don't know that for a fact. I can
10 assume that they do.

11 Q. Isn't it true that a CLEC has an option
12 to purchase different levels of interoffice transport
13 which have different capacities?

14 A. Again, I have to assume that it can.

15 Q. So, for example, a CLEC can choose to
16 purchase an OC-3 or an OC-48, is that correct?

17 A. In the TDM world, that's correct.

18 Q. And so -- and let me know if I am
19 incorrect in my technical understanding here -- an
20 OC-48 could consist of -- would have the same capacity
21 as 16 OC-3s?

22 A. Sixteen OC-3s, that is correct.

1 Q. So if a CLEC purchases an OC-48 from
2 Ameritech, it is consuming the equivalent capacity of
3 16 OC-3s?

4 A. If they purchase an OC-48, that would be
5 the 16 equivalent to OC-3s.

6 Q. Okay. But in managing its capacities, to
7 the best of your knowledge, Ameritech doesn't require
8 CLECs to purchase 16 OC-3s; it allows a CLEC to
9 purchase an OC-48, for example?

10 A. I will assume that's true.

11 Q. Even though, obviously, the CLEC is
12 consuming more of Ameritech capacity, is that true?

13 A. Repeat the question, please.

14 Q. Sure. I think you agreed that there is
15 no requirement that a CLEC purchase 16 OC-3s.
16 Instead, a CLEC can purchase an OC-48 even at the
17 equivalent of 16 OC-3s, is that correct?

18 A. A CLEC can purchase an OC-48? Again, I
19 will assume that's true.

20 Q. Okay. And in doing so it's consuming the
21 equivalent capacity of 16 OC-3s, is that correct?

22 A. When a CLEC purchases an OC-48, it

1 purchases the equivalent of 16 OC-3s.

2 Q. Okay. So you could -- I mean, arguably
3 that's perhaps denying OC-3 capacity to other CLECs,
4 for example, would you agree? Because, for example,
5 let me ask this, because Covad has purchased an OC-48,
6 now there is less capacity, OC-3 capacity, for other
7 CLECs to purchase, for example, is that correct?

8 A. That capacity would be subtracted from
9 the overall capacity of whatever exists in that
10 network.

11 Q. So there is arguably less capacity now
12 available for either SBC's use or other CLECs' use?

13 A. That's correct.

14 Q. But there is no restriction today on
15 Covad's ability to purchase an OC-48, even though that
16 is consuming additional capacity, is that correct?

17 A. None that I am aware of.

18 Q. And Covad simply pays more for an OC-48
19 than for an OC-3, is that correct?

20 A. I don't know what they pay, so I would
21 have to assume that an OC-48 costs more than an OC-3.

22 Q. You assume that if a CLEC is consuming

1 more capacity, that it would have to pay Ameritech
2 more for that use of capacity?

3 A. I would assume that if you buy an OC-48
4 that's more expensive than an OC-3.

5 Q. And let's assume that Covad's decision to
6 purchase an OC-48 uses up all the capacity, all that
7 fiber or transport capacity that's available at this
8 time. What will Ameritech do?

9 A. Well, if Ameritech is that close on
10 capacity, Ameritech engineers will probably have
11 determined it needs to add some more SONET rings or
12 SONET nodes and would then start building. I assume
13 before we got that close that we would start building
14 the capacity.

15 Q. Okay. So when you see that CLEC use of
16 your transport systems as consuming capacity, you grow
17 it, is that correct?

18 A. That's correct.

19 Q. You don't deny CLECs the ability to
20 purchase that transport, do you?

21 A. I don't know the answer to that.

22 Q. To the best of your knowledge you don't,

1 though?

2 A. Again, I don't know the answer.

3 Q. Isn't it -- and I don't know if you are
4 familiar with this. Are you familiar generally with
5 how CLECs purchase collocation?

6 JUDGE WOODS: With what?

7 Q. With how CLECs purchase collocation from
8 SBC?

9 A. No, I am not.

10 Q. So you wouldn't know if there is some
11 sort of cap on the amount of collocation space a CLEC
12 can purchase?

13 MR. LIVINGSTON: Are you talking about the
14 central office or RT?

15 Q. Let's talk about the central office this
16 time.

17 A. I am not aware of any. I don't know.

18 MS. FRANCO-FEINBERG: That's all the
19 questions I have at this time. Thank you.

20 JUDGE WOODS: Mr. Townsend?

21

22

1 CROSS EXAMINATION

2 BY MR. TOWNSEND:

3 Q. Good evening, Mr. Keown. I am Darrell
4 Townsley. I represent WorldCom in this proceeding. I
5 have got just a few questions on a very narrow piece
6 of your direct testimony. And if I could ask you to
7 open your direct testimony to page 4?

8 A. I have it.

9 Q. And at the bottom of that page, beginning
10 on line 21, there is a question and answer that deals
11 with Ameritech's plans or SBC's plans for Pronto DSL
12 deployment in Illinois. Do you see that question and
13 answer?

14 A. I do.

15 Q. And within that answer you talk about
16 what Project Pronto entails. Specifically with
17 respect to Illinois, you talk about Project Pronto
18 covering 101 wire centers, is that correct?

19 A. Correct.

20 Q. And the next sentence you say, "Each wire
21 center/central office would have been equipped with a
22 new Optical Concentration Device (OCD)." Do you see

1 that?

2 A. I do.

3 Q. Now, in that sentence you use "wire
4 center/central office"?

5 A. Yes.

6 Q. Do I take that to mean that a wire center
7 in the way you use it here is equivalent to a central
8 office?

9 A. In some cases a wire center equals a
10 central office. In other cases, if you have a
11 multi-entity wire center, you could have multiple
12 central offices in that wire center.

13 Q. And then the answer goes over onto page 5
14 of your direct testimony. You talk about -- you say
15 starting on line 2 on page 5, "One ultimate goal of
16 Project Pronto is to shorten the lengths of the copper
17 portion of customer's loops, as DSL service
18 performance is generally best on shorter copper
19 loops."

20 A. I am sorry, where is that? Where are you
21 reading?

22 Q. Starting on line 2, page 5, of your

1 direct testimony. Do you see that?

2 A. Yes, I am sorry, yes.

3 Q. And then you go on to state, "Deployment
4 of Pronto DSL equipment in Illinois would mean that
5 more than one million customer locations would have
6 access to DSL service that did not have such access
7 before," do you see that? Did I read that correctly?

8 A. Yes.

9 Q. And what I want to understand is you make
10 a statement here about the customers that, absent
11 Project Pronto, would not have access to DSL and what
12 I want to ask you about are those customers in
13 Illinois today that do have access to DSL. Let me
14 first ask you, is the DSL that Ameritech Illinois
15 provides, is that asynchronous digital subscriber line
16 service, whether it's on Project Pronto facilities or
17 not?

18 A. Well, first, Ameritech Illinois doesn't
19 ADSL. AADS is the affiliate that offers the ADSL
20 service.

21 Q. Let me ask the question this way. Does
22 Ameritech Illinois or any Ameritech Illinois affiliate

1 or subsidiary in the state of Illinois provide DSL
2 service?

3 A. AADS, the affiliate of SBC, provides ADSL
4 service today in Illinois.

5 Q. And the ADSL service that they provide is
6 provided to a limited number of customers that reside
7 within the Ameritech Illinois service area, is that
8 correct? In other words, we have got two groups of
9 people in Illinois. We have got people that have
10 access to DSL service and we have people that don't
11 have access to DSL service, correct?

12 A. There are people whose cable or
13 facilities, currently serving facilities, prevent them
14 from being able to get DSL service.

15 Q. And generally they are prevented from
16 obtaining ADSL service from Ameritech Illinois or its
17 affiliates because they are served by loops that are
18 in excess of 18,000 feet, is that correct?

19 A. I am sorry. Could you restate the
20 question? I got lost somewhere in that.

21 Q. I am sorry. Let me restate it for you.
22 The customers that do not have access to DSL service

1 from Ameritech or any of its affiliate companies in
2 Illinois today are those customers that are served by
3 loops that are in excess of 18,000 feet, is that
4 correct?

5 A. Typically, that would be the case.

6 Q. And the customers that happen to live
7 more than 18,000 feet from a central office, they are
8 still within Ameritech Illinois' serving area; they
9 just happen to be more than 18,000 feet from that
10 central office, correct?

11 A. If I can narrow that scope just a little
12 bit by saying that where Ameritech Illinois' AADS, who
13 is really the serving arm for ADSL in this state,
14 where they make that service available in the central
15 offices, yes.

16 Q. So today in Illinois, if I am a customer
17 and I am within 18,000 feet of an Ameritech central
18 office, DSL service, ADSL service is available to me?

19 A. Not in every central office.

20 Q. Do you know how many central offices
21 there are in the state of Illinois, Mr. Keown?

22 A. I sure don't know right off the top o f my

1 head.

2 Q. Well, you know how many central offices
3 that you are upgrading as a result of Project Pronto,
4 correct?

5 A. Yes, I do.

6 Q. Is that 101 central offices?

7 A. Approximately 101 for Project Pronto.

8 Q. And as the manager for Project Pronto you
9 don't know how many central offices are in the state
10 of Illinois?

11 A. I don't know right off the top of my head
12 how many total central offices there are in the state.

13 Q. Well, you were explaining before that DSL
14 service is only available out of certain central
15 offices in the state of Illinois, is that correct?

16 A. Certain Ameritech central offices, that's
17 correct.

18 Q. Can you tell me which ones?

19 A. No, I don't know that answer.

20 Q. Is that something that within the scope
21 of your duties you have had an opportunity to
22 investigate?

1 A. I have seen the Tier 1, and what we call
2 Tier 1 and Tier 2 offices, and those are the offices
3 that would have a CO DSLAM, a possible CO DSLAM.

4 Q. Can you explain to me what is a Tier 1
5 office?

6 A. A Tier 1 office is one of these 101
7 offices that we are doing the Project Pronto build in.
8 There are some additional offices outside that scope,
9 and I don't know the exact number for Ameritech
10 Illinois, that are getting a DSLAM or I think AADS has
11 deployed a DSLAM in.

12 Q. That have DSLAMs today?

13 A. I don't know that they have deployed them
14 all totally.

15 Q. Let me ask you this. You are generally
16 familiar with the fact that Ameritech and SBC had made
17 certain commitments, both at the federal level and at
18 the state level here in Illinois, about deployment of
19 ADSL service, are you not?

20 A. I am not familiar with the state
21 commitments. I have some general knowledge of the
22 commitments we had for low income and rural

1 deployments.

2 MR. TOWNSLEY: May I approach the witness,
3 Your Honor?

4 JUDGE WOODS: Yes, everybody else is.

5 (Whereupon the witness was
6 provided a document.)

7 Q. Mr. Keown, let the record reflect that
8 what I have presented to you is a copy of an excerpt
9 from the Order of the Illinois Commerce Commission in
10 Docket 98-0555 which was issued by this Commission on
11 September 23, 1999. And if you would turn to page 2
12 of the document I have handed you, in parens under
13 number 20 is reference to ADSL deployment which was a
14 condition that the Commission placed on Ameritech
15 Illinois in conditionally granting the merger between
16 SBC and Ameritech. Do you see that?

17 A. Yes. Give me a minute to read through
18 this.

19 Q. Sure.

20 (Pause)

21 A. Okay.

22 Q. And that particular condition states that

1 in the event ADSL service is offered by AI, which
2 refers to Ameritech Illinois, as a service to
3 residence customers in any Ameritech Illinois central
4 office, then ADSL service will be offered to residence
5 customers in any other Ameritech Illinois central
6 office where ADSL is subsequently deployed, do you see
7 that?

8 A. Yes, I do.

9 Q. And then it goes on to state that any
10 deployment by joint applicants, referring to SBC and
11 Ameritech Illinois, of ADSL in Illinois will be done
12 in good faith and a non-discriminatory fashion,
13 without excluding any particular area of the Ameritech
14 Illinois service area. Did I read that correctly?

15 A. That's accurate.

16 Q. Do you believe that Ameritech Illinois
17 and SBC take their commitments to this Commission
18 seriously?

19 A. Yes, I do.

20 Q. Is it evident to you from the commitment
21 that Ameritech Illinois and SBC, that they made to
22 this Commission, that the customers who happen to

1 reside more than 18,000 feet from the central office
2 in Ameritech Illinois' service area should be
3 receiving DSL service in those same central offices
4 where Ameritech has deployed ADSL service to the
5 customers that reside within 18,000 feet from the
6 central office?

7 A. I don't know that I would read that into
8 this. This paragraph says in the event service is
9 offered in the central office. Well, if the
10 technology limits you to the central office, then you
11 are limited to 18,000 feet, regardless.

12 Q. Well, my question to you and -- my
13 question to you is what central offices has Ameritech
14 deployed ADSL service in, Mr. Keown?

15 MR. LIVINGSTON: Well, we know he hasn't
16 deployed it in any offices because it is not providing
17 the service.

18 Q. Well, is your testimony here, Mr. Keown,
19 that the commitment that SBC and Ameritech made to the
20 Commission, which was that Ameritech Illinois will
21 deploy ADSL service in that manner, is really not a
22 commitment at all because Ameritech Illinois doesn't

1 provide ADSL service in Illinois?

2 MR. LIVINGSTON: I am going to object.
3 That's argumentative and its irrelevant, and he is
4 asking this witness for a legal conclusion.

5 JUDGE WOODS: I think it responds to your --
6 you might ask him, because he is the one who said it,
7 but I don't think this witness said that. I think
8 this witness said the commitment is limited by the
9 technology in the central offices. So I am not sure
10 that the question asks for information relevant to
11 this docket. So I guess I will sustain it on
12 relevance grounds.

13 Q. Okay. Let me ask it this way, Mr. Keown.
14 To the extent that Ameritech Illinois has deployed
15 ADSL service in a particular central office, pursuant
16 to this commitment Ameritech Illinois or its affiliate
17 would have to provide service, ADSL service, to
18 anybody that is served by that central office, isn't
19 that correct?

20 MR. LIVINGSTON: Objection, irrelevant.

21 JUDGE WOODS: I don't understand the
22 relevance, Mr. Townsley. I am sorry. I just don't

1 get it. Sustained.

2 Q. In order for a customer to receive DSL
3 service if they are served by a loop that is more than
4 18,000 feet, would Ameritech have to deploy its
5 Project Pronto architecture to be able to serve that
6 customer ADSL service in the state of Illinois?

7 A. Not necessarily.

8 Q. Please explain.

9 A. Well I think Mr. Ireland covered some of
10 that in his testimony, that there are other means of
11 providing high speed internet access or DSL type
12 service.

13 Q. I am asking over an Ameritech loop.

14 MR. LIVINGSTON: So you changed the question.

15 JUDGE WOODS: Well, I think the question, as
16 I heard it, was limited to ADSL service.

17 MR. TOWNSLEY: That's right.

18 JUDGE WOODS: I think the answer was
19 non-responsive to that question. So I think the
20 question was limited to the manner in which Ameritech
21 or the Ameritech customer could receive ADSL service
22 without the deployment of Project Pronto. If you

1 would limit your answer to that question, I would
2 appreciate it.

3 THE WITNESS: I guess the answer is still not
4 exactly. In order to fulfill that obligation, AADS
5 could deploy a remote DSLAM, just as any CLEC could,
6 to provide ADSL service.

7 Q. Has AADS deployed any remote DSLAMs in
8 the state of Illinois, Mr. Keown?

9 A. Not that I am aware of.

10 Q. And if they have not and AADS provides
11 ADSL service to customers served by a particular
12 central office, if they were obligated to provide ADSL
13 service to anybody else who is served by that central
14 office, in that case would Ameritech have to deploy
15 its Project Pronto architecture so that AADS could
16 provide service to those customers that reside more
17 than 18,000 feet from that central office?

18 MR. LIVINGSTON: I think we are getting back
19 to the condition in the Merger Order that is
20 irrelevant?

21 JUDGE WOODS: Sustained.

22 Q. There has been a lot of testimony in this

1 case from Ameritech witnesses about Illinois customers
2 being harmed if Ameritech Illinois does not roll out
3 Project Pronto architecture, isn't that correct? Is
4 that your understanding?

5 A. I think there has been some testimony
6 along that lines.

7 Q. And the customers that would be harmed,
8 the customers that you are referring to that you
9 understand that would be harmed, are those one million
10 plus customers that would be served by the 101 wire
11 centers where you deploy Project Pronto architecture,
12 correct?

13 A. Could you give me a definition of harm to
14 make sure I am clear?

15 Q. Is it your position that customers that
16 have access to DSL service are better off than
17 customers that do not have access to DSL service, that
18 those customers would be harmed?

19 MR. LIVINGSTON: This is well beyond the
20 scope of this witness' testimony. We have had
21 economists up here. We have had Mr. Ireland up here.
22 They have been subjected to these questions. This is

1 beyond the scope of this witness' testimony.

2 JUDGE WOODS: Well, in the hopes that it's
3 foundational, I am going to let him ask that question
4 and see where we are going with it.

5 THE WITNESS: Would you repeat the question?

6 Q. Is it your testimony here today that
7 customers that have access to DSL service in Illinois
8 are better off than those customers that do not have
9 access to DSL service in Illinois?

10 MR. LIVINGSTON: Objection. That can't be
11 his testimony because there is nothing like that in
12 his testimony.

13 MR. TOWNSLEY: Mr. Keown testifies that there
14 are more than a million customer locations in Illinois
15 that will not have access to DSL service if they do
16 not deploy Project Pronto architecture in Illinois.

17 JUDGE WOODS: I think he can ask him about
18 the inferences to be drawn from that.

19 MR. LIVINGSTON: Okay.

20 Q. Are those customers worse off than the
21 customers that currently today have access to DSL
22 service in Illinois? Is that the conclusion I am to

1 draw from your testimony?

2 A. I think the conclusion to draw from my
3 testimony is that today, without the deployment of
4 Project Pronto, approximately one million households
5 will not have access to DSL service.

6 JUDGE WOODS: Is that important?

7 THE WITNESS: I think it's important from the
8 standpoint that, if those customers really wanted DSL
9 service and couldn't get it because we didn't have
10 Project Pronto deployed, it is significant.

11 Q. Project Pronto is not deployed today in
12 Illinois and there are customers today, Ameritech or
13 AADS customers today, that do have access to DSL
14 service, correct?

15 A. If I could take a piece at a time.
16 Project Pronto, we are not deploying the NGDLC part of
17 Project Pronto in Illinois. And what was the other
18 part of that question?

19 Q. Project Pronto is not deployed today in
20 Illinois, correct?

21 A. The NGDLC portion is not deployed.

22 Q. And there are Ameritech or AADS today in

1 Illinois that have that access and actually purchase
2 DSL service through AADS from Ameritech Illinois,
3 correct?

4 A. Through AADS and a variety of other CLECs
5 that provision it from central offices, yes.

6 Q. And any customers that happen to be
7 served out of those same central offices should have
8 available to them the same ability to access those DSL
9 services in order to be on the same footing with the
10 customers that currently have DSL, isn't that correct?

11 MR. LIVINGSTON: Objection to the relevance
12 to the extent it's tied to this condition in the
13 Merger Order.

14 JUDGE WOODS: I think it is, too. Sustained.

15 MR. TOWNSLEY: Thank you, Mr. Keown. I have
16 no further questions.

17 JUDGE WOODS: Mr. Dunn?

18 CROSS EXAMINATION

19 BY MR. DUNN:

20 Q. Mr. Keown, my name is John Dunn
21 representing AT&T. SBC is not deploying Project
22 Pronto out of its 13-state region, is it?

1 A. I am sorry?

2 JUDGE WOODS: I have no idea what that means.

3 MR. TOWNSLEY: Outside its 13-state region.

4 JUDGE WOODS: Is that the question?

5 MR. DUNN: Yes.

6 JUDGE WOODS: Okay. The question is whether
7 or not SBC is deploying Project Pronto outside the
8 13-state region.

9 THE WITNESS: I only manage Project Pronto
10 within the 13 -- within the 12-state region now, so to
11 my knowledge that's all I know.

12 Q. So you don't have any idea whether
13 Project Pronto is being deployed in states outside of
14 those 12 or 13 states?

15 A. There is no Project Pronto outside of the
16 12 states that we have deployed that I am aware of.

17 Q. Does SBC provide, SBC or any of its
18 affiliates provide, any DSL services outside of the
19 13-state region?

20 A. I don't know.

21 Q. Are you familiar with SBC's National
22 Local Strategy?

1 A. I am familiar, generally familiar, with
2 SBC's National Local Strategy.

3 Q. Do you know if SBC or any of its
4 affiliates are providing DSL services to mass markets
5 or residential customers outside of the 13-state
6 region?

7 A. Again, I don't know.

8 Q. Could you turn to your rebuttal
9 testimony, please, at page 8?

10 A. Sure.

11 Q. I am not sure if I have the same
12 pagination that you do. Do you have a question on
13 page 8 of your rebuttal testimony beginning at line 8?

14 A. Not really. My question starts at line
15 10. Tell me what the question is and I will see if I
16 can match it.

17 Q. Okay. At line 10 the question that
18 begins "Mr. Dunbar (At 26)."

19 A. Yes.

20 Q. Do you see that question?

21 A. I do.

22 Q. That's a question where you -- Mr.

1 Dunbar, Mr. Morrison and Mr. Starkey assert
2 inefficiencies regarding -- excuse me, let me strike
3 that question. Mr. Dunbar, Mr. Morrison and
4 Mr. Starkey all assert that any line card collocation
5 inefficiencies could be eliminated by placing cross
6 connects at RT sites. Is that your understanding of
7 the testimony of those three witness?

8 A. Reading their testimony, that's my
9 understanding.

10 Q. And if you look at the answer that
11 follows the question there on page 8, you address
12 Mr. Dunbar's testimony and Mr. Morrison's testimony,
13 but you don't address Mr. Starkey's testimony, do you
14 see that?

15 A. Oversight on my part. Yes, I do see
16 that.

17 Q. And I am sorry, did you say that was an
18 oversight on your part?

19 A. Yes.

20 Q. So do you agree or disagree with
21 Mr. Starkey's assertions about placing cross connects
22 at RT sites?

1 A. That's -- my answer applies to all three.
2 I guess my answer in the testimony still is that that
3 adds additional costs to the Project Pronto build.
4 That also adds a point of network reliability, a point
5 of failure in our network that we try to avoid, and it
6 also brings with it some operational issues. So does
7 it bring some efficiencies, yes, but it also brings a
8 lot of baggage with it.

9 Q. Does it bring any flexibility to the
10 Project Pronto architecture?

11 A. Define flexibility.

12 Q. Well, do you have -- you know, if you
13 have a cable breakdown, does the cross connect allow
14 you to have alternatives to repairing that cable?

15 A. That all varies and all depends. If the
16 cable is going to the same SAI and there is a
17 breakdown in that cable, the cross connect doesn't
18 help you at all in that situation.

19 Q. In your answer here on page 8 were you
20 attempting to draw any distinction between the cross
21 connects advocated by Mr. Dunbar, Mr. Morrison, and
22 the cross connect advocated by Mr. Starkey?

1 MR. LIVINGSTON: Well, I object because what
2 Mr. Starkey was advocating is what Mr. Morrison was
3 advocating since he was relying specifically on
4 Mr. Morrison for the cross connect testimony, if you
5 recall the discussion this morning.

6 Q. I am just asking if you are trying to
7 draw any distinction here or if this was just an
8 oversight.

9 JUDGE WOODS: You can answer.

10 A. I am not trying to draw any specific
11 distinction.

12 Q. And then, finally, I had at last a
13 general question about the Project Pronto, the call
14 pad which you described.

15 A. Could you tell me the reference, give me
16 a reference?

17 Q. Yes, your direct testimony at page 6.

18 A. Okay. I have that.

19 Q. And our line numbers are different so I
20 can't give you a line number. But as I understand it,
21 and I am going to focus on the data and not the voice
22 signal now, but the data signal come from the

1 customer's premise to the line card in the remote
2 terminal, is that correct?

3 A. Over the copper.

4 Q. Over the copper, correct. And then it
5 goes from the remote terminal to the OCD, correct?

6 A. From the remote terminal through the
7 facilities to the OCD, correct.

8 Q. So is the line card performing a -- in
9 your opinion, performing a switching function there?

10 A. What the line card is doing is actually
11 taking the high frequency and low frequency portion of
12 that loop and interpreting those cells as coming over
13 that high frequency portion, routing it to a certain
14 bus, the ATM bus, taking the high frequency portion of
15 that bus and routing it up to the TDM part.

16 Q. And do you consider that to be a
17 switching function?

18 A. I don't consider that to be a switching
19 function.

20 Q. Do you consider it to be a transmission
21 function? Or what function do you consider it to be,
22 transmission or multiplexing or?

1 a short recess.)

2 JUDGE WOODS: Redirect?

3 REDIRECT EXAMINATION

4 BY MR. LIVINGSTON:

5 Q. I would like to direct your attention to
6 JEK-4.

7 A. Yes, sir, I have it.

8 Q. Is this your analysis of the possible
9 impact of the Commission's Order in this case?

10 A. Yes, it is.

11 Q. Is it a worst case analysis.

12 A. Yes, it is.

13 Q. Who did you prepare it for?

14 A. I prepared it at the direction and for my
15 management.

16 Q. And what was your understanding of the
17 purpose for which management wanted this?

18 A. My management wanted to see what the
19 possible impacts of this Order could have on Project
20 Pronto to make an informed decision on whether to
21 continue to deploy it or not.

22 Q. So this analysis that you presented with

1 your testimony was prepared for your management for
2 business purposes?

3 A. That is correct.

4 Q. Was your purpose to try to come up with
5 what would happen if you implemented the order?

6 A. No, it was not.

7 Q. What was your purpose?

8 A. It was to come up with an analysis of
9 what could happen under the Order, again, so that my
10 management could take a look at the possible impact on
11 the Project Pronto business case. But not to
12 determine what would happen under the Order.

13 Q. Now, there was discussion about whether
14 you had an empirical basis for some of these
15 assumptions you made, remember that?

16 A. I do.

17 Q. If you were going to try to come up with
18 an analysis of what will or would happen, would you
19 have wanted to have an empirical basis for your
20 assumptions?

21 A. I certainly would have and it would have
22 taken me a lot longer to prepare.

1 Q. You remember the discussion -- if you
2 look at page 1 of Attachment JEK-4, do you remember
3 the discussion about G.SHDSL?

4 A. Yes, I do.

5 Q. And do you remember Mr. Bowen saying you
6 shouldn't have had it in there because it doesn't have
7 anything to do with linesharing?

8 A. Yes, I do.

9 Q. Are you aware that the Commission in this
10 case, in the currently effective order, has said that
11 CLECs can collocate any card, any card that works?

12 A. That's my understanding.

13 Q. Now, if you assume that Release 11 is
14 deployed, like Mr. Bowen wants to assume, that release
15 will support G.SHDSL, correct?

16 A. That is correct.

17 Q. Are you aware that in this proceeding, in
18 this rehearing proceeding, Rhythms has said that if it
19 gets from the Commission what it wants, it will deploy
20 G.SHDSL as soon as it can over the Project Pronto
21 architecture?

22 A. I am familiar with that.

1 Q. Now, if your management wants to know
2 what the impact of the Commission's Order could be,
3 you have to take G.SHDSL into account, don't you?

4 A. That is correct.

5 Q. Even if it can't support linesharing?

6 A. That's correct. That's why I include it
7 in my analysis.

8 Q. Now, just one quick question. There was
9 discussion about power and heat dissipation
10 constraints on adding additional ADLU cards, do you
11 remember that generally?

12 A. I remember that discussion.

13 Q. And Mr. Bowen asked you whether in CEVs
14 and huts couldn't you add additional battery plant to
15 make up for any power needs you might have caused by
16 additional ADLU cards?

17 A. I remember that.

18 Q. And I think you testified that that would
19 take up space?

20 A. Yes, I did.

21 Q. Could that take up space that was
22 reserved under the Project Pronto Waiver Order that

1 had been reserved for collocation by CLECs?

2 A. It certainly could.

3 MR. LIVINGSTON: Your Honor, I have a few
4 other questions but they delve into confidential
5 material, so I will reserve those until after
6 Mr. Bowen completes his examination tomorrow.

7 JUDGE WOODS: Very good, thank you.

8 Mr. Schiffman?

9 RE CROSS EXAMINATION

10 BY MR. SCHIFMAN:

11 Q. Mr. Keown, did you do your analysis
12 that's reflected in JEK-4 specifically for Ameritech
13 Illinois' petition for rehearing in this matter?

14 A. Yes, I did.

15 Q. So management asked you to do an analysis
16 so Ameritech could file a petition for rehearing?

17 A. Ameritech, no. The management asked me
18 to do an analysis to see if we wanted to continue to
19 deploy it, based on the Order that we had.

20 Q. But it was asked that you do that
21 analysis specifically for the petition for rehearing,
22 right?

1 A. No, I did that as a request from
2 management to see what we wanted to do with Project
3 Pronto.

4 Q. But your analysis was used in the
5 petition for rehearing, right?

6 A. I filed an affidavit that had this
7 analysis attached to it.

8 Q. And that's the reason why you had to get
9 it done so fast, in order to determine -- because you
10 had a petition for rehearing due, right?

11 A. Well, again, I was asked to file an
12 affidavit for rehearing in this case and I attached
13 what essentially is JEK-4 to this testimony.

14 Q. And you needed to complete your analysis
15 such that because there was a time limit on the
16 petition for rehearing, right?

17 A. That's my general understanding.

18 Q. And that's why you couldn't take more
19 time to complete your analysis, right?

20 A. Based on what management needed, I think
21 that satisfied their needs.

22 Q. Let me just ask one more question. You

1 testified that your analysis was the worst case
2 analysis, right?

3 A. Yes, it is.

4 Q. Did you do an analysis what would be
5 considered a likely outcome from the Commission's
6 Order in -0393?

7 A. No, I did not.

8 Q. Management didn't ask you to do that,
9 right?

10 A. No, they did not.

11 Q. And management didn't ask you to do that
12 for a petition for rehearing, right?

13 A. No, they did not.

14 Q. And they did not ask you to do that for
15 your testimony in this case, right?

16 A. No, they did not.

17 MR. SCHIFMAN: No further questions.

18 RE CROSS EXAMINATION

19 BY MR. BOWEN:

20 Q. Mr. Keown, did your management ask you to
21 do a best case analysis of the Commission's Order?

22 A. No, they did not.

1 Q. Well, is SBC in the habit of making
2 business decisions based upon the worst case scenario?

3 A. I think SBC makes decisions based on the
4 information that they have, whether it's best case or
5 worst case. Again, the analysis was provided with
6 worst case and we could apply the percentages to
7 determine if this could be mitigated somewhat.

8 Q. I know it's like -- did you hear my
9 question?

10 A. Did I not answer it?

11 Q. I said is SBC in the habit of making
12 business decisions based upon the worst case scenario?

13 A. This is the only business decision of
14 this type that I have been involved with. In the
15 normal course of business, no, we don't always use the
16 worst case.

17 Q. Well, but that's all you provided
18 management with as a decision tool was the worst case
19 scenario?

20 A. For this particular analysis that's all I
21 provided.

22 Q. Was the Project Pronto deployment

1 decision based on a worst case scenario?

2 A. I am not sure -- the decision to deploy?

3 Q. Yeah. You have seen the business case.

4 You testify to the business case, don't you?

5 A. Yeah. I am trying to figure out in my
6 mind what that looks like if we deployed based on the
7 worst case analysis. Does that mean spending whatever
8 the amount of money it takes to deploy? I am not sure
9 I follow the question.

10 Q. You have seen the business case utilized
11 by Pronto, have you not?

12 A. I have.

13 Q. Aren't there assumptions about how much
14 it will cost to deploy Pronto?

15 A. Yes, there are.

16 Q. Are those worst case scenarios?

17 A. Unfortunately, they aren't.

18 Q. So it's a likely outcome scenario for the
19 expenditure, isn't it?

20 A. I am sorry, I didn't hear you.

21 Q. It's a likely outcome scenario for
22 expenditure, right? Not the best, not the worst?

1 A. The business case is.

2 Q. Okay. And that's true with respect to
3 the cost savings that are assumed in there, right?
4 It's not the best case, it's not the worst case, it's
5 the assumed case that will occur, isn't that right?

6 A. It's a calculated amount of savings based
7 on what we thought at the time we could get out of the
8 efficiencies.

9 Q. In other words, you are agreeing that the
10 cost savings are estimated as the most likely level of
11 cost savings in the business case, isn't that right?

12 A. It's a calculated amount, yes.

13 Q. Is it the most likely, as opposed to the
14 best or the worst, Mr. Keown?

15 A. I assume it's the most likely, but I
16 don't know that to be the case.

17 Q. And then with respect to the expected
18 revenues, isn't that again the most likely level of
19 revenues, not the best or the worst case of expected
20 revenues?

21 A. For the business case, that's the case.

22 Q. Well, if the bean counters had assumed

1 the worst case in each case, isn't it correct that
2 Project Pronto would never have been approved in the
3 first place?

4 A. That's a possibility.

5 MR. BOWEN: That's all I have. Thank you,
6 Your Honor.

7 EXAMINATION

8 BY JUDGE WOODS:

9 Q. On this idea of backing out percentages,
10 do you know if anybody ever did that?

11 A. I toyed with just a few.

12 Q. I am sorry?

13 A. I toyed with just a few, just a few.

14 Q. Are those reflected in your final number?

15 A. Not in the JEK-4 attachment. But I do
16 take a ten percent, twenty percent, thirty percent of
17 the numbers that's in this analysis.

18 Q. Maybe I misunderstood your testimony. I
19 thought your testimony was that you did this as a
20 worst case scenario so somebody at some point could go
21 in and try to make judgments on the likelihood of
22 these worst case things happening.

1 A. Correct.

2 Q. And based upon those likelihoods they
3 then adjust those dollars by percentages, is that what
4 I heard you say?

5 A. We played with the number. After looking
6 at the worst case, we played with certain percentages.
7 For instance, the thought was if a CLEC only
8 collocated at 50 percent of the RTs, what would that
9 number look like based on these numbers that I have
10 calculated, and we did look at those numbers.

11 Q. Now, when you say we, this is you
12 conferring with the people who made the decision not
13 to go forward with deploying Project Pronto at this
14 time?

15 A. They have the same compilation, same
16 ability, to calculate. We just talked about the
17 percentages.

18 Q. But you don't know what their breakpoint
19 was or what percentages they backed out to get to
20 their decision not to deploy?

21 A. I do not.

22 Q. So we have no idea what that number is?

1 A. I don't.

2 JUDGE WOODS: Mr. Livingston? Nothing?

3 Okay. We will back at 10:00 a.m. tomorrow morning.

4 (Whereupon the hearing in this

5 matter was continued until

6 July 25, 2001, at 10:00 a.m.

7 in Springfield, Illinois.)

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1 STATE OF ILLINOIS)
)SS
2 COUNTY OF SANGAMON)
CASE NO.: 00-0393 On Rehearing
3 TITLE: ILLINOIS BELL TELEPHONE COMPANY

4 CERTIFICATE OF REPORTER

5 We, Cheryl A. Davis and Carla J. Boehl, do
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10 case on the 24th day of July , 2001; that the foregoing
11 pages are a true and correct transcript of our
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15 to be so stenographically reported.

16 Dated at Springfield, Illinois, on this 26th
17 day of July, A.D., 2001.

18

19

20

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