1 BEFORE THE WASHINGTON

2 UTILITIES AND TRANSPORTATION COMMISSION

3)
In The Matter of the Review of) UT-023003
4 Unbundled Loop and Switching Rates) Volume XII
And Review of the Deaveraged Zone) Pages 602-800
5 Rate Structure.)
)

6

7

8 A hearing in the above-entitled matter

9 was held at 9:32 a.m. on Thursday, May 27, 2004, at

10 1300 South Evergreen Park Drive, Southwest, Olympia,

11 Washington, before Administrative Law Judge THEODORA

12 MACE, CHAIRWOMAN MARILYN SHOWALTER, COMMISSIONER

13 RICHARD HEMSTAD, and COMMISSIONER PATRICK OSHIE.

14

15 The parties present were as follows:

16

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COVAD COMMUNICATIONS COMPANY, by Karen
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VERIZON NORTHWEST, by Catherine Kane
22 Ronis, Brad Berry, Polly Smothergill, Attorneys at
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24 Barbara L. Nelson, CCR

25 Court Reporter

1 AT&T COMMUNICATIONS OF THE PACIFIC
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1 JUDGE MACE: Let's be back on the record in
2 Docket Number UT-023003. When we adjourned yesterday
3 evening, I believe, Mr. Kopta, you were crossing Dr.
4 VanderWeide?
5 MR. KOPTA: That's correct.
6 JUDGE MACE: And you continue to have
7 cross-examination for this morning?
8 MR. KOPTA: I do. Thank you, Your Honor.
9
10 C R O S S - E X A M I N A T I O N (CONTINUING)
11 BY MR. KOPTA:
12 Q. Good morning, Dr. VanderWeide.
13 A. Good morning.
14 Q. Would you agree with me that, according to
15 the FCC's latest pronouncements, the cost of capital,
16 when computing UNE prices, is intended to reflect the
17 cost of capital of a telecommunications carrier that
18 operates in a market of facilities-based competition?
19 A. Yes, I would.
20 Q. Okay. In your computations, both your cost
21 of debt and your cost of equity reflect the risk of
22 the average competitive industrial company; isn't
23 that correct?
24 A. That's correct with regard to the cost of
25 equity. It's not correct with regard to the cost of

1 debt. The cost of debt that I used was the yield to
2 maturity on Moody's A-rated industrial bonds, and the
3 telecommunications companies are considered
4 industrials at this point, and so I believe that it
5 is a conservative indicator of the costs that they
6 would incur if they were to issue debt to finance the
7 facilities required to provide the telecommunications
8 services.
9 Q. And as you mentioned, the S&P 500 includes
10 several telecommunications carriers, does it not?
11 A. Yes.
12 Q. Do you include any of them in your sample?
13 A. I have done two calculations. One is a
14 calculation of the DCF for the entire S&P
15 industrials, and another is a calculation for the
16 middle two quartiles of the S&P industrials. The
17 results for the entire S&P industrials, which the
18 telecommunications companies are included, are higher
19 than the results for the middle two quartiles. I
20 chose conservatively to look at -- to base my
21 recommendation on the results of the middle two
22 quartiles, because it's very difficult to estimate
23 the cost of equity, and for companies that are in the
24 highest quartile or the lowest quartile, it could
25 easily be that the assumptions of the DCF model don't

1 apply real well, and at any rate, we know that they
2 are outlier results.
3 So I feel that it's better to use a large
4 sample of companies that are in the middle range of
5 companies, and it turns out that the several -- there
6 are only several telecommunications companies that
7 are in the S&P industrials, and those turn out to be
8 outliers.
9 Q. So in the sample that you use, there are no
10 telecommunications companies?
11 MR. BERRY: I'm going to object, Your Honor.
12 I think that's been asked and answered.
13 JUDGE MACE: Well, Mr. Kopta.
14 MR. KOPTA: It was a rather long answer, but
15 I'm not sure I got a yes or no.
16 JUDGE MACE: Well, and I'm not clear,
17 either. It sounded to me like you used the middle
18 two quartiles, but you never really said that there
19 were no telecommunications companies in that middle
20 two quartiles, and I would be interested in hearing
21 the answer to that and also where the
22 telecommunications companies were that were in the
23 first and fourth quartiles.
24 THE WITNESS: Okay.
25 CHAIRWOMAN SHOWALTER: If I could interrupt,

1 I'm not clear if this exchange is about debt or
2 equity, so can you just make that clear?
3 THE WITNESS: Yes, I'd be happy to. It's
4 about equity.
5 CHAIRWOMAN SHOWALTER: Okay.
6 THE WITNESS: The debt that I used was the
7 yield for maturity on A-rated industrial bonds, and
8 the telecommunications companies are -- right now
9 have a low A rating, and they've been put on credit
10 watch for a reduction in credit rating. So it's
11 likely they will be below an A rating, and they are
12 industrial companies. So that would certainly apply
13 to the -- it would be a conservative estimate of the
14 cost of debt for the telecommunications companies.
15 With regard to the cost of equity, I applied
16 the DCF to all of the companies, so I guess I was
17 confused by the use of the word used. I used all of
18 the S&P Industrials, and indeed my results -- I
19 observed that the results of the DCF applied to all
20 of the S&P Industrials was higher than the results of
21 the DCF applied to the middle two quartiles. And I
22 suggested that any cost of equity model, be it the
23 DCF or the CAPM, is only a model. It's an
24 approximation.
25 And so I felt that companies that were on

1 the high or the low end of those results, the DCF
2 didn't really provide a good indication of what those
3 companies' cost of equity was.
4 JUDGE MACE: Right, and I understand that.
5 I guess I'm concerned about what was in the middle
6 two quartiles, which I don't think you -- whether
7 they were telecommunications companies.
8 THE WITNESS: There were no
9 telecommunications companies, to the best of my
10 recall, in the middle two quartiles.
11 JUDGE MACE: And in the first, first or the
12 highest quartile, I assume that's what you meant by
13 the first quartile?
14 THE WITNESS: They were in the lowest
15 quartile.
16 JUDGE MACE: They were the lowest, okay.
17 Thank you. That answers my question.
18 THE WITNESS: Okay.
19 Q. Well, just to follow up on that answer,
20 aren't Verizon and SBC in the top quartile, the first
21 quartile?
22 A. They're in the fourth quartile.
23 Q. Which is the highest or the lowest?
24 A. Those are the lowest. DCF results, which,
25 as I've indicated, I don't believe indicated the cost

1 of equity for those companies, because they're
2 outliers.
3 Q. Okay. The list of companies that are in the
4 middle two quartiles is included in Exhibit 102,
5 which is your Exhibit JHV-2; is that correct?
6 A. That's correct.
7 Q. And among those companies are Avon. Do you
8 know what business Avon is in?
9 A. Yes, they are a cosmetic company.
10 Q. And Anheuser Busch?
11 A. They sell beer.
12 Q. There are also companies that are what I
13 would refer to as retailers, that just sell products,
14 they don't make any products, such as Wal-Mart?
15 A. Yes.
16 Q. And do you believe that those companies are
17 a close proxy to what Verizon's cost of capital would
18 be?
19 A. I undoubtedly think that the average of the
20 whole group is, not any individual company, but the
21 cost -- the cost of equity, as measured by either the
22 DCF or the CAPM, doesn't -- is the return expected on
23 companies of comparable risk, not companies in the
24 same industry.
25 For instance, in the Virginia Arbitration

1 Order, the Wireline Competition Bureau used a beta of
2 one in their calculation of the cost of equity, and a
3 beta of one is tantamount to using the S&P
4 Industrials as a proxy group, because the S&P
5 Industrials -- my sample of companies, actually,
6 because they're in the middle two quartiles, have a
7 beta that's slightly less than one. So using a beta
8 of one in the capital asset pricing model is the same
9 thing as using the S&P Industrials as a proxy for the
10 cost of equity for the telecommunications companies.
11 Indeed, the capital asset pricing model measures risk
12 by beta, not by industry grouping.
13 Q. I'm going to change subjects for a moment.
14 You have calculated your cost of equity using a
15 single-stage discounted cash flow model, or DCF, we
16 have been talking about; correct?
17 A. Yes.
18 Q. Am I correct that a single-stage DCF model
19 uses the same earnings growth and assumes the same in
20 perpetuity?
21 A. Yes.
22 Q. If you would, please, turn to page 65 of
23 your rebuttal testimony, which is Exhibit 106-TC, and
24 specifically I'm referring to the sentence that
25 begins on line eight. Actually, sentences. Really,

1 the rest of that whole answer on that page. And you
2 have an equation there that I'm not going to repeat,
3 but is that the equation that you used to develop the
4 cost of equity?
5 A. The actual equation that I used is very
6 close to that equation and can be put into that form,
7 but the equation I used is shown in my -- in the
8 notes to the exhibit that we were just looking at
9 that shows the S&P Industrials in my direct
10 testimony, and that equation recognizes that --
11 JUDGE MACE: Can you refer us to the exact
12 place where it is so that we can look at it, too?
13 THE WITNESS: Yes. It's in Exhibit Number
14 101, JHV-2, which are the last several pages.
15 JUDGE MACE: So it's in -- actually in what
16 we've marked it as Exhibit 102.
17 THE WITNESS: Oh, I'm sorry.
18 JUDGE MACE: That's all right. It's on --
19 did you say the last page of that exhibit or --
20 THE WITNESS: It's three of the last four
21 pages. Not the last page, but the three pages
22 preceding the last page. And so then the equation
23 would be on the second to the last page.
24 CHAIRWOMAN SHOWALTER: Well --
25 JUDGE MACE: So I'm quite --

1 CHAIRWOMAN SHOWALTER: What does the top of
2 the page say? Does it say -- I think it must be page
3 three of Exhibit 102, because there's a complicated
4 formula there.
5 THE WITNESS: Yes.
6 CHAIRWOMAN SHOWALTER: Okay.
7 Q. So what is the difference between the
8 formula that you have on page 65 of Exhibit 106-TC
9 and on the last page of Exhibit 102?
10 A. It's only a minor difference in terms of the
11 cost of equity, but the -- but, theoretically, it's
12 more correct in that it recognizes that dividends are
13 paid quarterly, rather than just once at the end of
14 the year.
15 Q. Okay.
16 A. But the results are within 10 basis points
17 of what you would get if you assumed that dividends
18 were paid just at the end of the year.
19 Q. Okay. And this equation essentially has two
20 parts, a dividend yield component and the growth
21 component; is that correct?
22 A. Yes.
23 Q. Would you agree that, in the one-stage DCF
24 model, the model is highly responsive to changes in
25 the growth component of the model?

1 A. Yes.
2 Q. And is it correct that the dividend yield
3 component of the DCF is based on current market
4 information?
5 A. Pretty close. The dividend that's used is
6 actually the expected next period dividend, so you
7 take the current dividend and you multiply it by one
8 plus the growth rate, but certainly the current
9 dividend and the price are based on current
10 information.
11 Q. Now, the growth rate that you used was based
12 on forecasts compiled by IBES; is that correct?
13 A. Yes.
14 Q. And IBES growth rates represent the
15 consensus or mean forecast produced by analysts from
16 the research departments of leading Wall Street and
17 regional brokerage firms over the preceding three
18 months; is that correct?
19 A. Yes.
20 Q. So essentially it's a collection of
21 analysts' forecasts, the Wall Street analysts'
22 forecasts?
23 A. Yes.
24 Q. And you've characterized these estimates as
25 long-term; is that correct?

1 A. They are five-year growth rates, but the
2 analysts characterized them as long-term growth
3 rates. That's as far out as they feel it's really
4 possible to look.
5 Q. Just to clarify, since there is some
6 discussion in the testimony about one-stage versus
7 two or three-stage DCF, I just wanted to clarify
8 that, by way of example, a two-stage DCF model would
9 have one growth rate for a period of time and then
10 change to a different growth rate; is that correct?
11 A. Yes.
12 Q. And so by analogy, a three-step or
13 three-stage DCF would have three different growth
14 rates at different points in time?
15 A. Yes, and since really growth can only be --
16 as far as the analysts are concerned, five years is a
17 long period of time. The second and third stages
18 would be even more difficult, in fact, virtually
19 impossible to forecast.
20 Q. Would you turn to Exhibit 120?
21 A. Which is?
22 Q. Which is an excerpt of your prior testimony
23 in FCC CC Docket Number 98-166?
24 A. Do you have a copy of that?
25 JUDGE MACE: I think you or your counsel

1 should have a copy of it. It's an AT&T cross
2 exhibit.
3 MR. BERRY: We do.
4 THE WITNESS: I might have left it in my
5 briefcase.
6 JUDGE MACE: All right. Let's take a moment
7 and make sure you have a copy. It says on the cover
8 page Exhibit 8, but it's our Exhibit 120.
9 THE WITNESS: I don't have exhibit numbers
10 on mine, but -- okay. Thank you. Yes, I'm ready.
11 Q. Okay. Do you recognize this as a portion of
12 testimony that you provided to the FCC in this
13 docket?
14 A. Yes. And not in this docket, in Docket
15 98-166.
16 Q. I'm sorry, yes, I understand. I meant -- by
17 this docket, I meant the docket listed on the
18 document.
19 A. All right.
20 Q. And I wanted to draw your attention to the
21 column labeled IBES Mean Growth, which is the second
22 from the end.
23 A. Yes.
24 Q. Would you agree, just looking at all of
25 those numbers in that column, that most of the

1 companies listed had a forecasted earnings growth
2 rate of greater than 10 percent at the time that this
3 exhibit was compiled?
4 A. Yes.
5 Q. Would you accept, subject to check, that the
6 average growth rate of these companies is 12.51
7 percent?
8 A. Yes, I would.
9 Q. Now, I hate to do this to you, but I'd like
10 you to look at Exhibit 121, which is an excerpt from
11 S&P's 2003 Analyst Handbook.
12 A. Yes.
13 Q. Are you familiar with the Standard and
14 Poor's Analyst Handbook?
15 A. I don't use it regularly, but I am familiar
16 with it.
17 Q. And is it your understanding that the
18 handbook tracks the actual earnings of the S&P
19 Industrials over time?
20 A. Yes.
21 Q. Now, if you would turn to the second page of
22 this exhibit, and my apologies for the very small
23 numbers, but what I would like you to look at, down
24 the left-hand column is the year?
25 A. Yes.

1 Q. The far left-hand column as you look at this
2 exhibit. And if you count over ten columns, you'll
3 see the heading Diluted Earnings, and the tenth
4 column is Per Share. Do you see that column?
5 A. Yes.
6 Q. Okay. And if you look down to 1998, which
7 was the year of the information that you had in
8 Exhibit 121, and then follow that across to the
9 column of diluted earnings per share, you see $40.79.
10 Is that correct?
11 A. Yes.
12 Q. So at the time that IBES was estimating
13 average earnings growth of around 12.51 percent for
14 the S&P Industrials, S&P reports that the earnings
15 per share on the composite was $40.79; is that
16 correct?
17 A. That is correct.
18 Q. Okay. If we assume a 12.1 percent growth
19 rate on this $40.79 earnings per share in 1998, then,
20 by the end of the year 2002, would you accept,
21 subject to check, that the earnings per share would
22 be $65.36?
23 A. Yes, I would.
24 Q. Now, if you would, go down to the bottom of
25 that column, the column being the Diluted Earnings

1 Per Share, and look at year 2002.

2 A. Yes, those earnings are very significantly

3 less than that number, because this was a

4 recessionary period in '01 and '02. And in addition,

5 it doesn't really matter what earnings actually are

6 after the fact in terms of the cost of equity; it

7 matters what they are forecasted to be. Actual

8 earnings are sometimes higher than forecast and

9 sometimes they're lower than forecast, but what's

10 important is that these are the earnings growth rates

11 that are expected by investors, and my studies have

12 indicated that the IBES forecasts are the growth

13 rates that investors use when they make stock buy and

14 sell decisions.

15 You could pick any period of time, and

16 sometimes their earnings, as I say, would be less

17 than the forecast and sometimes they would be greater

18 than the forecast, but that's immaterial as far as

19 the cost of equity, because it's always

20 forward-looking.

21 Q. But you would agree that it puts a premium

22 on the accuracy of the forecast that you're relying

23 on, doesn't it?

24 A. It -- what's required is that these are the

25 growth rates that investors use when they make stock

1 buy and sell decisions. And my studies indicate that
2 the IBES growth rates are the growth rates that
3 investors use when they make stock buy and sell
4 decisions.
5 Q. Well, there have been -- are you aware of
6 news reports recently about problems with analysts
7 and the extent to which their forecasts are accurate
8 because of conflicts of interest?
9 A. There certainly were a few problems in the
10 -- following the collapse of the stock market in 2001
11 and 2002. There have been major steps that have been
12 taken to penalize the few analysts who had a conflict
13 of interest, indeed, most of those have not only lost
14 their jobs but have had to pay a financial penalty,
15 and some of them have -- still have the possibility
16 of being convicted of fraud.
17 So it seems to me that the response has been
18 very quick and very strong to those few analysts who
19 had a conflict of interest, and I believe that the
20 evidence is that investors still use analyst
21 forecasts in making stock buy and sell decisions.
22 Q. But wouldn't you expect that the natural
23 reaction would be to take those forecasts with a
24 grain of salt?
25 A. Not at all. The question is what is --

1 first, the question is how widespread was the
2 conflict -- were the conflicts of interest, and the
3 second question is were any actions taken to penalize
4 those people who did have a conflict of interest, and
5 third, the question is do stock investors actually
6 use the analysts in making stock buy and sell
7 decisions, and the evidence is that they still do.
8 Q. And what evidence are you referring to?
9 A. I'm referring to studies that I have done
10 which relate different kinds of growth forecasts to
11 stock prices and see which growth forecasts are
12 statistically related to stock prices, as measured by
13 price earnings ratios.
14 And I have compared analysts' growth rates
15 in a single-stage DCF model and I have compared that
16 to two-stage growth rates and three-stage growth
17 rates, and found that the single-stage growth rates
18 using the analyst's forecasts are very
19 highly-correlated with stock prices. And in
20 addition, they give the intuitively appealing result
21 that companies with higher risk have higher DCF
22 results, whereas if you use a two-stage or a
23 three-stage DCF model and, hence, a two or
24 three-stage growth rate, you get virtually no
25 correlation with stock prices and, furthermore, you

1 get the entirely unintuitive, indeed I would say
2 incorrect result that companies that have higher risk
3 have lower DCF results and companies with lower risk
4 have higher DCF results, which to me is -- and these
5 studies were done subsequent to the years '01 and
6 '02, which is very strong evidence that it's the
7 analysts' growth rates in a single-stage result that
8 are strongly -- that are used to make buy and sell
9 decisions. Those are the ones that are correlated
10 with stock prices.
11 Q. Would you turn in your rebuttal testimony,
12 Exhibit 106-TC, to page 57, and specifically the
13 question and answer that begin on line 15?
14 A. Yes.
15 Q. And I believe, at this point in your
16 testimony, you're criticizing Dr. Selwyn's use of
17 AT&T Wireless, Sprint PCS and Nextel, saying that
18 they're not representative of the risk that Verizon
19 Wireless faces. Is that correct?
20 A. Yes, it is.
21 Q. And the sentence beginning on line 20
22 states, Furthermore, Verizon's wireless business is
23 much larger than that of AT&T Wireless, Nextel and
24 Sprint PCS, and Verizon is able to diversify some of
25 the risks of offering wireless service by offering

1 both wireless and wireline service at the same time,
2 whereas Dr. Selwyn's, quote, comparables, close quote
3 are not able to diversify in that manner. Did I read
4 that accurately?
5 A. Yes, you did.
6 Q. Okay. So am I correct in understanding that
7 sentence in -- to mean that a larger company would
8 have less risk than a smaller company?
9 A. No, you would not. This sentence is
10 specifically referring to the wireless industry, in
11 which -- which is a national industry, and it's very
12 important in the wireless industry to be able to make
13 calls over the same company's network so that you
14 don't incur roaming charges, and especially since it
15 is for people who are mobile and who travel, you want
16 those people to be able to make calls anywhere they
17 travel using the same company or the same network.
18 That's entirely different than for the local
19 exchange business, which is a local market. And you
20 don't have the issue of roaming charges and you don't
21 -- it's not a national market; it's a market for
22 local calls. And there aren't any particular
23 advantages, that I know of, from being large in the
24 local market as there are in the wireless market.
25 Q. Okay. You also criticize Dr. Selwyn for

1 including Qwest in doing his analysis of the cost of
2 equity and capital structure; is that correct?
3 A. Yes.
4 Q. And I believe you characterize Qwest as
5 highly leveraged; is that correct?
6 A. Yes, they are highly leveraged.
7 Q. And do I understand the term leveraged
8 correctly to mean that it's the degree to which a
9 firm is debt-financed, as opposed to equity-financed?
10 A. Yes.
11 Q. And a firm's leverage increases its risk; is
12 that correct?
13 A. Yes, it does, its financial risk.
14 Q. Okay. If you would, please, turn to Exhibit
15 124.
16 A. Which is?
17 Q. Which is several Value Line -- primarily
18 several Value Line --
19 JUDGE MACE: It's also marked on the cover
20 page Exhibit 12. It's one of AT&T's cross exhibits,
21 Estimating the Beta for Post-merger Qwest and Value
22 Line Source Material.
23 THE WITNESS: Yes.
24 Q. Okay. And if you would, please, turn to
25 page seven of that exhibit, which should be the May

1 2000 Value Line Report, Pre-merger Qwest?
2 A. Yes.
3 Q. Okay. I'm going to focus in the upper
4 left-hand corner, and again, I apologize not only for
5 the small type, but the bleed-through when it was
6 copied.
7 CHAIRWOMAN SHOWALTER: Counsel, can you --
8 there's a date in the bottom right-hand corner, but
9 it doesn't show up on -- it's May of some year.
10 MR. KOPTA: Right, and that's why I said May
11 2000.
12 CHAIRWOMAN SHOWALTER: Oh, you did. Thank
13 you.
14 MR. KOPTA: I'm sorry. I'll apologize again
15 for having it be a little muddy, but it is May of
16 2000.
17 CHAIRWOMAN SHOWALTER: Thanks.
18 Q. If you look in the upper left-hand corner in
19 the first box, under Qwest Communications
20 International, that last figure is a beta of 1.7; is
21 that correct?
22 A. Yes, it is.
23 Q. Now, I want you, if you would, to go down to
24 the box labeled Capital Structure. It's the sixth
25 box on the left-hand side.

1 A. Yes.

2 Q. And the first entry, and it is a little bit

3 difficult to read, but would you accept that it is --

4 that the figure is for total debt, and it is for

5 $2.3697 billion?

6 A. Yes, and just for the record to be clear, it

7 says, right above that, that's for the date 12/31/99.

8 Q. Correct. And down at the very bottom of

9 that box, there's a figure for market cap of 33.1

10 billion?

11 A. Yes.

12 Q. Okay. And a beta of 1.7 is fairly high,

13 isn't it?

14 A. Yes, it is.

15 Q. And would you expect that that is associated

16 with the business operations of Qwest Communications

17 International, as opposed to its financial leverage

18 based on these figures?

19 A. I'm not sure what you mean. I don't

20 understand the question.

21 Q. Well, if you have a market cap of 33.1

22 billion debt of 2.3 billion, would you characterize

23 that as a highly-leveraged company?

24 A. As of this date, they were not as highly

25 leveraged, no.

1 Q. So the beta --
2 JUDGE MACE: And this date, you mean the
3 date on the page?
4 THE WITNESS: 12/31/99.
5 JUDGE MACE: Thank you.
6 Q. So then, the high beta of 1.7 is probably
7 based on factors other than their leverage; correct?
8 A. Well, it's based on all factors, but the
9 dominant factor was probably their business
10 operations, which was building a nationwide
11 fiberoptic network in a period where there was
12 beginning to be excess capacity for fiber-optics
13 nationwide.
14 Q. Okay. Now, if you would turn the page to
15 page eight, and this one, thankfully, is a little
16 clearer. If you look down at the bottom right-hand
17 corner, you'll see July 6th, 2001. Now, again, let's
18 look at those same figures. The beta, which is in
19 the upper left-hand corner, 1.55?
20 A. Yes.
21 Q. Again, going to the capital structure box,
22 total debt of $21.779 billion?
23 A. Yes.
24 Q. And a market cap of $50 billion?
25 A. Yes.

1 Q. Would you characterize Qwest at this point
2 in time as being highly leveraged?
3 A. More highly than before, but not nearly as
4 highly leveraged as it is today.
5 Q. Okay. So would you agree that the leverage
6 that Qwest had at this point in time was probably a
7 more significant factor in its 1.55 beta than the
8 prior example that we were looking at?
9 A. I would agree with that, but I would also
10 put in the qualifier that betas are measured with --
11 from five years of historical stock price data. They
12 don't reflect risk as of this point in time, unless
13 things have stayed the same over the last five years.
14 And so one has to be very careful drawing conclusions
15 about the effect of individual variables that might
16 have changed the beta when, in fact, betas are based
17 on five years of history.
18 So there's -- a particular change in a
19 variable is going to have very little effect on the
20 beta for quite some period of time.
21 Q. Is it your understanding that the amount of
22 debt that Qwest took on in a very short period of
23 time was to finance its acquisition of US West?
24 A. I don't know exactly what caused its large
25 increase in debt, whether it was to finance this

1 acquisition of US West or whether it was to finance
2 its large investment in a nationwide fiberoptic
3 network. I do know that the leverage that has
4 occurred for Qwest didn't result by just adding
5 additional debt, but it -- at least on the data that
6 you have, it did, but subsequently it arose because
7 of the very dramatic decline in its stock price as
8 information became available about accounting
9 problems and excess capacity, so that its equity went
10 from $50 billion to about $4 or $5 billion, which
11 would indicate an increase in leverage, even if its
12 debt stayed the same, just because its equity
13 virtually collapsed.
14 Q. But there was a merger between Qwest and US
15 West that resulted in the company that we know as
16 Qwest today?
17 A. Yes.
18 Q. Okay. And similarly, there was a merger
19 between Bell Atlantic, Nynex and GTE that resulted in
20 the company we know as Verizon today?
21 A. Yes.
22 Q. And similarly, there was mergers between
23 SBC, PacTel and Ameritech?
24 A. Yes.
25 Q. Now, are you aware of whether SBC and

1 Verizon maintained in support of their respective
2 merger applications that they would each achieve
3 significant benefits from becoming so much larger
4 than if they continued to operate as separate smaller
5 companies?
6 MR. BERRY: Objection to the form of the
7 question. He refers to merger applications. It's
8 not clear whether he's talking about applications
9 filed with the FCC for license transfers,
10 applications filed before the states. It's just not
11 clear what he's talking about.
12 JUDGE MACE: Mr. Kopta.
13 MR. KOPTA: I would take any of those,
14 whether it's applications -- I'm assuming that they
15 were consistent in their representations to the state
16 commissions and to the FCC, so --
17 JUDGE MACE: And you're referring to the
18 mergers that you referred to in your earlier
19 question?
20 MR. KOPTA: I am.
21 JUDGE MACE: Thank you. That will be all
22 right.
23 THE WITNESS: I haven't read, nor am I
24 familiar with their merger filings, and am not aware
25 of what representations they made as part of those

1 filings.

2 CHAIRWOMAN SHOWALTER: Be sure to use the

3 microphone.

4 MR. KOPTA: Thank you, Dr. VanderWeide. I

5 have no more questions for you, I'm sure you'll be

6 glad to know. But this time I remembered to move for

7 the admission of Exhibits 110 through, I suppose,

8 127.

9 JUDGE MACE: And I think I referred to 127

10 earlier as the Verizon Virginia Arbitration Order

11 that's been marked as 127. Is there any objection to

12 the admission of those proposed exhibits?

13 MR. BERRY: No objection from Verizon, Your

14 Honor.

15 JUDGE MACE: I'll admit them. Thank you.

16 MR. KOPTA: Thank you, Dr. VanderWeide.

17 THE WITNESS: Thank you.

18 JUDGE MACE: Now, Staff does have some

19 cross-examination of Dr. VanderWeide, as well?

20 MS. SMITH: Yes. Thank you, Your Honor.

21

22 C R O S S - E X A M I N A T I O N

23 BY MS. SMITH:

24 Q. Good morning, Dr. VanderWeide.

25 A. Good morning.

1 Q. Do you know what Verizon Northwest's current
2 capital structure is, the actual capital structure?
3 A. On a book value basis?
4 Q. Sure.
5 A. Well, yes. Their book value capital
6 structure I believe contains about 63 percent equity
7 and 37 percent debt, although I don't have the exact
8 numbers with me.
9 Q. Did you examine that current capital
10 structure as part of your cost of capital analysis in
11 this docket?
12 A. No, because the TELRIC standard, as
13 enunciated by the FCC, is that UNE rates must be
14 based on forward-looking economic costs, not
15 accounting or historical costs. Verizon Northwest's
16 book value capital structure is undoubtedly based --
17 is undoubtedly an accounting cost, which is, by
18 necessity, based on historical cost.
19 So book value capital structures are not
20 appropriate for use in TELRIC because they violate
21 the principle that TELRIC rates must be based on
22 forward-looking economic costs, not accounting costs.
23 Q. In your view, are there any circumstances in
24 which the book capital structure would be considered
25 forward-looking?

1 A. No. Again, the book value capital structure
2 reflects the book value of the company's assets that,
3 because liabilities, plus equity, have to be equal to
4 the value of assets, and the book value of assets
5 represents their original purchase price, minus
6 historical depreciation. In addition, the equity
7 component of the book value is equal to the company's
8 retained earnings in all prior years summed up, plus
9 the historical amounts of equity that they received
10 in all previous years, and the retained earnings were
11 based on the historical costs of their operations.
12 Q. And Dr. VanderWeide, you talk in your
13 testimony that the cost of capital must be estimated
14 under the assumption that the incumbent company, in
15 this case, Verizon, faces full facilities-based
16 competition. Does the VZ Cost model used in this
17 proceeding reflect that assumption, that Verizon
18 operates under full facilities-based competition?
19 A. I'm not the company's expert on the VZ Cost
20 model, but I have heard company witnesses in other
21 states say that it is based on the assumption of
22 competition. But, again, I'm not the expert on the
23 VZ Cost model.
24 Q. So for purposes of this proceeding, you
25 would prefer that we defer that question to the VZ

1 Cost model panel?
2 A. Yes.
3 Q. Now, again, in your rebuttal testimony,
4 which has been marked in this proceeding as Exhibit
5 106-TC, on page 74 of that testimony, on line one,
6 you say that the amounts shown on Verizon Northwest's
7 books necessarily reflect accounting and historical
8 costs. And my question for you on that is what do
9 you mean by the term amounts? Do you mean the dollar
10 value of debt and equity, the relative percentage of
11 debt and equity, or something else?
12 A. I mean the dollar values of debt and equity
13 reflect historical costs and, because the dollar
14 values reflect historical costs, then the ratios
15 would also reflect historical costs.
16 Q. And a few pages over, at page 77, at lines
17 eight through essentially 13, and again this morning,
18 in your answer to questions from Mr. Kopta, you talk
19 about Verizon and its subsidiaries being placed on
20 credit watch with negative implications. Would you
21 agree that sometimes companies are placed on credit
22 watch with either negative or positive implications,
23 but no action actually is taken by the rating
24 agencies?
25 A. Yes. No action would be taken if the

1 company is able to reverse the risk factors that were
2 -- that put them on credit watch, but it is
3 undoubtedly true that their costs of debt and equity
4 go up when they're placed on credit watch, with
5 negative implications.
6 Q. And on that same page, the question
7 beginning on line 14 in your answer that concludes on
8 line 23, you talk about the key financial ratios that
9 you analyzed in support of Verizon's request for
10 interim rate relief in this state, and you reference
11 your conclusion that Verizon Northwest would have a
12 bond rating of, I think, BB, you said, for its
13 intrastate operations. And would you agree that
14 Standard and Poor's only makes bond ratings on a
15 total company basis?
16 A. Yes, I would.
17 Q. And is it correct that the numerators you
18 used in your ratios are restated numbers that
19 Verizon's accounting witnesses have provided in that
20 docket, in the interim rate case docket?
21 A. The number for the 12 months ending
22 September 2003 were based on restated or
23 forward-looking results, but the numbers for the
24 prior years were based on results as reported to the
25 Commission.

1 MS. SMITH: Thank you. That's all the cross
2 we have.
3 JUDGE MACE: I wanted to do one little
4 housekeeping thing here, and that is, Mr. Kopta, you
5 offered your cross exhibits for admission and, based
6 on our earlier discussion about Number 114, which is
7 Verizon's response to AT&T Discovery Request Number
8 10-005, my understanding is you are not offering that
9 and that's a duplicate of another exhibit; is that
10 correct?
11 MR. KOPTA: That is correct, Your Honor, and
12 I apologize for not pointing that out when I offered
13 these.
14 JUDGE MACE: Thank you. Dr. Gabel.
15
16 E X A M I N A T I O N
17 BY DR. GABEL:
18 Q. Good morning, Dr. VanderWeide. I'd like to
19 begin by asking you to turn to Exhibit 102. That is
20 your JHV-2.
21 A. This is the rebuttal testimony?
22 Q. No, this is your direct testimony.
23 A. Direct testimony, okay.
24 JUDGE MACE: This is the exhibit that had
25 your sample companies listed.

1 THE WITNESS: Yes, okay.
2 JUDGE MACE: Your proxy companies.
3 Q. Mr. Kopta touched upon this in his question,
4 and I'd like to learn a little bit more about this.
5 When you use the term Standard and Poor's Industrial
6 500, when I hear the the word industrial, I think of
7 firms that are producing products. Why is a firm
8 like Wal-Mart included in the list of the industrial
9 companies?
10 A. Basic -- well, let me talk about -- I don't
11 know why they're included. All I -- what I -- I'm
12 explaining what I did. I took the S&P 500 and I
13 removed the financial institutions, because financial
14 institutions have capital structures that are based
15 on an entirely different kind of business. A bank,
16 for instance, has mostly deposits, rather than debt,
17 and so these are basically all of the companies that
18 are not financial institutions, and those companies
19 are commonly referred to as the S&P Industrials, for
20 whatever reason.
21 Q. Now, on the third page of that exhibit,
22 where you discuss how you created your sample, do you
23 state that you removed the financial institutions?
24 A. I don't know if I state that exactly. For
25 people in the financial markets, when you use the

1 word S&P Industrials, it would be apparent
2 immediately that that's the S&P 500 minus the
3 financial institutions.
4 Q. All right. On this third page, you mention
5 that you've excluded companies that do not have a
6 positive dividend growth rate. So this is in the
7 second line of the second paragraph. You say that
8 you've included companies that pay a dividend and
9 have a positive growth rate. Why did you exclude,
10 for example, a company that had a zero growth rate in
11 dividends, or negative? What would be the reason?
12 A. Well, if you -- if we start with the zero
13 growth rate in dividends, the DCF model assumes that
14 dividends grow at a positive rate. If they grow at a
15 negative rate, for example, the company will, sooner
16 or later, go out of existence. So you're basically
17 there talking about a company that is not investing
18 in its business; it's just -- it's going to go out of
19 business very soon.
20 If you talk about a zero growth, then you
21 would normally get a result that doesn't make sense.
22 For instance, the average dividend yield on the S&P
23 500 is approximately two percent. Well, the cost of
24 equity couldn't be two percent, because the cost of
25 debt is over six percent, and equity is much riskier

1 than that. So if you have a situation where the
2 company is not growing, the assumptions of the DCF
3 model just don't seem to apply, because it results in
4 a cost of equity of two percent for the average
5 company, maybe even one percent, which is just a
6 ridiculous number. It doesn't pass the test of
7 reasonableness that the cost of equity has to be
8 larger than the cost of debt.
9 Q. Two follow-up questions to that. First, I
10 don't understand the link between why a reduction in
11 the rate of dividend implies no investment. Couldn't
12 a firm just decide, hey, we have a high internal rate
13 of return and we shouldn't pay a dividend to our
14 stockholders, so actually we're going to reduce our
15 dividend, but we're going to increase our level of
16 investment?
17 A. Yes, that could occur, and what that implies
18 is that they're reducing their dividends now in order
19 to finance investment in the company that will lead
20 to future growth. And so in that instance, the
21 negative growth rate is, by definition, not a good
22 indicator of future growth.
23 Q. Okay. And you know the financial industry
24 much better than I do, but I recall reading that
25 maybe if not Verizon, but one of -- or more than one

1 of the large RBOCs, as well as perhaps AT&T in the
2 past three, four, five years have reduced their
3 levels of dividends. Am I correct about that?
4 A. Not the RBHCs. Verizon's has been steady.
5 And recently, the other RBHCs have increased their
6 dividends.
7 JUDGE MACE: When you use the acronym RBHC,
8 what do you mean?
9 THE WITNESS: I mean Regional Bell Holding
10 Company.
11 JUDGE MACE: It's the same thing as the RBOC
12 that Dr. Gabel is referring to, or is there a
13 distinction?
14 THE WITNESS: The word, in practice, the
15 acronyms get intermixed. It used to -- at one point
16 in time, the Regional Bell Operating Companies
17 referred to the companies that actually provided --
18 the subsidiaries that actually provided telephone
19 service and the Regional Bell Holding Companies were
20 the parent companies that had a diversified mix of
21 telecommunications businesses. So for those who were
22 really well-versed in the industry, there was a
23 distinction between the RBHCs and the RBOCs. For
24 those who -- for whom -- that aren't so familiar with
25 the operations of a telecom company, they sometimes

1 use the word RBOCs to refer to RBHCs, and vice versa.
2 Q. Am I correct that AT&T reduced its dividend?
3 A. Yes.
4 Q. Thank you. And in looking at the formula
5 that's on the page three of Exhibit 102, this is your
6 DCF formula that you discussed with Mr. Kopta earlier
7 this morning. Why, looking at this formula, wouldn't
8 it function properly if G was equal to zero?
9 A. It would. Oh, yes, the formula would
10 function properly, but it would produce -- it would
11 produce a result that doesn't make sense. DCF
12 models, just like CAPM models and all cost of equity
13 models are based on certain assumptions, and one
14 always has to check whether the results of the model
15 make sense, whether they are consistent with normal
16 risk-return relationships. And if they don't make
17 sense, that's an indication that the assumptions of
18 the model really don't apply in this situation, and
19 one ought not to use it.
20 Q. And am I correct to -- am I correct in my
21 understanding that, because of your concern about the
22 assumptions of the DCF model, you felt it necessary
23 to reduce your sample size, and this is why we see in
24 the preceding two pages that your sample size is more
25 in the order of 100 firms, rather than 500 firms?

1 A. Yes, I think it's -- yeah, that's right. If
2 you take out the financial institutions, that's about
3 100 companies, round numbers.
4 Q. Mm-hmm.
5 A. That would leave 400. And then, when you
6 put them into quartiles -- also, there are a good
7 many of them that don't pay any dividends. That
8 might be another 100 or so. And the DCF model
9 certainly doesn't apply to a company that doesn't pay
10 dividends at all, because in that case, you get a
11 zero cost of equity. I mean, that just doesn't --
12 that doesn't apply.
13 So once you remove all the companies that
14 are financial institutions and those that don't pay
15 dividends, you're left with a smaller group, and then
16 the middle two quartiles of those leaves you with --
17 I think it's roughly 125.
18 Q. So if we've removed 100 firms that don't pay
19 dividends and we're left with 125 that do, how do we
20 know that the 125 is actually representative of the
21 universe?
22 A. That, to me, represents the companies for
23 which the DCF model assumptions apply. Those are --
24 those are companies that one can reasonably apply a
25 model like the DCF model because one has data that is

1 consistent with the assumptions of the model.
2 Companies that don't pay dividends aren't consistent
3 with the assumptions of the model, companies that
4 have -- that pay negative dividends aren't
5 consistent, and I believe that companies whose
6 results don't make sense, such as those in the first
7 and the fourth quartiles are -- the results, because
8 they don't make sense, leads us to believe that they
9 don't obey the assumptions of the DCF model. The
10 model didn't produce reasonable results.
11 So I believe it's safer -- although I would
12 have gotten higher results if I'd just blindly
13 applied it to all four quartiles, I believe it's
14 safer and one can get more reasonable results by
15 looking at still a large sample, over -- well over
16 100, my recall is that was more like 125 or so, of
17 companies that are large companies, mature companies,
18 companies of average risk that have the same betas as
19 the RBHCs, and indeed they have slightly lower betas
20 than the RBHCs, so that those are companies that are
21 of comparable risk, but for which one can obtain a
22 reasonable estimate of the cost of equity.
23 Q. You stated in your prior response that if
24 you had used all four quartiles, you would have had a
25 higher estimate of the cost of equity, but I believe

1 you've also stated that if you had used firms that
2 paid no dividend or had a zero growth rate in
3 dividend or negative growth rate in dividend, you
4 would have obtained lower estimates of the cost of
5 equity.
6 A. Well, the --
7 Q. And so I guess --
8 A. Yeah.
9 Q. -- my question is why is it appropriate to
10 take the average of the -- why isn't it appropriate
11 to take the average of the firms that pay no
12 dividends or have a declining dividend or zero
13 dividend, why does that tell us that we still have a
14 representative reading of the cost of money?
15 A. Well, let's examine those that have zero
16 dividends. It's -- just on a purely logical basis,
17 the assumptions of the DCF model are violated,
18 because if you start out with a zero dividend and you
19 now assume -- at some point the company has to pay a
20 dividend for it to have a positive price. If the
21 company never pays any dividends, investors don't
22 ever get anything from investing in the company, and
23 so the price -- it won't have a positive price. And
24 if it doesn't have a positive -- if the model implies
25 it doesn't have a positive price, but it, in fact,

1 does have a positive price, that means the model is
2 not consistent with the reality.
3 Now, let's suppose that you assume a
4 positive growth rate. Well, whatever positive growth
5 rate you apply to an initial zero dividend, you'll
6 still get a zero dividend, because multiplying zero
7 by anything is still zero. So for companies that
8 have a zero initial dividend, no matter what your
9 expected growth is, the model implies that you will
10 have zero dividends forever. And a company that has
11 zero cash flows forever can only have a zero price
12 and can never have a positive price, because the only
13 reason it might have a positive price, say, in Year
14 10, would be that investors after Year 10 expect
15 there to be a dividend at some point, but that's
16 inconsistent with the model, which started with a
17 zero dividend and you multiplied it by a growth rate
18 and you still had a zero dividend.
19 So if the model doesn't apply, one can't
20 conclude either that its DCF result is too high or
21 too low. It's just -- the model doesn't work. So
22 you can't say that, Well, there's a bias in removing
23 those firms. There isn't. Their cost of equity
24 might really be higher. It's just we don't know,
25 because you can't apply the model to those companies.

1 Q. Okay. Thank you. I'd like to move on to a
2 related issue. Now, as I understand, you're
3 recommending to the Commission that, first, the
4 weighted average cost of capital is 12.03 percent?
5 A. Yes.
6 Q. And a regulatory risk premium of 3.95
7 percent?
8 A. Yes.
9 Q. All right. Now, the regulatory risk premium
10 is to reflect the risk that exists in the providing
11 of UNEs that you do not believe exist in the group of
12 firms that you use to estimate the cost of equity
13 which led to the weighted average cost of capital,
14 12.03 percent?
15 A. That's partly it. It certainly doesn't
16 exist in the -- for the companies -- my sample
17 company, and it also, even if one were to apply the
18 DCF or the CAPM to a publicly-traded UNE company, it
19 still wouldn't be measured in the result of the DCF
20 or the CAPM, because the DCF or CAPM models don't
21 hold in the presence of options. That's why people
22 have gone to different equations, Black and Scholes
23 won a Nobel Prize for recognizing that, in the
24 presence of options, the CAPM and the DCF models are
25 illegitimate. They don't tell you what the price of

1 the stock ought to be or they don't tell you what the
2 expected return on the stock ought to be.
3 So since the regulatory risk premium results
4 from the presence of options, the cost of equity, as
5 measured by either the DCF or the CAPM, doesn't truly
6 measure what the required return is when there are
7 real options present.
8 JUDGE MACE: Can I just -- can you move your
9 microphone a little bit closer to you? I'm just
10 worried that people on the bridge are not going to be
11 able to hear what you're saying.
12 THE WITNESS: I'm used to an environment
13 where I usually speak too loudly.
14 JUDGE MACE: I know, and I know you do have
15 a very -- a deep voice, and more than likely they can
16 hear it, but I'm not sure.
17 CHAIRWOMAN SHOWALTER: Why don't you open
18 that up for a second. Is anyone on the line? If you
19 are, we can now hear you, and let us know if you can
20 hear the witness.
21 MR. PHALEN: I can hear him loud and clear.
22 CHAIRWOMAN SHOWALTER: All right.
23 JUDGE MACE: Thank you.
24 CHAIRWOMAN SHOWALTER: Thanks. Who was
25 that, for the record?

1 MR. PHALEN: Brian Phalen, from ETI.
2 CHAIRWOMAN SHOWALTER: Thank you. It was
3 working all right.
4 Q. Dr. VanderWeide, earlier this morning you
5 were stating, in response to Mr. Kopta's questions,
6 that investors look at the IBES --
7 A. Yes.
8 Q. -- the IBES report to make decisions about
9 where it's sensible to make investments. Did I
10 correctly understand your testimony?
11 A. Yes, that, in short, that the IBES, or IBES
12 growth rates are more highly-correlated with stock
13 prices than growth rates derived from a two or
14 three-stage DCF model.
15 Q. And you use these IBES numbers to estimate
16 your cost of equity in your one-stage discounted cash
17 flow analysis?
18 A. Yes, I have.
19 Q. And do I understand you to state that these
20 forecasts, which investors rely on, don't reflect the
21 option value?
22 A. The forecasts -- the investors undoubtedly
23 know that there are options, and that those options
24 involve risk. The point is is that there's no room
25 in the DCF equation to reflect those option values.

1 That's why my adjustment was necessary.
2 Basically, I took the DCF equation, measured
3 the value of the option, and then added an additional
4 term, or that's what Copeland and Weston do, the
5 article that I relied on, added an additional term to
6 incorporate the value of the option and then solved
7 for the cost of equity in the adjusted DCF equation.
8 There are two things that are required to
9 accurately estimate the cost of equity. One is that
10 you have to have a stock price that reflects
11 investors' knowledge about the company. The other is
12 you have to have an equation that's the correct
13 pricing equation. And the DCF and the CAPM pricing
14 equations don't hold in the presence of options.
15 That's why Black and Scholes won a Nobel prize. It
16 was for recognizing that.
17 Q. In your discounted cash flow analysis
18 formula, you have in the denominator P subscript
19 zero, which is the average of the monthly high and
20 low stock price April 2003?
21 A. Yes.
22 Q. Now, would that price reflect the option
23 values that a firm is confronting? For example, a
24 Boeing may have a contract with Delta, where Delta
25 has an option to buy 20 767s in five years. Would

1 that option value be reflected in the market price of
2 the stock?
3 A. Investors would recognize, when they make
4 stock buy and sell decisions, that there are options,
5 and hence one would guess that it would be reflected
6 in the market price. It's just that the market price
7 would not be the present value of the future
8 dividends, as is assumed in the DCF model. And so
9 one couldn't take a model where the market price is
10 the present value of future dividends and solve for
11 the cost of equity as we do in the DCF, because price
12 is not the present value of future dividends. It can
13 be in the price, but the price is not equal to the
14 present value of future dividends; it's the present
15 value of future dividends minus the value of the
16 option.
17 Q. Let me return to what I initially asked.
18 Let me turn to this topic of the regulatory risk
19 premium. Am I correct in my understanding that, to
20 some degree, this regulatory risk premium reflects
21 that a company like Verizon, who has to provide UNEs,
22 faces risks which are different than are being
23 confronted by the group of companies in your sample
24 and, therefore, you believe there needs to be a
25 higher return to reflect the additional risk?

1 A. I don't think that it really -- I think
2 there are higher risks, but I don't think that's the
3 primary reason. It's not the comparable companies;
4 it's the fact that the cost of equity, as measured by
5 the DCF model or the CAPM, will underestimate the
6 cost of equity for a company in the presence of
7 options.
8 So even if the sample of companies were
9 comparable, and I believe they are -- if anything,
10 they're conservative because of the regulatory risks
11 associated with the TELRIC standard. The cost of
12 equity cannot be measured by the DCF model alone or
13 by the CAPM model alone. It's a higher number than
14 that, because the DCF and the CAPM models don't
15 incorporate option values. They don't have -- the
16 equations themselves don't apply in that situation,
17 and they miss a key term. And so it's basically the
18 fact that the DCF and the CAPM only provide a partial
19 answer to the cost of equity. Even if you had a firm
20 that were a pure UNE provider, which there aren't
21 any, you wouldn't get a correct result from applying
22 the DCF or the CAPM, because those equations don't
23 hold when there are options.
24 Q. All right. Let me just approach this a
25 little different way. Let's think of a couple of

1 industrial firms. Let's say, for example, Motorola
2 produces cell phones.
3 A. Yes.
4 Q. And they face competitors that produce cell
5 phones abroad, like Nokia; is that correct?
6 A. Yes, they do.
7 Q. And let's say a pharmaceutical company.
8 This is an industry where there's a lot of research
9 and development, am I correct?
10 A. Yes.
11 Q. And sometimes firms get a lock on a
12 particular medicine through the granting of a patent?
13 A. Correct.
14 Q. And let's say somebody is producing
15 clothing. There's a risk in producing clothing,
16 which is associated with fashions, and maybe you
17 picked the right fashion or you didn't, and so that's
18 something that's particular to the fashion industry?
19 A. Yes.
20 Q. Okay. So I'm sure you guessed where I'm
21 heading on this. I just named, you know, three
22 different industries which, would you agree, have
23 types of risks that are different than the
24 telecommunications industry in the state of
25 Washington? One involves granting of a patent, the

1 pharmaceutical, the second is fashions, and the third
2 was importing of goods from abroad. Does a company
3 like Verizon Northwest face any of those kinds of
4 risks operating in the state of Washington?
5 A. Although the -- I think they face many of
6 the same -- well, let me start it this way. All
7 risks ultimately relate to uncertainties in earnings,
8 no matter what names you put on those risks, they all
9 relate to the fact that earnings or the cash flows to
10 investors are uncertain. And so the Capital Asset
11 Pricing Model, for instance, recognizes that it
12 doesn't matter what names you put on the risk, all
13 companies who have the same uncertainty in their cash
14 flows in relationship to the market would have the
15 same beta and, thus, would be of the same risk.
16 And indeed, as I've indicated, the Wireline
17 Competition Bureau recognized that you could -- you
18 ought to use a beta of one in the CAPM model, because
19 that was the average beta of the companies in the S&P
20 500, even though the companies in the S&P 500 don't
21 provide telecommunications service.
22 So that when we say that a company is of
23 average risk, we mean that it has a beta of one. We
24 don't mean that it's in the telecom industry or it's
25 in the fashion industry or the drug, the

1 pharmaceutical industry. We just mean that its
2 future cash flows have equal uncertainty compared to
3 all the companies in the economy.
4 JUDGE MACE: So just to be clear, I'm not
5 sure you exactly answered Dr. Gabel's question, but
6 are you saying that it doesn't matter whether Verizon
7 faces the same risks as the companies that Dr. Gabel
8 cited in Washington?
9 THE WITNESS: It depends on what variable we
10 focus on. If we're focusing on cash flows, that is,
11 the cash -- which is what investors really care
12 about, is what cash are they going to receive as a
13 result of their investment, Verizon and Verizon
14 Northwest face investors, face the same risks. That
15 is, that their cash flows are uncertain. And if they
16 are -- if their cash flows are equally uncertain,
17 people commonly agree that they face the same risks,
18 although the reason why their cash flows may be
19 uncertain in one case might be because there are
20 technology changes in the telecom industry, and in
21 another case, it may be that fashions will change.
22 Investors don't really care whether it's
23 because there are technology changes or because
24 fashions change. What they care about is the bottom
25 line. Are the cash flows that we can expect to

1 receive from this company more or less uncertain.
2 And if they are equally uncertain, from their point
3 of view, those companies have equal risk. It's
4 immaterial to them whether -- what the cause of that
5 is, as long as the resulting uncertainty is the same.
6 Q. Now, just -- I'll push this -- I'll just ask
7 ask this one more time, because I want to make sure I
8 -- I understand your point of why there's option
9 value that -- and I understand the theory that you're
10 referring to. Well, I'll just -- I'll just move on.
11 Let me ask you now to turn to, in your
12 direct testimony, it's Exhibit 101, you have a
13 formula for calculating your regulatory risk premium.
14 This is at page 58.
15 A. Yes.
16 Q. And when you're discussing this formula, you
17 were also referred to JHV-4.
18 JUDGE MACE: That would be Exhibit 104.
19 THE WITNESS: Which is the Copeland and
20 Weston article?
21 JUDGE MACE: No, it's a chart.
22 Q. It's a chart. The Analysis of Washington
23 Network Investment.
24 A. Oh, yes, okay.
25 Q. Okay. How, as a reader, can I see how you

1 took the numbers that are on Exhibit Number 104 and
2 put them into your Formula One that appears on page
3 58, and your Formula Two that appears on page 62? I
4 have trouble seeing the relationship.
5 A. All right. I'll explain that. In the
6 formula on page 58, the first term is, on the left,
7 is the amount -- is the investment in the network on
8 a total network basis. So that's referred to by the
9 letter I. So the amount of the investment is found
10 in JHV-4 as the total forward-looking investments of
11 1,856,296,315. So that would be the I in that
12 formula. Then O is the monthly operating expense.
13 The operating expenses are shown in JHV-4 on the
14 right, and I would divide those by 12 to get a
15 monthly operating expense. And that would be put
16 into the formula as -- for the letter O.
17 Q. And just for that, as a point of
18 clarification, operating expense numbers are
19 generated by VZ Cost?
20 A. Yes.
21 Q. Okay. And why is it that there's no entry
22 for support investments or --
23 A. I don't know how Verizon characterizes this.
24 For my purposes, I only really need the three bottom
25 line numbers, total forward-looking investments,

1 expected life, and the operating expenses. How they
2 are put into the different categories, you would have
3 to ask Verizon. So that would be the operating
4 expenses. The depreciation would just be straight
5 line depreciation. We would take the initial
6 investment of one-billion-eight-hundred-fifty-six and
7 depreciate it in a straight line basis over 17.1
8 years.
9 Q. And the 17 years is the
10 Commission-authorized life or the --
11 A. That's my understanding, that it is. Again,
12 Verizon would be the best one to ask for that.
13 Q. Well, which do you think is the appropriate
14 depreciation to use, the depreciation that's used in
15 the cost studies or the depreciation that is the book
16 rate, which you're suggesting is 17 years?
17 A. One ought to use the expected life that is
18 ultimately agreed to by the Commission, but since we
19 don't have evidence of that yet, that's the purpose
20 of the proceeding, one of the purposes, I believe
21 they used the life that was used in the last UNE
22 proceeding.
23 Q. But wouldn't that be different than the life
24 that's used to produce the last column, operating
25 expenses, since if --

1 A. Well, yeah, these operating expenses are
2 annualized operating expenses, and so they're assumed
3 to be constant over the life. So this is the
4 operating expense per year, and that operating
5 expense would go on for 17.1 years.
6 JUDGE MACE: I'd like to take a break, 15
7 minutes.
8 (Recess taken.)
9 JUDGE MACE: Let's be back on the record.
10 Before Dr. Gabel continues, we need to address the
11 question of the lunch break today. Mr. Kopta and Ms.
12 Smith have an appointment that will take them away
13 from the hearing from 1:30 to 2:00. We will have a
14 long lunch break and we'll resume at 2:00. If it
15 ends up you're delayed somewhat, I'll get the
16 Commissioners when you finally come back.
17 MR. KOPTA: Thank you, Your Honor.
18 JUDGE MACE: All right.
19 MR. BERRY: Judge Mace, what is your
20 expectation about when we would break for lunch,
21 approximately?
22 JUDGE MACE: At noon.
23 MR. BERRY: Thank you.
24 Q. Mr. VanderWeide, right before break, I was
25 asking you about the expected life, and we were

1 discussing if it was the book life or the lives that
2 are recommended in this proceeding by Verizon, and
3 you said that, to get an answer to that question, I'd
4 need to pose the question to the right Verizon
5 witness. Do you know which witness would have that
6 information?
7 A. No, I don't, but I have given it some
8 thought since -- during the break, and my recall is
9 that this is the depreciation life that is used by
10 Verizon in its cost model, that this is their
11 recommended depreciation life, and that ultimately
12 one could do it again once a depreciation life is
13 decided, but it shouldn't have a material -- a really
14 large impact on the cost of capital.
15 What's important is to recognize that there
16 is a risk premium required and what the approximate
17 magnitude is.
18 Q. Thank you. So I had interrupted. You were
19 walking us through the formula that's on page 58.
20 A. Yes. So we've already gone through the
21 amount of the investment, and we've gone through the
22 operating expenses, and this assumes that this --
23 that these are the aggregate amounts. And so then we
24 would take the -- we determined the depreciation from
25 the average life, and using the tax rate, the

1 depreciation, the operating expenses and the
2 investment and the 12.03 percent weighted average
3 before tax cost of capital, we'd look at the
4 after-tax component of that, what the after-tax
5 equivalent is, and we'd solve for the least payment,
6 that's L.
7 In my model, I assumed that MV, the salvage
8 value of the asset, is zero, that it's fully
9 depreciated over the 17.1 years. So I would first
10 solve for the least payment that's required if there
11 are -- if there is no option, and I would use the
12 data for investment, operating expenses,
13 depreciation, and the after-tax weighted average cost
14 of capital.
15 Then I would solve for the value of the
16 option itself, and I would look at Equation Two,
17 which is on page 62. And that equation is the same
18 in all respects, except for the last term, which is
19 piece of eight. And that's the value of the put
20 option that the CLECs have to put the network back to
21 Verizon if they decide to build their own network or
22 if they decide to use some other provider of network
23 services. And so I calculate for the put value and I
24 calculate the new lease payments from Equation Two
25 that will make the present value of the lease

1 revenues, minus the operating expenses, plus the
2 depreciation tax shield, equal to the investment, and
3 I plug those into Equation One to solve for the new
4 cost of capital, and that's how I get the risk
5 premium.
6 Q. And could you explain how you determine the
7 value of P subscript A, the value of the option to
8 cancel?
9 A. Yes, I use an option pricing formula that's
10 exactly described in this article by Copeland and
11 Weston. Basically, it's called the Binomial Option
12 Pricing Formula.
13 Q. Mm-hmm.
14 A. And that formula is described in that
15 article and you need certain inputs to that, and you
16 need, for instance, a risk-free interest rate, you
17 need to know the life of the option, and you need to
18 know the volatility. And I measure the volatility
19 from option contracts on Verizon's stock, and I then
20 put those inputs into that Binomial Option Pricing
21 Formula described in the Copeland Weston article and
22 solve for the value of the put option.
23 Q. And why did you use the -- for the
24 measurement of the volatility, something you said you
25 obtained from options on the Verizon stock. Why did

1 you use that, as opposed to the volatility that was
2 observed in the use of UNEs?
3 A. Because the volatility in the option pricing
4 formula is a volatility in market values of the
5 assets, and there is no -- and there are no companies
6 whose stock is publicly traded that we could -- that
7 we can get an unbiased measure of volatility. I
8 could, for instance, do a simulation on different UNE
9 forecasted cash flows, but that might then be subject
10 to any forecast error on my part in forecasting those
11 UNE revenues or those UNE operating expenses, and I
12 felt that a market forecast would be much less --
13 much more accurate and would not be -- would not
14 relate to my particular forecast of UNE revenues and
15 variability of UNE values.
16 Q. Is your measurement of volatility, say, a
17 standard deviation measurement?
18 A. Yes.
19 Q. All right. And why would it be appropriate
20 to use, say, the standard deviation for the option on
21 the Verizon stock, as opposed to the standard
22 deviation on renting UNEs, you know, look at what's
23 the average life of a UNE and what's its standard
24 deviation?
25 A. Yeah, what you need is a standard deviation

1 of a rate of return in the option pricing model.
2 You're dealing with investors' rates of return on
3 investment, and those are uncertain. And so you need
4 to have a standard deviation of that rate of return.
5 And I just don't know of any way that one could get a
6 standard deviation of a rate of return over the
7 17-year period of the investment in the facilities to
8 provide UNEs that wouldn't be subject to tremendous
9 controversy about how one forecasted the standard
10 deviation of revenues and standard deviation of
11 operating expenses and the standard deviation of the
12 amount of the investment.
13 That would be like having to argue about not
14 only a cost -- a VZ Cost model, but also arguing
15 about how the VZ Cost model changes with regard to
16 all the inputs and, hence, the standard deviation of
17 those changes. That would be a highly controversial
18 thing to do, I would say, whereas this is the implied
19 volatility of investors that's measured by the option
20 pricing formula, so that it represents -- it does
21 represent Verizon, which its volatility ought to be
22 quite a bit less than the volatility of UNEs
23 themselves because of the ability to diversify over
24 wireline versus wireless. There ought to be a lot
25 less volatility in Verizon's stock price than there

1 would be in the -- in a stock price that was related
2 only to UNEs.
3 Q. Last question in this area, and then I'm
4 going to move on to another topic. When you reported
5 your results from the discounted cash flow analysis,
6 when you looked at your sample of 125 firms, you
7 reported sensitivity analysis. You said, Well, if I
8 hadn't -- you stated if you had included other two
9 quartiles, it would have raised the cost of equity by
10 a small amount. Did you undertake any sensitivity
11 analysis for your regulatory risk premium analysis?
12 A. Yes, I -- first of all, I provided the
13 software for the model as part of the record and --
14 or as part of the -- I forget whether it was in
15 response to a data request or whether I provided it
16 as part of the work papers, but it is -- it is
17 available and one can change the parameters and see
18 what the results are. I believe that most of the
19 parameters are not so controversial. The risk-free
20 rate that's required is the return on a government
21 bond that has the same maturity as the option.
22 That's not a very controversial number. The result
23 might be sensitive to that, but that's -- but there
24 shouldn't be alternative values for that. There
25 should be only one.

1 It's sensitive to the -- it's somewhat
2 sensitive to the life of the option, but in this
3 case, the 17 years is fairly straightforward, and
4 it's not that sensitive to whether it's 16 or 18. If
5 it were zero or if it was one, it would make a big
6 difference. And the volatility of Verizon's stock
7 was not that much different than that for other
8 stocks. And so there's no -- there's pretty solid
9 data behind each of the inputs into that model.
10 Q. This was going to be my last question in
11 this area, but now I have to follow up your last
12 comment. You said that the volatility of Verizon's
13 stock wasn't different than the volatility of other
14 stocks. If other stocks don't have associated with
15 them this option of having to rent out your network
16 at a wholesale price that's determined by regulatory
17 commission, does it surprise you that Verizon's isn't
18 any more volatile, and does that indicate anything
19 about the importance of this option value?
20 A. Well, first of all, there were -- I believe
21 that Verizon's volatility is less than what it would
22 be for the pure UNE, because of the ability of the
23 natural diversification associated with owning both
24 wireline and wireless operations. They are natural
25 hedges against each other. So I think that's a

1 conservative estimate of the volatility for the UNE
2 business.
3 But other businesses have -- the option
4 pricing model determines a value for the option, and
5 that value would be there if you had an option for
6 the other company's stock, as well. What the -- so
7 there is certainly volatility in the other companies'
8 stock prices, as well as volatility in Verizon's
9 stock price, and it doesn't surprise me that, since
10 Verizon has a beta of one, it doesn't surprise me
11 that their volatility is approximately the same as
12 the volatility of other stocks.
13 What is different is that when you use this
14 to measure internal cost of capital and you have an
15 internal investment that involves a real option, as
16 opposed to a financial option, that you have to add
17 something to the cost of capital that you get in the
18 marketplace to get a cost of capital appropriate for
19 an investment decision within the firm, because of
20 the real options. For the other companies, you might
21 have a volatility associated with a financial option
22 on their stock, but they might not, if they don't
23 have real options on internal investments, have to
24 have a risk premium over and above the DCF result to
25 make internal investment decisions.

1 AT&T obviously does have some type of a risk
2 premium, because their cost of capital is similar, if
3 not higher. It is higher than my estimate. So they
4 clearly recognize this option value and the need for
5 a risk premium associated with long-lived options on
6 investments in telecommunications assets.
7 Q. Thank you. I'd like to ask you to turn to
8 page 37 of 101, this is your direct testimony, page
9 37, lines four to seven. You state, TELRIC rates are
10 based on the unrealistic assumption that the
11 telecommunications network can be reconstructed each
12 time a new technology appears and companies incur no
13 cost in transitioning to new technologies.
14 Can you point to something in this
15 Commission's decision in its prior UNE cases where it
16 made unrealistic assumptions about the network being
17 reconstructed each time a new technology appears?
18 A. I can't point to something in the -- in any
19 orders. It's a fundamental characteristic of cost
20 proxy models. Whichever cost proxy model you use,
21 they're forward-looking. And in that cost proxy
22 model, you look at what it would cost to build a
23 telecommunications network starting today, that would
24 have the same functionalities as the current network,
25 or that would be projected over the forecast horizon.

1 So it's a fundamental -- since you're not
2 looking at historical costs, you're not looking at
3 what the actual investments are; you're looking at
4 the cost of, inherently, of constructing a new
5 network. And you're supposed to use the most
6 efficient available technology.
7 And so when you build the cost proxy model,
8 you look at the cost of -- the amount of investment
9 of building a network. And so you essentially
10 assume, since -- there's essentially an equivalence
11 between using forward-looking economic costs and the
12 assumption of reconstructing the network. And what's
13 different is that you do this again in maybe five or
14 six years when you set rates the second time. You
15 look at a new cost proxy model, and that cost proxy
16 model tells you what it would take to construct the
17 network five years later. And if you do that before
18 the life of the -- before the assets are fully
19 depreciated, you may not be able to recover your
20 investment in the assets during the -- that were
21 assumed to be required to build the network the first
22 time.
23 That's inherent in the forward-looking
24 economic cost standard, and the FCC has recognized
25 that and has stated clearly, in the Triennial Review

1 Order, that if rates are reset more frequently than
2 the economic life of the asset and costs are
3 declining, the company will not be able to recover
4 its costs.
5 Q. Thank you. Turning to page 40 of the same
6 exhibit, line 18, you use the phrase "make follow-on
7 decisions." Would you explain what you mean through
8 the use of that term?
9 A. Yes. I'm talking here about making an
10 investment and then having a second decision that
11 depends on the initial results of your investment
12 with an option -- the inherent characteristic of an
13 option is that you make an investment today, you see
14 what the results are in periods -- forward-looking
15 periods one or two, and then you can decide to invest
16 again or not invest in a second period. That's what
17 I mean by a follow-on investment.
18 The DCF model, as all DCF models and the
19 CAPM, assume that you make the investment now and
20 then you walk away. All the cash flows occur and you
21 don't -- you don't make any investments that respond
22 to what happened in period one and two.
23 Q. Thank you. I'd now like to ask you to turn
24 to Exhibit 105. This is your reply testimony of
25 April 20th.

1 A. Yes.
2 Q. Page 16, at lines seven through nine, you
3 state, UNE rates are based on the unrealistic
4 assumption that the incumbent serves the entire
5 demand for telecommunications service, even though
6 competitors serve a significant increasing share of
7 the market.
8 Now, when you state that the rates are based
9 upon the unrealistic assumption that the incumbent
10 serves the entire demand, is it your assertion that
11 the UNE cost models assume that the ILEC is now a
12 monopolist and serves 100 percent of the market? Is
13 that what you're asserting?
14 A. I'm asserting that the FCC has stated, in
15 its Local Competition Order, that when -- that you're
16 to build a network on a forward-looking basis, and
17 that network is supposed to have the capacity to
18 serve the entire market. So when you now go back to
19 that equation that we were talking about earlier,
20 where you set the lease payments or the UNE rates,
21 you are assuming that the present value of the UNE
22 rates of the projected UNE revenues over the life of
23 the network are sufficient to cover the costs of that
24 network. And in that calculation you are to assume
25 that the network is large enough to satisfy all of

1 the demand.

2 You're not -- you have the tension, as the

3 FCC recognized in its notice of proposed rule-making,

4 that on the one hand you're assuming that the firm

5 operates in a competitive market when you estimate

6 all the inputs in the model. And indeed,

7 forward-looking economic costs only make sense in a

8 competitive market.

9 On the other hand, as the FCC recognizes,

10 you're assuming that, in the cost models, you build a

11 network that is sufficient to handle all of the

12 demand, and then, when you determine the revenue that

13 are required to cover all the costs, you divide by

14 the number of lines to get a lease payment per line,

15 and when you divide by the number of lines, you

16 divide by all the lines.

17 So that's what I mean when you say that

18 you're assuming you have 100 percent of the demand.

19 That is, you divide by all the lines to get the lease

20 revenues per line that will be sufficient to cover

21 the costs on a forward-looking basis.

22 Q. All right. And when you use the phrase "all

23 the lines," is all the lines all of the lines that

24 shows up, for example, in Verizon's ARMIS report --

25 A. No.

1 Q. -- or is it all of the lines which include
2 not only the lines that are served by Verizon, but
3 also the lines that are served by the CLECs?
4 A. It's -- well, the ARMIS reports would refer
5 to lines that occurred last year. The lines that
6 would be used would be the lines used in the -- in a
7 cost model, the cost proxy model. In that cost proxy
8 model, the guideline is is that it would be the
9 demand for the foreseeable future or over the
10 planning horizon.
11 I guess in the Verizon model, that might be
12 a three-year planning horizon, but it's the --
13 guidelines are that it be the project -- not the
14 projected lines served by Verizon; that it be the
15 projected lines that the network could satisfy in
16 total, including the lines of the CLECs, that were
17 offered to the CLECs, but not any lines on
18 alternative networks, necessarily; just the lines
19 that could be served on the incumbent's network,
20 including all those that were leased to UNEs -- to
21 CLECs.
22 Q. Okay. Now, remaining on page 16, if you
23 turn your attention to a paper by Sharkey and Mandy,
24 its an Office of Strategic Planning and Policy
25 Analysis paper.

1 JUDGE MACE: Where is that, Mr. Gabel?
2 DR. GABEL: It's Exhibit 105, page 16,
3 starting at line 13.
4 JUDGE MACE: Thank you.
5 Q. Do you know, in this paper, are the authors
6 assuming that the cost of construction increases or
7 decreases over time?
8 A. They're assuming that the cost decreases
9 over time in their paper.
10 Q. Have you ever looked at the telephone plant
11 indexes for Verizon? Do you know if, for example,
12 its cost of burying cable or placing poles or hanging
13 aerial cables has been increasing or decreasing over
14 time?
15 A. I don't know whether it, in fact, has been
16 increasing or decreasing, and I haven't looked at
17 such cost indices. I do know that, over time, in the
18 second round of UNE proceedings, for whatever reason,
19 they're frequently -- been based on an assumed
20 decrease in cost. I know, for instance, that the
21 line cost rates that have been recommended by the
22 Hatfield model and -- as sponsored by AT&T and
23 WorldCom, now MCI, have projected decreasing costs
24 and have been based on decreasing costs over time.
25 And I know that the very assumptions of the

1 forward-looking cost model, as the FCC discussed it,
2 were based on the assumption of decreasing cost.
3 It's possible, and in fact, costs will
4 increase. I don't have opinion on that. I just -- I
5 know that, in fact, state commissions have frequently
6 set UNE rates in the second round based on the
7 assumption of declining costs, and that AT&T and MCI
8 and the Hatfield model have also projected declining
9 costs.
10 Q. Now I'd like to ask you to turn to your
11 Exhibit 106. This is your May 12th filing, May 12th
12 of this year. Page 31, at line 16, you state that
13 beta values are measured using five years of monthly
14 historical data?
15 A. Yes.
16 Q. Is this your convention, the convention of
17 financial analysts? I'm just curious about why you
18 say this is the way in which betas are measured?
19 A. Yes, it's not my convention. It's -- the
20 way Value Line calculates betas is generally with
21 five years of historical data. And most analysts
22 that estimate betas have, over time, used a five-year
23 convention. But in this context, I was referring to
24 Value Line betas, because those were the betas that
25 Dr. Selwyn used.

1 Q. Okay. Now, turning to page 35, you have a
2 graph, which is a scatter plot of Dr. Selwyn's data
3 points?
4 A. Yes.
5 Q. Do you see that? Now, you have a horizontal
6 line there?
7 A. Yes.
8 Q. Now, your coefficient estimate wasn't zero,
9 was it? It was just statistically equal to zero?
10 A. It was statistically equal to zero for those
11 three companies.
12 Q. And that's why you made it a horizontal
13 line?
14 A. Yes. And just visually, I don't think
15 there's any doubt that there's just -- one could see
16 that, obviously, there's not -- certainly not a
17 positive or a negative relationship between beta and
18 the percentage of non-ILEC assets. Certainly, a
19 horizontal line visually would best fit the data
20 points.
21 Q. And then, looking at your regression results
22 on table three, page 36.
23 JUDGE MACE: These -- there was a revision.
24 I don't know if you're aware of it.
25 DR. GABEL: Oh.

1 Q. Would you agree most of these coefficients
2 are not statistically significant?
3 A. Yes.
4 Q. Did you do an F test to see if, overall, the
5 model is statistically significant?
6 A. Yes. It's not.
7 Q. It's not?
8 A. Yeah.
9 Q. Turning to page 75 of the same exhibit, here
10 you're discussing AT&T's updated cost of capital for
11 internal investment decisions?
12 A. Yes.
13 Q. All right. Have you read the FCC's approval
14 of Qwest Washington's request to provide interstate
15 services? This is the 271 application for the state
16 of Washington by Qwest.
17 A. No, I have not.
18 Q. Okay. Let me just represent, at Paragraph
19 426, there was a discussion about, well, can you use
20 AT&T's numbers to decide the costs that are incurred
21 by an efficient firm, and for a number of reasons,
22 the FCC declines to use AT&T's internal numbers when
23 deciding is there going to be a price squeeze if
24 Qwest is granted 271 approval. And AT&T said that
25 there would be a price squeeze and they said that

1 they wouldn't be able to cover their internal costs.
2 They said their internal costs were $10. And the FCC
3 rejected that presentation by AT&T for a number of
4 reasons.
5 And just one thing I would like you to react
6 to, having in mind in general what the FCC did, they
7 said, Well, how do we know that AT&T is the right
8 benchmark for an efficient firm? That's one firm,
9 but we don't know if it's truly an efficient firm.
10 Translating that same type of analysis to this
11 situation, do you have knowledge of what kinds of
12 internal cost of capitals are used by other CLECs?
13 Are they in the same range?
14 A. Well, the answer to that is yes. In
15 response to a interrogatory at the -- in the Virginia
16 Arbitration Order, or the Virginia arbitration
17 proceedings, MCI indicated that it also used an
18 internal hurdle rate in the same range as AT&T. And
19 in that proceeding, AT&T's was somewhat lower than it
20 is today. They have increased their internal hurdle
21 rate, but -- yet MCI's was in the same range as
22 AT&T's.
23 DR. GABEL: Thank you. I have no further
24 questions.
25 CHAIRWOMAN SHOWALTER: I think we should go

1 to lunch, but just one question. Dr. Gabel mentioned
2 AT&T's internal rate or hurdle rate. That was not
3 confidential, was it?
4 MR. KOPTA: What he said was not; the rate
5 itself is.
6 CHAIRWOMAN SHOWALTER: The dollar amount was
7 not confidential?
8 MR. KOPTA: Well, he didn't give the actual
9 amount.
10 CHAIRWOMAN SHOWALTER: That was confusing.
11 DR. GABEL: Oh, the $10 number was not.
12 MR. KOPTA: Different thing.
13 CHAIRWOMAN SHOWALTER: All right. I think
14 we should break for lunch.
15 JUDGE MACE: We'll break for lunch, and
16 we'll resume at 2:00.
17 (Lunch recess taken.)
18 JUDGE MACE: Let's now be back on the
19 record.
20
21 E X A M I N A T I O N
22 BY CHAIRWOMAN SHOWALTER:
23 Q. Yes, can you turn to Exhibit 120? And that
24 was the cross exhibit that you were looking at
25 earlier from AT&T.

1 A. There were several. There was the --
2 JUDGE MACE: It was the Exhibit Number 8.
3 THE WITNESS: Yes, okay. The excerpt from
4 CC Docket 98-166?
5 Q. That's right. And on page three -- or four
6 of -- page four of that exhibit, it's Exhibit 120,
7 page four, you have an elaborate formula at the
8 bottom?
9 A. Yes.
10 Q. K equals. And in the denominator, you have
11 P times (1-FC)?
12 A. Yes.
13 Q. And the terms are defined right above it.
14 A. Yes.
15 Q. All right. Now, can you turn to Exhibit
16 102?
17 A. That's my direct testimony or --
18 Q. Right, and that's the three-page similar
19 formula.
20 A. Yes.
21 Q. And on page three, you have a similar
22 formula, but I notice that the denominator only has
23 the P, it doesn't have the 1 minus FC in the
24 denominator. And since, of course, I'm not very
25 familiar with these formulas, I'm just wondering if

1 there's any significance to that fact?
2 A. First, let me say that you've read this very
3 carefully. That's an amazing catch. The FC is among
4 the notation --
5 Q. Right.
6 A. -- that's just above it, but it was
7 inadvertently left out of the equation.
8 Q. So it should be --
9 A. It should be in the equation. It has a
10 minuscule impact.
11 Q. So it should be P(1-FC)?
12 A. That's correct.
13 Q. This probably makes me look more intelligent
14 than I am, but what it really is is I'm reacting on
15 the surface of the exhibit and I noticed the
16 difference.
17 A. Well, it's pretty amazing.
18 Q. Okay. So -- but that is to say, then, the
19 actual operation, the formula you used was the same
20 in both instances?
21 A. Yes, it was.
22 Q. Okay. And then, while we're on this page,
23 do I understand you to say that the formula -- let's
24 call it the K formula, since it's K equals something.
25 A. Yes.

1 Q. That this K formula is simply incomplete for
2 the purposes we're using here?
3 A. Yes.
4 Q. And is it necessarily always incomplete for
5 the same purpose as applied to any company?
6 A. No, it's not necessarily always incomplete.
7 It's incomplete when you are trying to value a
8 project that has real options involved with them. A
9 real option is where you have an initial choice
10 whether to accept a project or not, and then you have
11 another choice at a later period regarding whether,
12 for instance, you expand the project or you change
13 the size of the project or you -- you have a
14 secondary decision and -- or you give someone else
15 that secondary decision. In the case of the network,
16 you're giving somebody else a secondary decision, and
17 that is whether they return the network to you. It's
18 called a put option. They put it back to you.
19 And the formula, this formula for the cost
20 of equity is derived from an equation for the price.
21 So you start with an equation for the price as being
22 the present value of the future dividend stream.
23 Q. And you're saying that's incomplete?
24 A. That's incomplete when there are options.
25 Q. All right. So --

1 A. So that when you solve for K, you're solving
2 for the cost of equity from the wrong formula.
3 Q. All right. Because the cost of equity
4 involves more than just the net present value of
5 expected future dividends?
6 A. Exactly right. It involves also an
7 additional term to reflect the value of the option.
8 Q. Okay. But, then, if you were determining
9 the cost of equity for any company, let's say an
10 anonymous company, you don't know what it is --
11 A. Yes.
12 Q. -- you would use this formula, and then you
13 would additionally ask yourself, Is this a company
14 that has options?
15 A. Yes.
16 Q. And that answer might be yes or no?
17 A. Yes, that's correct.
18 Q. So for the class of companies that have
19 options, you would need to do an additional step to
20 calculate that kind of a risk?
21 A. That's correct.
22 Q. Is the risk -- is it only an addition? In
23 other words, is the cost of equity always K or
24 bigger? Can you have something so stable and without
25 any options that there's a negative additur?

1 A. The cost of equity is -- always goes up, but
2 in the equation that has the valuation, there may be
3 a plus term or a negative term. It will be a plus
4 term if the -- if it's a put option, that is, the
5 right for someone to return something to you. It
6 will be a plus if it's a call option where --
7 Q. You mean a negative? You said plus both
8 times.
9 A. Oh, I'm sorry. I meant a negative the first
10 time, where it's a put option.
11 Q. Okay. Can you just say that again, then?
12 It would be negative --
13 A. Yeah, it would be a negative term to the
14 price equation when it's a put option. That is,
15 where someone has the right to sell something to you
16 at a known price or return it to you.
17 Q. And so you could take -- that means you, the
18 company, could take advantage of that so there would
19 be some potential benefit?
20 A. Well, you gave to customers, you sold to
21 somebody else or you gave to somebody else the right
22 to return the network to you, and that right that you
23 gave to the customers was very valuable to them,
24 because the customers, being the CLECs, without
25 making any investment on their own, then have the

1 ability to enter and exit the market for nothing
2 without any cost. They can enter the market without
3 having to make any investment, and if things don't go
4 right, they can immediately exit the market. Or if
5 the economy is good, they can enter the market when
6 the economy is good, and if the economy goes down,
7 they can immediately exit during the down years and
8 return when the good years come again. Whereas if
9 you build a fixed network with physical facilities,
10 you can't do that. You're locked in, because the
11 physical facilities -- you've made the investment and
12 you can't do anything else with those facilities
13 because they're specific to this particular use.
14 Q. All right. So if I were trying to determine
15 the cost of equity of Company X at fully competitive
16 -- in a fully competitive environment, I would use
17 this formula, I would use the center two quartiles
18 minus the financials, minus the companies that --
19 A. Don't pay dividends.
20 Q. -- don't pay dividends. I would then ask is
21 this a company that has a put or a call-type option,
22 and depending on it and some valuation of it, I would
23 either add or subtract from this K formula?
24 A. From the formula for the price, and then you
25 would solve for K.

1 Q. I see.

2 A. And that's, in fact, what real world firms
3 do when they set internal hurdle rates. In some
4 cases, there might be options, but they're so small
5 in value to have no effect at all. In other case,
6 there may be options, and they're substantial, and it
7 could have a significant impact on the cost of
8 capital or the hurdle rate.

9 Q. Okay. Thank you. If you could turn to
10 Exhibit 101-T, that's your initial testimony, page
11 four, specifically lines seven to nine. This is a
12 similar subject that you discussed with Dr. Gabel,
13 but when it says, The most efficient technology to
14 meet the entire demand for telecommunications
15 services -- I had my own questions, and I was also a
16 little unclear on your answers to Dr. Gabel, but,
17 first of all, does the entire demand for
18 telecommunications service include all possible
19 modes, wireless, cable, and land line in this formula
20 or method?

21 A. It includes land line telephones, the entire
22 demand for land line telephones. Namely, the FCC
23 says that when you build a cost model, you are to
24 build a network, you are to calculate the cost of
25 building a network that has the capability of meeting

1 the foreseeable demand for -- and then they use the
2 words telecommunications service, but in practice,
3 for those that build these models, it means the
4 foreseeable demand for wireline telecommunications
5 service.
6 Q. All right. So in my mind, I'm beginning
7 with a pie of total demand, and some piece of it is
8 wireless and some piece of it is cable, and those
9 wedges might grow over time, but some pieces of this
10 pie left is land line, and that's the one that you
11 are dealing with here. Judging whatever it is is
12 another matter, but just --
13 A. Yes, that's how I interpreted the FCC's
14 requirement, that when you build a cost model -- and
15 others may have a different interpretation, because
16 it's the FCC's requirement. And their requirement
17 was just that the network that you are calculating
18 the cost of should have sufficient capacity to meet
19 the foreseeable demand for telecommunications
20 service.
21 I have interpreted that, since the company
22 has historically provided wireline service, that
23 those words would mean the foreseeable demand for
24 wireline telephone service.
25 Q. Okay. Supposing, of my pie, half of it is

1 land line. Then when -- in the Verizon model, is the
2 Verizon model built on the total number of lines in
3 that half a pie, or if Verizon's part of a pie and
4 its territory is three-eighths, is it the
5 three-eighths? In other words, is it the demand that
6 would be made of Verizon's footprint network or is it
7 more?
8 A.   Well, that --
9 Q.   And by the way, I don't mean literally of
10 it, but --
11 A.   Right.
12 Q.   -- the number of lines that could be in that
13 footprint.
14 A.   Yes. It's a difficult question to answer.
15 Let me give my interpretation, the best I can do,
16 just because the FCC's words are kind of vague in
17 that regard. It would seem to me that at one time
18 the network was designed -- there weren't other
19 alternatives, such as cable or wireless, and so the
20 network was designed to provide voice grade telephone
21 service to the entire population. And so when you
22 build that network, you're -- it's supposed to be
23 capable of providing voice grade telephone service to
24 whomever may demand it.
25 So if a customer calls and said they would

1 like to have voice grade telephone service on a wire
2 line network, the network has to be capable of doing
3 that. You have to be a universal service provider,
4 if you will.
5 So I would think that would be the entire
6 population of people who might demand
7 telecommunications service. In practice, I don't --
8 I'm not familiar with exactly the demand forecast
9 that people use in their cost models, but when -- but
10 if you interpret the words literally as the
11 foreseeable demand, it would be the demand coming
12 from anyone who might demand wireline telephone
13 service. Whether they, in fact, do or not, you have
14 to be capable of being on the ready to give it to
15 them, at the ready to give it to them.
16 Q. All right. So a UNE, the value of a UNE
17 would be the value of one little sliver of the half
18 of a pie without knowing whose sliver it might
19 ultimately be? It might be a demand made on Verizon,
20 but it might be a choice to go somewhere else; is
21 that correct?
22 A. Yes, in other words, you have to build the
23 network to be able to satisfy the demand for the
24 entire population. Wherever they may be located and
25 whether they intend to take land line telephone

1 service or not, you have to be capable of doing it.
2 Then, of that entire population of people who might
3 want to have telephone service, some of them may
4 decide they don't want to use land line telephone
5 service, but the cost studies are based on the entire
6 demand and the revenue-per-line calculation assumes
7 that you get lease revenues from everyone.
8 Q. All right. Although your answer just then
9 seemed to me to go over to the other half of the pie.
10 That is, you said somebody might not want land line,
11 and I was thinking that --
12 A. It's when you forecast -- again, it's a
13 difficult question, but when you forecast the
14 foreseeable demand, I would interpret that to mean --
15 and again, other economists could differ, but I would
16 interpret that to mean, given the history of the
17 industry, that that would be the foreseeable demand
18 from anyone who might want to -- want to take
19 wireline telephone service, because you have to be
20 ready to provide that demand. And that would -- that
21 could be just about anybody. That would be a
22 function of the population.
23 Q. But wouldn't there be a judgment involved?
24 That is if, say, half the lines are wireless, you
25 don't need to build or assume the network is going to

1 provide the whole pie, because you know that not half
2 of the -- not all the people of wireline are going to
3 come running over to the land line. So there's some
4 kind of judgment to be made, I take it?
5 A. I would guess so. I'm a little beyond my
6 depth, because I'm not the one who does the cost
7 studies, so I don't know how they interpret, the ones
8 that do the cost studies, interpret the phrase
9 foreseeable demand for telephone service.
10 Q. Okay. I'll ask them. Can you turn to
11 Exhibit 106? That's your rebuttal, page seven. No,
12 excuse me, page 16.
13 A. Yes, I'm there.
14 Q. And I'm looking at lines seven through 14.
15 I guess my question is, on line 13 and 14, this is --
16 the cost of capital is supposed to provide Verizon
17 with a reasonable opportunity to recover its costs,
18 including its cost of capital?
19 A. Yes.
20 Q. And I am wondering how this element here
21 interacts with the additur for the risk, because it
22 seems like you are adding that 3.5 percent or so,
23 because there's a chance you might not get your costs
24 covered?
25 A. Yes, and that the risk is asymmetric, in the

1 sense that you have a risk that they won't be
2 covered, but you don't have the opportunity on the
3 other side, there aren't an excess return. The rates
4 are set so that, in the best of circumstances, you
5 would just cover your costs, and if they are reset
6 prior to the time that you've depreciated your
7 network, which is 17 years, to reflect a lower cost,
8 the supposedly lower cost of a new technology, or if
9 some of your customers decides to take an
10 alternative, such as cable or wireless, then you
11 would not earn your required return.
12 Q. So therefore, -- so therefore, that's why
13 you add the additur, because of potential dropoff?
14 A. Yes.
15 Q. In which case you would not recover, unless
16 you drive up your cost of capital?
17 A. Right, you don't really expect to earn the
18 higher number. If you take the two numbers as being
19 12 and, say, 16, you need to set rates based on a 16,
20 so that you can actually expect to earn 12.
21 Q. Okay. I think I see. My last area of
22 inquiry is just more general. I'm trying to
23 understand the effect of the FCC's TELRIC policy.
24 And I'm going to use an analogy, sort of, which is if
25 it were an FCC directive, binding directive, that we

1 had to deregulate all prices immediately -- that is,
2 assume a fully-competitive market. In a
3 fully-competitive market, presumably, there'd be no
4 regulated rates?
5 A. Yes.
6 Q. And so if we were going to assume a
7 fully-competitive market, we'd say, All right,
8 there's no rates.
9 A. Yes.
10 Q. Now, obviously in -- if, in reality, we
11 didn't have that fully competitive market and instead
12 had a monopoly or someone with monopoly power, the
13 unregulated monopoly could raise its rates, and the
14 monopoly power might be used or potentially could be
15 used such as to squeeze out any competitors, and
16 you'd never reach the stage that you were assuming --
17 A. Yes.
18 Q. -- as full competition?
19 A. Right.
20 Q. And that's why we don't do that. We have
21 gradual lightening of regulation upon a showing of
22 real actual competition?
23 A. Yes.
24 Q. All right. Now I want to move over to
25 TELRIC. And it seems that the FCC, in your view, is

1 saying, You must use TELRIC and assume
2 fully-competitive conditions, and it simply does not
3 matter what the reality is. Am I right so far?
4 A. Yes, you are.
5 Q. Okay. And so if that is correct, is there
6 any analogous effect if there's really a monopoly and
7 there's not really competition, or does the TELRIC
8 pricing kind of work itself out in the right way by
9 prompting leasing of UNEs where that looks good and
10 building other facilities where that's preferable?
11 In other words, under your view, it's not
12 going to matter -- the answer to my question is not
13 going to matter, since we would be bound to do the
14 TELRIC formula anyway, but does it have a negative
15 effect of the type in my analogy?
16 A. Let me take it in several steps, because, as
17 I see it, there are a number of aspects to that
18 question. TELRIC, in itself, which is based on
19 forward-looking economic costs, rather than
20 historical cost, as is rate of return regulation, was
21 introduced because, whether or not the market was, in
22 fact, competitive, they were trying to set prices as
23 if the market were competitive. So they said -- in
24 competitive markets, a firm would look to the future,
25 rather than to the past. So let's base it on

1 forward-looking economic costs, because that's what
2 firms would do in a competitive market. Whether or
3 not this company is competitive, we're trying to
4 replicate the prices in a competitive market.
5 So they said, Well, there are four inputs to
6 a UNE cost study that's going to lead to those prices
7 that are meant to reflect the prices that would occur
8 in a competitive market. There are --
9 Q. Before you go there --
10 A. Yeah.
11 Q. -- I think all you need to do is stay at the
12 level of, All right, assuming those prices, assuming
13 -- assuming we obey TELRIC, as you say we're required
14 to do, and set those prices that way, my question is
15 if real life isn't that way, is there any
16 corresponding consequence as there is in my first
17 example, where, if you deregulate because you're
18 assuming a fully-competitive situation when there
19 really isn't, you can demonstrate pretty clearly, I
20 think, that you're never going to get the competition
21 that you were -- that your model is assuming.
22 A. Okay. The goal of the TELRIC pricing is not
23 only to set prices that approximate the prices that
24 would occur in a competitive market, but to send
25 correct economic signals to the participants. So

1 they said, rather than decide in advance how many
2 competitors there should be, or trying, through
3 regulation, to dictate the outcome, we should let the
4 prices be set to send the correct signal and then, if
5 competition arises, it was because it was good
6 competition. We sent the correct signal, and the
7 competition that arises would be because firms were
8 able to provide telecommunications service at either
9 a lower cost or a higher quality than that of the
10 incumbent.
11 And so the idea was that if we set prices
12 that approximate the prices in a competitive market,
13 we shouldn't care whether there ultimately is
14 competition. The market will take care of that if
15 there are efficient competitors and they have the
16 correct economic signals. We don't try to give them
17 below-cost rates just to get the competition. We set
18 the prices at forward-looking economic cost and then,
19 if they can beat that, if they can provide service at
20 a lower cost, they should enter the market and
21 society will be better off. If they can't do it,
22 they should not enter the market, but we would still
23 have -- we would still have a price system which sent
24 us the right signals so we could efficiently deploy
25 society's resources.

1 Q. In order for all of that to work, is it
2 necessary for the incumbent to have demonstrated it
3 has opened its network up to competitors, a la 271?
4 A. Well, I'm not an expert on all of the
5 aspects of 271, but it should -- the -- my
6 interpretation would be that once you've set the
7 price and you've decided which elements should be
8 offered to the competitors, that is, you decide it
9 should be a loop and it should be a switch, that
10 then, when the competitor orders that switch, it
11 should be provided in a timely fashion at the
12 competitive price.
13 Q. In other words, the execution of the selling
14 of the elements has to also be operational?
15 A. Yes, and if a firm achieves 271 approval,
16 then that supposedly -- they've passed that test.
17 They have met the operational standard that they can
18 provide those elements in a timely manner.
19 CHAIRWOMAN SHOWALTER: Thank you.
20
21 E X A M I N A T I O N
22 BY COMMISSIONER HEMSTAD:
23 Q. I just have a relatively simple question.
24 The risk premium that you describe as required, how
25 does that translate into the price for the stock of

1 Verizon or similarly-situated companies? I take it
2 it would follow from that that the price of that
3 stock is depressed as a result?
4 A. The price -- without -- the cost of capital,
5 let's say, is 12, and if the company doesn't earn 12,
6 their price would be depressed. If they earn 12,
7 their price would stay the same. So if you set rates
8 in this TELRIC environment based on a inputted cost
9 of capital of 16, and you recognize the TELRIC
10 framework that is biased against actually earning the
11 16, the company could actually earn 12, according to
12 my calculations. And in that environment, the price
13 ought to say the same. That is, if you set prices
14 that are based on an inputted cost of capital of 16,
15 that allow the company to actually earn 12, and 12 is
16 the cost of capital, then the stock price would stay
17 the same as it is.
18 Q. I'm not sure I understand what you just told
19 me.
20 A. Okay.
21 Q. Try again.
22 A. Do you want to ask a follow-on question, or
23 should I try to explain it differently?
24 Q. Well, put it this way. If, as a
25 generalization, regulators aren't adequately taking

1 into account the need for the risk premium that
2 you're describing --
3 A. The price will go down.
4 Q. -- the price will go down?
5 A. You're exactly right.
6 Q. And at least in the long run, a random walk
7 down Wall Street and all that kind of stuff, all
8 information is known and priced accordingly so that
9 then the -- if the risk premium isn't acknowledged,
10 then the prices for the stocks will be accordingly
11 depressed?
12 A. Yes, they will.
13 COMMISSIONER HEMSTAD: That's all I have.
14 JUDGE MACE: Commissioner Oshie.
15 COMMISSIONER OSHIE: I don't have any
16 questions. Thank you.
17 JUDGE MACE: Mr. Kopta, Ms. Smith?
18 Redirect?
19 MR. BERRY: No redirect. Your Honor.
20 JUDGE MACE: Yes, I'm going to address it.
21 Under Chairwoman Showalter's examination, you talked
22 about the calculation of the option and the model
23 that was used. Is that available to the Commission?
24 Has that been provided in any discovery or part of
25 your --

1 THE WITNESS: Yes, it has.
2 JUDGE MACE: And could you point us to where
3 that is?
4 THE WITNESS: I'd have to consult with
5 someone to do that.
6 JUDGE MACE: That's possible. Can you track
7 down where that is, and if it's not being made part
8 of the record, we'd want to make a bench request for
9 it.
10 MR. BERRY: We'd be happy to do that, Your
11 Honor.
12 JUDGE MACE: If you'd do that. Thank you.
13 Thank you. You're excused. Let's go to the next
14 witness, which is Dr. Selwyn.
15 Whereupon,
16 DR. LEE L. SELWYN,
17 having been first duly sworn by Judge Mace, was
18 called as a witness herein and was examined and
19 testified as follows:
20 JUDGE MACE: Please be seated.
21
22 D I R E C T E X A M I N A T I O N
23 BY MR. KOPTA:
24 Q. Dr. Selwyn, would you state your name and
25 business address for the record, please?

1 A. Yes, my name is Lee L. Selwyn, spelled
2 S-e-l-w-y-n. My business address is Two Center
3 Plaza, Suite 400, Boston, Massachusetts, 02108.
4 Q. And do you have before you what have been
5 marked for identification with the following numbers,
6 651-T, which is the direct testimony of Lee L.
7 Selwyn, 652 through 656, which are the Attachments 1
8 through 5 to that testimony, and 657-TC, which is the
9 confidential surrebuttal testimony of Lee L. Selwyn?
10 A. Yes, I do.
11 Q. Were those documents prepared by you or
12 under your direction and control?
13 A. They were.
14 Q. Do you have any corrections to make to them
15 at this time?
16 A. Yes, I do. I have two small corrections in
17 -- I guess it's going to be Attachment 4, which would
18 be 655, I believe; is that right?
19 Q. That's correct.
20 A. In Appendix One to Attachment 4, which is
21 about 10 pages into the document -- unfortunately,
22 this page appears not to have a page number on it.
23 There's a table that is identified as Data Underlying
24 Appendix One, and if you go down the list to -- on
25 the left-hand column to the first entry for Qwest,

1 where it says 2H00, which would imply second half of
2 2000, that should be 1H00. In other words, it should
3 be the first half of 2000.
4 And similarly, about five or six pages
5 further on, there's a similar table, identified as
6 Data Underlying Appendix Two, and the corresponding
7 figure there, again, the first Qwest entry, which is
8 shown as 2H00, should be 1H00. Those are the only
9 corrections of which I'm aware.
10 Q. And as corrected, are the exhibits we've
11 identified correct, to your knowledge?
12 A. Yes, they are.
13 Q. If I asked you the questions and requested
14 the same information that are contained in these
15 exhibits today, would you provide that same
16 information?
17 A. Yes.
18 Q. Have you prepared a brief summary of your
19 testimony?
20 A. Yes, I have. I will try to be very brief.
21 JUDGE MACE: Dr. Selwyn, do you want me to
22 give you a 30-second warning or are you --
23 THE WITNESS: That would be fine, although
24 I'm going to do my best to finish in two and a half
25 minutes, so --

1 JUDGE MACE: All right.
2 THE WITNESS: My testimony develops the
3 applicable cost of capital for use in TELRIC studies
4 in a manner that is consistent with the prescription
5 established in the Wireline Competition Bureau's
6 Virginia Arbitration Order. That uses the Capital
7 Asset Pricing model, which I have updated to reflect
8 the very significantly lower market rates and
9 interest and other related rates that have occurred
10 in the three years since the data that underlied the
11 determination in that case was adopted.
12 I have also adjusted the risk premium that
13 the FCC Wireline Competition Bureau had considered at
14 the time to reflect risks that are specific to the
15 telecommunications industry, and more particularly to
16 the incumbent LEC component of the conglomerate
17 Regional Bells, which are -- themselves consist of a
18 number of entities having not themselves in the
19 incumbent local exchange carrier business.
20 Consequently, I've developed a cost of
21 capital I believe is consistent with the Bureau's
22 prescription, and it contains the additional analysis
23 that was expressly requested or suggested by the
24 Bureau at Paragraph 90.
25 In addition, my reply testimony, my

1 surrebuttal testimony on May 12th addresses the
2 suggestion by Professor VanderWeide that his proposed
3 cost of capital is consistent with AT&T's internal
4 cost of capital. And as I point out there, the
5 figure that he cites is, in fact, not a cost of
6 capital at all, but is a project-specific hurdle rate
7 that reflects the unique condition of AT&T, as a
8 non-dominant competitive local exchange carrier, and
9 is certainly not anything that would be remotely
10 applicable to an incumbent TELRIC, as incumbent UNE
11 provider, such as Verizon.
12 JUDGE MACE: You have 30 seconds.
13 THE WITNESS: That completes my summary.
14 JUDGE MACE: Thank you.
15 MR. KOPTA: I move for admission of Exhibits
16 651-T, 652 through 656, and 657-TC.
17 JUDGE MACE: Any objection to the admission
18 of those exhibits?
19 MR. BERRY: No, Your Honor.
20 JUDGE MACE: Hearing none, I'll admit them.
21 CHAIRWOMAN SHOWALTER: Dr. Selwyn, I don't
22 know if it was because of your three minutes or not,
23 but you were speaking pretty fast, so I hope in your
24 answers you can slow down a bit.
25 THE WITNESS: I will try.

1 CHAIRWOMAN SHOWALTER: Thanks.

2 MR. KOPTA: Dr. Selwyn is available for

3 cross-examination.

4 JUDGE MACE: Mr. Berry.

5 MR. BERRY: Thank you, Your Honor.

6

7 C R O S S - E X A M I N A T I O N

8 BY MR. BERRY:

9 Q. Good afternoon, Dr. Selwyn.

10 A. Good afternoon.

11 Q. My name's Brad Berry, and I'm one of the

12 lawyers, as you know, representing Verizon. I'd like

13 to --

14 JUDGE MACE: Mr. Berry, is your microphone

15 on? Would you double check that?

16 MR. BERRY: It is.

17 JUDGE MACE: All right.

18 MR. BERRY: I'll keep it close and speak up.

19 JUDGE MACE: Thank you.

20 CHAIRWOMAN SHOWALTER: Or, you know, another

21 thing to do is get it so it's in front of you, so

22 when you're looking, it will pick up the whole thing.

23 JUDGE MACE: Like this.

24 CHAIRWOMAN SHOWALTER: Yeah.

25 Q. Dr. Selwyn, I'd like to start by looking at

1 an excerpt of the FCC's Triennial Review Order, and
2 we have excerpts of that for you and for the Bench.
3 CHAIRWOMAN SHOWALTER: Mr. Berry, I don't
4 think -- you have to be speaking straight into it, so
5 you have to turn it -- get it so that it's angled at
6 you.
7 JUDGE MACE: It has to -- there you go.
8 MR. BERRY: Thank you.
9 Q. Dr. Selwyn, I'm going to focus on Paragraphs
10 680 and 681. And to read briefly from those,
11 Paragraph 680 says, To ensure that UNE prices set by
12 the states appropriately reflect the risks associated
13 with new facilities and new services, we think it
14 would be helpful to clarify two types of risks that
15 should be reflected in the cost of capital. First,
16 we clarify that a TELRIC-based cost of capital should
17 reflect the risks of a competitive market. The
18 objective of TELRIC is to establish a price that
19 replicates the price that would exist in a market in
20 which there is facilities-based competition. In this
21 type of competitive market, all facilities-based
22 carriers would face the risk of losing customers to
23 other facilities-based carriers, and that risk should
24 be reflected in TELRIC prices.
25 Then, going on to Paragraph 681, the

1 Commission says, We do not agree with AT&T that
2 Paragraph 702 of the local competition order limits a
3 state to considering only the actual competitive risk
4 the incumbent LEC currently faces in providing UNEs.
5 Because the objective of TELRIC pricing is to
6 replicate pricing in a competitive market and prices
7 in a competitive market would reflect the competitive
8 risks associated with participating in such a market,
9 we now clarify the states should establish a cost of
10 capital that reflects the competitive risks
11 associated with participating in a type of market
12 that TELRIC assumes. The Commission specifically
13 recognized that increased competition would lead to
14 increased risk, which would warrant an increased cost
15 of capital. Although Paragraph 702 states that there
16 was limited competition for network elements at the
17 time, it is clear from our discussion of the TELRIC
18 methodology that future competition must be
19 considered in assessing risk.
20 Dr. Selwyn, did I read that correctly?
21 A. I believe so.
22 Q. Now, Dr. Selwyn, the sentence that I want to
23 focus on is the one that says that increased
24 competition would lead to increased risk, which would
25 warrant an increased cost of capital. Do you see

1 that?

2 A. Yes.

3 Q. Do you think, Dr. Selwyn, that that gives --

4 that that mandates that the cost of capital used in

5 setting UNEs be increased to warrant the increased

6 risks of future competition?

7 A. Well, as a general statement, to the extent

8 that there is increased competition in the future or

9 that we are hypothesizing increased competition in

10 the future, for -- specifically for the rate

11 elements, the network elements that will continue to

12 be made available as UNEs, if that competition would,

13 in fact, confront the incumbent with increased risk,

14 then I would agree that it would be appropriate to

15 reflect those increased risks.

16 However, it would not be appropriate and, in

17 fact, would constitute a cross-subsidy of the

18 incumbent's other business activities if risks

19 associated with incumbent activities other than -- or

20 affiliate activities, other than the provision of

21 UNEs, were considered in determining the actual level

22 of risk that was confronting the incumbent in the

23 provision of UNEs.

24 Q. Dr. Selwyn, should this Commission increase

25 the cost of capital to reflect the risk of future

1 competition?
2 A. If it finds that the risk of future
3 competition specifically for those unbundled network
4 elements that Verizon will continue to be required to
5 provide under the Triennial Review Order, as
6 subsequently partially vacated by the D.C. Court of
7 Appeals, to the extent that the Commission finds that
8 those UNEs represent a source of increased risk, then
9 it should make the adjustment that the FCC has called
10 for, but it should not look at the conglomerate
11 Verizon or, worse, a collection of unrelated
12 companies and somehow infer or impute that risks
13 associated with the beer business or the cosmetics
14 business or the cruise line business or the retail
15 chain business have anything at all to do with the
16 risks that Verizon confronts in the provision of
17 those UNEs that -- for which impairment continues to
18 exist.
19 Q. Dr. Selwyn, let's start with the benchmark
20 of the cost of capital that would be appropriate for
21 Verizon Northwest in connection with providing local
22 exchange service in the state of Washington. Should
23 that cost of capital -- would that cost of capital
24 appropriately be increased to reflect future
25 competition, in your view?

1 A. Okay. Let me respond first that I am not
2 offering an opinion here, nor have I undertaken to
3 examine the cost of capital that would apply to
4 Verizon Northwest's regulated services within the
5 Commission's jurisdiction in the state of Washington.
6 That is not the question that I was asked to address,
7 it's not the question before the Commission in this
8 case.
9 What I've done is to apply the methodology
10 that was prescribed in the Virginia Arbitration Order
11 using Capital Asset Pricing Model, updated to reflect
12 current rates and adjusted to reflect risks that I
13 believe are appropriately identified and identifiable
14 forward-looking, prospective risks confronting
15 incumbent local exchange carriers, as captured in
16 market determinations of prices of the conglomerate
17 RBOCs and stand-alone comparables who are in
18 businesses similar to the non-ILEC businesses of the
19 RBOCs.
20 Q. Should the cost of capital be increased or
21 not, Dr. Selwyn?
22 A. I'm going to stand on my answer. I haven't
23 addressed the question that you asked me to respond
24 to.
25 Q. So was your answer I don't know?

1 A. No, my answer is what I said.
2 Q. Now, I'm assuming, from the answer you gave
3 to my first question, that you think it's
4 discretionary whether to increase the cost of capital
5 to reflect the risks of future competition. Is that
6 a fair statement?
7 A. No, it's not.
8 Q. Is it mandatory?
9 A. The Commission, as I understand it, and as I
10 believe to be the case, is to maintain and adopt the
11 methodology set out by the FCC in the Virginia
12 Arbitration Order, which, by the way, is not what Dr.
13 VanderWeide has done. He used an entirely different
14 method that, in fact, was rejected by the Bureau in
15 that order.
16 CHAIRWOMAN SHOWALTER: I'm sorry, but can
17 you be very clear? When you're talking about the
18 Virginia Arbitration Order, I think you said
19 mandated, or maybe not, but is -- just as an
20 elementary proposition, is it the case that you are
21 adopting or endorsing the Virginia Arbitration Order,
22 but not that you think it's binding on us? Is that
23 correct? I just --
24 THE WITNESS: That is correct. The Virginia
25 -- it is my understanding, Chairwoman Showalter, that

1 the Wireline Competition Bureau, in the context of
2 that proceeding, was acting on delegated authority.
3 And its ruling has the effect of law subject to a
4 ruling to the contrary by the full Commission. It's
5 not like an ALJ decision that ultimately has to be
6 adopted. In that order, the Commission adopted --
7 the Bureau, to be more precise, adopted a specific
8 methodology for applying what it considered to be the
9 appropriate method of determining the cost of capital
10 that would reflect the risks that -- of the type that
11 are being described in the paragraphs that counsel
12 cited from the TRO.
13 And what it did in that order was to assume,
14 for lack of further information, that the risks
15 associated with the market, with stocks generally,
16 the S&P 500 in particular, that the average risk was
17 a reasonable surrogate for the risks confronting an
18 ILEC providing UNEs in the face of facilities-based
19 competition. But in that very same Paragraph 90, in
20 which the Commission made that determination --
21 CHAIRWOMAN SHOWALTER: Again, you just said
22 the Commission, and this is where I --
23 THE WITNESS: I'm sorry.
24 CHAIRWOMAN SHOWALTER: You need to be
25 precise here, because when we hear the word

1 Commission, we're assuming the FCC, that is, the five
2 Commissioners, and we ask expressly that if that's
3 not what you mean, be precise.
4 THE WITNESS: Okay. I'm sorry. Again, if I
5 use the word Commission, it is inadvertent. I mean
6 the Bureau acting on delegated authority from the
7 Commission. The point is the order has the same
8 effect as if it were issued by the Commission,
9 subject to a determination by the Commission to the
10 contrary. It is, in effect, an operative, it's not
11 like an ALJ decision, and it is generally being
12 treated in the industry as if it is a Commission
13 order, and that's why I am -- I apologize for being
14 less than precise, but that's the basis for my lack
15 of precision. The Bureau --
16 CHAIRWOMAN SHOWALTER: Mr. Selwyn, or Dr.
17 Selwyn, I really -- I was almost rude in interrupting
18 Mr. Berry's questions. It was on this issue of the
19 wireline versus FCC that I really just wanted to stop
20 you at that.
21 THE WITNESS: Okay.
22 CHAIRWOMAN SHOWALTER: We should turn it
23 back to Mr. Berry.
24 MR. BERRY: Thank you.
25 Q. So the question was is it mandatory or

1 discretionary for the Commission to increase the cost
2 of capital to reflect the risks of future
3 competition?
4 A. I think it is mandatory for the Commission,
5 this Commission, to address the issue of whether
6 competition -- whether and the specific extent to
7 which future competition for unbundled network
8 elements that Verizon will continue to be required to
9 provide justifies an increase in the cost of capital.
10 It is not mandatory for the Commission to adopt a
11 particular risk adjustment. It may determine that
12 the risk adjustment should be more or less than the
13 risk adjustment, for example, that the Bureau had
14 adopted in the -- in the Virginia Order, or it may, I
15 suppose, find that a different method for adjusting
16 for risk might be appropriate, such as, for example,
17 your witness is recommending a totally different
18 method that was examined and rejected by the Bureau,
19 and that is the cancellable lease stuff.
20 Q. So is your testimony, then, Dr. Selwyn, that
21 the Commission should adjust the cost of capital to
22 reflect future competition, but the method that they
23 use in doing that is discretionary?
24 A. Let me be absolutely clear. I believe I
25 stated already, but I'll state it again, the

1 Commission should determine whether or not an
2 adjustment -- whether and the extent to which an
3 adjustment for -- to the cost of capital to reflect
4 the risk of UNEs that Verizon will continue to be
5 required to provide is appropriate and, if it is, it
6 should determine the extent to which -- the amount of
7 such an adjustment. But it is not mandated to
8 conclude, in my opinion, that, in examining the
9 matter more carefully and more thoroughly than the
10 Bureau admittedly, by its own admission, had done in
11 that matter, if it determines that the adjustment
12 should be smaller or perhaps close to zero, then I
13 believe that is within its discretion.
14 Q. Well, Dr. Selwyn, I'm focused on the FCC's
15 Order and not the Wireline Competition Bureau's
16 Order.
17 A. Okay.
18 Q. I'm focused on the paragraphs I just read,
19 and I think correctly, which said that increased
20 competition would warrant an increased cost of
21 capital. So I just want to be clear about that.
22 A. Okay.
23 Q. Would your answer be the same with that
24 understanding?
25 A. Okay. With that understanding and with the

1 recognition that the word increase can be, you know,
2 eight decimal places one, I would probably agree.
3 Q. Now, Dr. Selwyn, you advocate the use of the
4 capital asset pricing model to determine the cost of
5 equity in determining the cost of capital in this
6 proceeding; is that correct?
7 A. Well, to be clear, I do advocate it, but the
8 basis for which I'm -- on which I'm recommending its
9 use here is because that is the method that was
10 adopted upon consideration of alternative methods by
11 the Bureau. And what I've done here is simply take
12 the method adopted by the Bureau and update it.
13 Q. This is -- the Bureau also accepted
14 Verizon's cost of capital number in that proceeding,
15 in the -- the Wireline Competition Bureau; isn't that
16 true?
17 A. I'm not sure to what you're referring.
18 Q. I'm referring to the Virginia Arbitration
19 Order that you've been referring to.
20 A. Yeah.
21 Q. And you have said that you've used the same
22 methodology that the Bureau used. And my question
23 was isn't it true that the Bureau accepted the cost
24 of capital recommendation made by Verizon in that
25 proceeding?

1 A. I don't think so. Verizon was supporting
2 the use of discounted cash flow and --
3 Q. I'm talking about the number, Dr. Selwyn.
4 A. That's not my recollection.
5 JUDGE MACE: Can I just -- it appears to me
6 that this has been made an exhibit in this case, and
7 if you have a citation to the exhibit, that may
8 resolve the issue.
9 MR. BERRY: Your Honor, would I -- if it's
10 okay, I'd like to get that number, but proceed with
11 my questioning and we can come back to it later.
12 JUDGE MACE: Sure, that's fine. I just
13 offered it as a suggestion.
14 MR. BERRY: Thanks very much.
15 Q. Now, in using or proposing the use of the
16 Capital Asset Pricing Model to determine the cost of
17 capital in this proceeding, the model requires that
18 you calculate three variables, is that correct, the
19 beta, the risk-free rate of return, and the market
20 risk premium?
21 A. Yes.
22 Q. And the risk-free rate of return there and
23 the market rate of return are added together and then
24 multiplied by the beta in order to determine the cost
25 of equity using the CAPM; is that correct?

1 A. Yes, that's correct, basically.
2 Q. Now, one of those -- and if the beta goes
3 up, then, therefore, the cost of equity goes up,
4 correct, other things equal?
5 A. And conversely, if the beta goes down, the
6 cost of equity goes down.
7 Q. And if the cost of equity goes down, other
8 things equal, the cost of capital goes down?
9 A. Correct.
10 Q. Now, one of the central premises of the
11 testimony you filed in this proceeding is that the
12 betas for the Regional Bell Holding Companies do not
13 reflect accurately the betas of the ILEC subsidiaries
14 of the other Regional Bell Holding Companies; is that
15 correct?
16 A. Yes.
17 Q. And your thesis is that, because the
18 Regional Bell Holding Companies have diversified away
19 from their core local exchange business in recent
20 years, that fact is what explains the increased betas
21 we've seen for the Regional Bell Holding Companies in
22 the recent past; is that fair?
23 A. Yes, yes.
24 Q. And you performed an analysis to demonstrate
25 that.

1 A. I performed two analyses.
2 Q. You ran -- you ran three regressions to show
3 that the betas of the Regional Bell Holding Companies
4 have been moving upward because they have been
5 diversifying; correct?
6 A. Yes.
7 Q. And those regressions also showed, as you've
8 testified, that increases in local competition,
9 competition for local exchange service, have not had
10 any material impact on the increased betas of the
11 Regional Bell Holding Companies?
12 A. That's correct.
13 Q. And would you say that the conclusions that
14 you reached in those regression analyses are the
15 foundation for the conclusions that you -- the
16 recommendations that you've made in this proceeding?
17 A. As I said, I performed two analyses. The
18 first one I did was the regression approach that I
19 originally presented in a declaration I filed with
20 the FCC about five or six months ago in the TELRIC
21 NPRM. And as a result of some response testimony
22 that came in in that docket, not unlike the response
23 testimony that Dr. VanderWeide has offered here with
24 respect to those regressions, although I don't agree
25 with them, we decided that an alternate approach

1 could be considered in which I attempted to
2 effectively take the conglomerate -- each of the
3 conglomerate Regional Bells and break them up into
4 their principal business components, then apply to
5 each of the non-ILEC components the betas for
6 comparable stand-alone entities, such as, for
7 example, in the case of wireless services, Nextel,
8 AT&T Wireless and Sprint PCS, which are pure wireless
9 carriers that are publicly-traded, and then, through
10 that analysis extract the betas that would be
11 associated with the ILEC component when the non-ILEC
12 components are removed.
13 And the results were consistent with the
14 regression and I believe corroborate the original
15 findings, which is why I think the regression was a
16 perfectly reasonable approach to begin with.
17 The regression, however, additionally
18 demonstrates, and even the rerun of the regression
19 that Dr. VanderWeide did also demonstrates that
20 competition does not affect risk.
21 Q. Is it fair to say that the regression
22 analysis that you ran is an important part of the
23 testimony that you're providing in this proceeding?
24 A. It's one of them, but I think the second
25 analysis is even more compelling.

1 Q. Do you stand by the regression analysis, Dr.
2 Selwyn?
3 A. I stand by it, yes.
4 Q. Okay. Now, the regression analysis that
5 we've been talking about is described in Attachment
6 Four to Exhibit -- let me get it right here.
7 JUDGE MACE: I think it's actually marked in
8 Exhibit 655, if it's the one I think. The one you're
9 referring to is the Technical Description of
10 Regression Analysis?
11 MR. BERRY: Yes, Your Honor. Thank you.
12 JUDGE MACE: It's marked 655.
13 Q. That's described at Exhibit 655; correct --
14 A. Yes.
15 Q. -- Dr. Selwyn?
16 A. That's correct.
17 Q. Now, in doing this regression analysis, you
18 had to determine the extent to which the Regional
19 Bell Holding Companies had diversified away from a
20 their core local exchange service; correct?
21 A. Yes.
22 Q. And the measure that you used to determine
23 the extent of their diversification away from the
24 core local exchange business was the percentage of
25 ILEC and non-ILEC assets held by each of the Regional

1 Bell Holding Companies; right?
2 A. That's correct.
3 Q. And you calculated those numbers based on
4 10-Ks and 10-Qs that the companies had filed with the
5 Securities Exchange Commission; correct?
6 A. In general, yes.
7 Q. Are there -- I noticed you said generally.
8 I want to make sure that I understand any exceptions
9 you're making to that.
10 A. Well, there were some adjustments that were
11 made in the second approach because of limitations on
12 the availability of 10-K data, but, for example,
13 facilities-based competition data came from FCC
14 reports, the betas came from Value Line, and the
15 non-ILEC component, I believe, came from the 10-Ks.
16 Q. And 10-Qs?
17 A. And 10-Qs.
18 Q. And what you did was -- and by the way, did
19 you perform this analysis personally or was this
20 performed by somebody under your direction?
21 A. It was performed under my direction, but
22 with my assistance.
23 Q. And supervision?
24 A. And supervision.
25 Q. You calculated the non-ILEC assets for

1 six-month periods; is that correct?
2 A. That's correct.
3 Q. Okay.
4 A. And in this regression, yes.
5 Q. Okay. Well, that's three regressions,
6 right, because you ran three separate regressions to
7 reach this conclusion that the increases in the RBHC
8 betas had nothing to do with competition?
9 A. Well, in Appendix -- the third one, it was
10 done on an annual basis, because the data wasn't
11 available consistently more granularly than that.
12 That's why I qualified it. But for the first two,
13 it's done on a semi-annual.
14 JUDGE MACE: Dr. Selwyn, I'm having trouble
15 understanding what you're saying.
16 THE WITNESS: I'm sorry.
17 JUDGE MACE: If you could make sure that you
18 keep your tone level and not drop off, that would be
19 helpful.
20 THE WITNESS: For the first two, Regressions
21 One and Two, as described in Exhibit 655, the figures
22 shown are semi-annual. For the third, they're
23 annual.
24 Q. And if we look at the second page of Exhibit
25 655 -- oh, I'm sorry. Exhibit 655 has a couple of

1 appendices; is that correct?
2 A. That's correct.
3 Q. If we look at Appendix One to Exhibit 655 --
4 JUDGE MACE: Apparently somehow this exhibit
5 escaped pagination. I'm not sure how that happened,
6 but --
7 THE WITNESS: Well, there's pagination
8 through, in the technical description, A4-8, and then
9 it continues on with the three appendices. And I
10 apologize. The appendices do not appear to have page
11 numbers, so it's the first appendix following page
12 A4-8.
13 JUDGE MACE: Thank you.
14 CHAIRWOMAN SHOWALTER: What page?
15 JUDGE MACE: There's no page. That's the
16 problem. It's just the first one after April 8.
17 MR. BERRY: If we go to A4-8 and then turn
18 two more pages, you'll be on the page that -- there's
19 a table that says Data Underlying Appendix One, and
20 that's where I want to be.
21 CHAIRWOMAN SHOWALTER: Thank you.
22 Q. Now, this table shows the inputs that you
23 used for your regression analysis; is that right?
24 A. Yeah.
25 Q. And it shows information on BellSouth,

1 Qwest, SBC and Verizon; right?
2 A. Yes.
3 Q. And for each of those companies, it has data
4 for the first and second half of each year, from the
5 beginning of 2000 through the first half of 2000 --
6 well, actually, it's different for the different
7 companies. For BellSouth, you have data from the
8 first half of 2000 through the first half of 2003;
9 right?
10 A. Right.
11 Q. For Qwest, you have data for the first half
12 of 2000 through the second half of '02; right?
13 A. Correct, correct.
14 Q. By the way, I have a question about that,
15 since we're on it. You corrected the Qwest entry and
16 said that the first entry should have been for the
17 first half of 2000, but that leaves us with no entry
18 for the second half of 2000.
19 A. That's correct.
20 Q. And is that intentional or --
21 A. This was the data that was available. There
22 were gaps in the -- in some of the components of the
23 data that we wanted, particularly with respect to
24 betas as a result of mergers. Consequently, we were
25 able -- we only used data where we had consistent

1 data for each of the three variables in a given
2 period.
3 Q. For SBC, we have data from the first half of
4 the year 2000 through the first half of 2003;
5 correct?
6 A. Yes.
7 Q. And then, for Verizon, we have data for the
8 first half of 2000, second half of '02, and the first
9 half of '03; right?
10 A. That's correct.
11 Q. Now, we have -- the inputs that were used
12 were the beta, competition variable, the non-ILEC
13 variable, and leverage; correct?
14 A. Yes.
15 Q. And for the beta, the beta for the periods
16 -- by the way, did the betas come from Value Line?
17 A. Yes.
18 Q. Okay. So the betas are the betas that were
19 observed for the time period that's represented in
20 the year column; right?
21 A. Yes.
22 Q. But the variables, the numbers for the other
23 variables, competition, non-ILEC, and leverage, were
24 lagged by one period; right?
25 A. That is correct, to make them comparable to

1 the beta, because the beta is presented as
2 prospective.
3 Q. Okay. So when we see, for BellSouth, first
4 half '00, and we see the beta, .825, that is the beta
5 for that time period, but the non-ILEC percentage for
6 that time period is actually the non-ILEC percentage
7 for the second half of '99; is that correct?
8 A. That's correct.
9 Q. Okay. And so on for the rest of the numbers
10 on the table; right?
11 A. That's correct.
12 Q. All right. Now, for the end of year
13 numbers, the end of year non-ILEC numbers, so we're
14 talking about the non-ILEC calculation for, let's
15 say, the end of 2000, which would actually show up on
16 your chart as the first half of '01; right? So when
17 you were calculating -- let me stop there. Is that
18 correct?
19 A. I'm sorry. Let me have that question again.
20 Q. I'm saying on this -- this is, again, on the
21 lagging concept.
22 A. Right.
23 Q. So I want to talk about the end of year
24 data. If we are trying to focus on what was the
25 non-ILEC percentage of assets for the end of a

1 particular year --

2 A. Right.

3 Q. -- we would look at the next period -- for

4 example, if we're looking for the end of 2000, we

5 would look at the entry for the first half of '01;

6 right?

7 A. That's correct.

8 Q. Okay. And the end of year data would have

9 been taken from the 10-Ks and 10-Qs that we talked

10 about earlier; is that correct?

11 A. Yes.

12 Q. Dr. Selwyn, with respect to BellSouth, in

13 looking at the non-ILEC numbers, I see that they go

14 from .4719 to .4260, .4170, .3868, .3861, .3670, and

15 then .3. So there was no increase in the percentage

16 of non-ILEC assets for BellSouth; is that right?

17 A. Right, and if you notice, the beta itself

18 also went down during that period.

19 Q. Okay. So in your view, this ties to your

20 conclusion that, you know, that the non-ILEC

21 percentage is reflected -- or impacts the beta;

22 right?

23 A. Yes.

24 Q. Okay. Let's focus on -- let's focus on SBC

25 for a second. I'd like to hand you the 10-K for SBC

1 for the year 2002, which --

2 A. I think you provided that.

3 Q. Yes.

4 JUDGE MACE: Is that -- that's what's been

5 marked 662?

6 MR. BERRY: 662, Your Honor. Thank you.

7 And because it's a big document, we've also prepared

8 some excerpts so that you don't have to flip through

9 all the pages to get to the ones that I want to focus

10 on. and with your permission, Judge Mace, we'd like

11 to set up some blow-ups of certain pages to make it

12 easier for -- easy for the Bench to follow along if

13 you think that might be useful.

14 JUDGE MACE: Let's take a recess of 15

15 minutes while you get that ready.

16 MR. BERRY: Thank you.

17 (Recess taken.)

18 JUDGE MACE: Let's be back on the record. I

19 was advised by Commissioner Hemstad that he'd like us

20 to go ahead. He'd be joining us shortly.

21 Q. Okay. Now, I am -- before looking at the

22 10-K, Dr. Selwyn --

23 JUDGE MACE: You need to adjust your

24 microphone, if you would.

25 Q. Focusing on the table entitled Data

1 Underlying Appendix One, I just want to ask a couple
2 questions before turning to the 10-K. Is it true
3 that the assets -- under this calculation that you've
4 made of non-ILEC, that the assets of the Regional
5 Bell Holding Company consists of ILEC assets and
6 non-ILEC assets? Those are the two categories?
7 A. ILEC assets and anything that was not an
8 ILEC asset was identified as non-ILEC. So in other
9 words, the non-ILEC was calculated as a residual,
10 essentially. That was the intent of the calculation.
11 I apparently have made some errors, but I'm sure
12 we'll learn about them.
13 Q. Now, so if we look at the non-ILEC, just at
14 the top of the page, to take an example, of BellSouth
15 of .4719, .4719?
16 A. Right.
17 Q. That would mean that the ILEC assets of
18 BellSouth for that same time period would be .5281;
19 right?
20 A. Right.
21 Q. Because the two numbers have to add up to
22 one; correct?
23 A. That's what they're supposed to do. Right.
24 Q. Now, what I've done on the blowup that we
25 prepared and on the page that I just gave you, Dr.

1 Selwyn, is to add a heading that says ILEC at the
2 top.
3 A. Right.
4 Q. And I just picked a couple of time periods
5 for SBC, and for those time periods, those being the
6 first half of '03, as reflected in the second column,
7 and the first half of '02, also as reflected in the
8 second column, I have written out, to the right of
9 your chart, the ILEC assets. Do you see that?
10 A. As simply one minus the non-ILEC figure, I
11 assume; is that right?
12 Q. That's correct.
13 A. Okay. That's what they look like.
14 Q. So ILEC for SBC for the first half of '02 is
15 .3881?
16 A. Right.
17 Q. Which, when added to .6119, equals one?
18 A. Right.
19 Q. And ILEC, for first half '03, with regard to
20 SBC, is .3672, which, when added to .6328, equals
21 one?
22 A. Correct. The arithmetic's correct.
23 CHAIRWOMAN SHOWALTER: Can I just interrupt?
24 The chart here and the table in Mr. Selwyn's
25 testimony doesn't label what these are. Non-ILEC

1 what and ILEC what?

2 THE WITNESS: They're fractions. In other

3 words, they're percents, except they're expressed as

4 decimals as opposed to percentages. So in other

5 words, .3672 would imply 36.72 percent.

6 CHAIRWOMAN SHOWALTER: But what? Percent

7 what?

8 THE WITNESS: Oh, of the assets of the

9 parent.

10 CHAIRWOMAN SHOWALTER: So in other words,

11 I'm trying to get a title, either on the whole

12 document or on a column, that describes what it is

13 that's in the column, so what would be the right

14 title for the whole document or a column?

15 THE WITNESS: The column should be Non-ILEC

16 Asset Percentage, or Non-ILEC Asset Share, since

17 these are expressed as fractions and not percentages.

18 CHAIRWOMAN SHOWALTER: Thank you.

19 Q. Okay. Now, we've already talked about the

20 fact that the right-hand variables, those are

21 competition, non-ILEC and leverage, are lagged by one

22 period; right?

23 A. Right.

24 Q. So if we look at SBC first half '03, the

25 non-ILEC percentage that's reflected there would be

1 for the end of the year 2002; right?
2 A. Yes.
3 Q. And that would have come out of SBC's 2002
4 10-K report filed with the SEC; correct?
5 A. Yes.
6 Q. Now, and that's Exhibit 662?
7 A. Correct.
8 Q. I would like for you, if you would, to turn
9 with me to page 266 of Exhibit 662, which, in the
10 excerpt that we handed out, is the --
11 A. I have it.
12 Q. This is for the purposes of the Bench --
13 A. Sorry.
14 Q. -- as much as you -- is the third to last
15 page of the excerpt. And there we see a heading --
16 A. Actually, it appears to be the fourth to
17 last page of mine. I guess that --
18 JUDGE MACE: It says at the bottom 266.
19 THE WITNESS: Yes, I seem to have two copies
20 of 273 on mine.
21 Q. Apologies. I see there's a heading there
22 called Condensed Consolidating Balance Sheets,
23 December 31st, 2002; correct?
24 A. Yes.
25 Q. And would this have been the source of the

1 information that you used to calculate the ILEC
2 percentage and the non-ILEC percentage for SBC for
3 year end 2002?
4 A. I believe so, yes.
5 Q. Dr. Selwyn, we see, if we go down the -- if
6 we go down to the specific listings of assets, we see
7 a line that says Total Current Assets; right?
8 A. Right.
9 Q. And the next line says Property Plant and
10 Equipment, Net; right?
11 A. Right.
12 Q. Next says Goodwill?
13 A. All right.
14 Q. Next says Investments in Equity Affiliates?
15 A. Right.
16 Q. Next says Other Assets; right?
17 A. Yes.
18 Q. And the next one says Total Assets; correct?
19 A. Yeah.
20 Q. And if we stay on the total asset line and
21 go to the far right-hand side column, we see a
22 number, 95,057. Do you see that?
23 A. Yes.
24 Q. And that reflects the total assets for the
25 SBC Regional Bell Holding Company for year end 2002;

1 correct?
2 A. Yes, yes.
3 Q. Now, and you mentioned this, and I just want
4 to reiterate it, that the calculation that you can
5 make based on this information is the percentage of
6 ILEC assets; right? And then you subtract that
7 number from one to derive the percentage of non-ILEC
8 assets; right?
9 A. That's correct.
10 Q. Okay. So the denominator in our fraction
11 will be 95,057; correct?
12 A. Right.
13 Q. And for year end 2002, we are going to use
14 as the denominator a number that, when divided by
15 95,057, will give us .3672; right?
16 A. I believe you misspoke. You meant
17 numerator, but other than that, that's correct.
18 Q. Yeah, the number we're going to use as a
19 numerator will be a number that, when divided by
20 95,057, will produce a result of .3672?
21 A. Right.
22 Q. And that will be our percentage of ILEC
23 assets; correct?
24 A. Yes.
25 Q. Okay. Now, if you add -- if you stay on the

1 total assets line and you go to the second column,
2 you'll see a number there, 17,341. Do you see that?
3 A. Yes.
4 Q. And in the very next column, you see the
5 number 17,567; correct?
6 A. Yes.
7 Q. And if you add those two numbers together,
8 you get 34,908. Is my math right?
9 A. Appears to be.
10 Q. And if we divide that 94 -- excuse me, if we
11 divide that 34,908 by 95,507 -- excuse me, 95,057, we
12 get .3672; isn't that correct?
13 A. Yes.
14 Q. And that's the number we're looking for;
15 right?
16 A. Except it's wrong.
17 Q. Well --
18 A. I'll admit it's wrong.
19 Q. Well, we're going to talk about it still.
20 A. It's wrong, because it appears not to
21 include Ameritech and SNET.
22 Q. Which are very big ILECs. Ameritech, in
23 particular, is a very large ILEC of SBC; correct?
24 A. Last time I looked.
25 Q. They have assets, don't they?

1 A. Well, I think that might be debatable, but,
2 yes, they have assets.
3 Q. They have assets, they operate in a
4 five-state region, Ohio, Indiana, Illinois, Michigan
5 and Wisconsin; correct?
6 A. I've heard of them.
7 Q. And would you agree with me that the assets
8 of those ILEC subs of SBC are greater than zero?
9 A. I imagine so. They're probably comparable
10 in magnitude to -- that's why I realized what the
11 problem is. And it's fairly obvious when it began,
12 because if you look at SBC back on that chart, if you
13 look at SBC for the first half of '01, the percentage
14 there is .4375, and the following half is .6150, and
15 to the best of my recollection, it was in between
16 that period when the Ameritech merger closed, and
17 then, similarly, the jump, as I see it, between first
18 half of '00, and second half of '00, it goes from .39
19 to .43, is when the SNET merger --
20 JUDGE MACE: Dr. Selwyn, can you slow down a
21 little bit?
22 THE WITNESS: I'm sorry. The jump from .39
23 to .43 is when the SNET merger closed, so obviously
24 those apparently were included in Other and were not
25 separately identified and we didn't pick them up.

1 Q. Well, let's let stick on that for just a
2 second, because I want to bring out a couple things
3 that you said. The assets for Ameritech, the second
4 column that has the number 17,341, lists the assets
5 of Pac Bell; right?
6 A. Yes.
7 Q. And the third column lists the assets of
8 Southwestern Bell; correct?
9 A. Correct.
10 Q. Okay. Now, and the Other category includes
11 the other ILECs that are subs of SBC; right?
12 A. Among other things.
13 Q. Right. And if we look at page 264 of the
14 same exhibit, which is, on the excerpt, is the
15 preceding page, we can see there why the assets of
16 Ameritech and Southern New England Telephone are not
17 included separately and are included in the Other
18 column?
19 A. Yes.
20 Q. If you look at Note 14, it says -- the
21 second paragraph, In accordance with SEC rules, we
22 are providing the following condensed consolidating
23 financial information. The Parent column presents
24 investments in all subsidiaries under the equity
25 method of accounting. We have listed Pac Bell and

1 SWBell separately because we have guaranteed
2 securities that are legal obligations of Pac Bell and
3 SWBell that would otherwise require SEC periodic
4 reporting. All other wholly-owned subsidiaries are
5 presented in the Other column. Consolidating
6 adjustment column eliminates the intercompany
7 balances and transactions between our subsidiaries.
8 What they're saying there -- would you agree
9 with me that what they're saying there is because SEC
10 guaranteed the debt of Pac Bell and Southwestern
11 Bell, they had to break out their assets separately
12 and file a report with the SEC regarding those
13 companies; correct?
14 A. I think it's just the opposite. It's that
15 the debt of Pac Bell and SWBell are legal obligations
16 of Pac Bell and SWBell respectively, and they
17 therefore have to file 10-Ks, 10-Qs for those
18 companies, but for SNET and Ameritech, the legal
19 obligations are guaranteed by the parent. Therefore,
20 the subsidiaries do not file 10-Ks. I believe you
21 stated it in the reverse. If I misheard you, then I
22 apologize.
23 Q. Okay. Well, stay with me, because I want to
24 make sure we get this clear. The second sentence of
25 the second paragraph says, We have listed Pac Bell

1 and SWBell separately because we have guaranteed
2 securities that are legal obligations of Pac Bell and
3 Southwestern Bell.
4 A. Yeah, okay. That's what it says, but,
5 again, it's my understanding that the issue --
6 there's a provision -- there's several provisions
7 under which separate reporting is not required for
8 the subsidiaries. One is the number of bond holders.
9 I believe if it's less than 500, then they do not
10 have to file 10-Ks, 10-Qs for those subsidiaries.
11 Pac Bell and SWBell, I believe, have a sufficient
12 number of bond holders that those reports are still
13 required and the other companies do not. I think
14 that's the basis for it. But, again, in any event,
15 they don't separately report it.
16 Q. Okay.
17 CHAIRWOMAN SHOWALTER: Can I ask a
18 clarifying question on this exhibit, please? Bold
19 headings, Parent, Pac Bell, Southwest Bell, Other,
20 Adjustments and Total, are they supposed to be
21 aligned over the columns below them, although they
22 are not?
23 THE WITNESS: I'm interpreting it that way.
24 CHAIRWOMAN SHOWALTER: So there's six
25 columns and six labels and we have to, in our brain,

1 shove them over a couple columns.
2 MR. BERRY: Unfortunately so.
3 CHAIRWOMAN SHOWALTER: Thank you.
4 THE WITNESS: This material is typically
5 obtained from the SEC's so-called EDGAR System,
6 E-d-g-a-r, and I imagine that it's in the -- whatever
7 computer spreadsheet format it is, it's offset
8 somehow in the printing. I'm interpreting it the way
9 you've described.
10 Q. So Dr. Selwyn, I think we've agreed that
11 this .63289 ILEC number on -- for the first half of
12 '03 for SBC is wrong; right?
13 A. Well, in fact, I'm prepared to agree that
14 probably -- certainly the numbers from 2H01 through
15 1H03 for SBC are wrong, and I'm speculating, but it
16 appears that the numbers for 2H00 and 1H01 are also
17 wrong for the same reason, but I'm not as sure -- I'm
18 not certain about that.
19 Q. The mistake that you made overstates the
20 non-ILEC percentage of the SBC -- of SBC; correct?
21 A. Correct.
22 Q. It understates the ILEC assets of the SBC
23 Corporation; right?
24 A. Yes.
25 Q. I think you've already testified that the

1 assets that you left out, principally the Ameritech
2 assets and the SBC assets, are substantial?
3 A. SNET.
4 Q. SNET, Southern New England Telephone, are
5 substantial; correct?
6 A. How substantial they are, I don't know, but
7 they're probably -- certainly the -- Ameritech is
8 probably comparable to the 17 billion figure for Pac
9 Bell and Southwest Bell.
10 Q. Dr. Selwyn, should we ignore your regression
11 analysis with regard to SBC?
12 A. Actually, fixing these errors would probably
13 -- would likely improve my regression, because if you
14 notice, SBC has betas, for the most part, below one,
15 and I think one of the reasons that the regression
16 results, for example, as Dr. VanderWeide redid it
17 without Qwest, produced the result that it did, is we
18 had a situation where the input data showed high
19 non-ILEC percentages for SBC and relatively low
20 betas, and I believe that if we were to make this
21 correction, the model would improve and the results
22 would be more consistent with the hypothesis that I
23 was attempting to test, and I certainly appreciate
24 calling this to my attention.
25 Q. That's all speculation; right, Dr. Selwyn?

1 A. No, it's not. Well, first of all, it's
2 easily tested, and I certainly --
3 Q. Well, you've already tested it once, Dr.
4 Selwyn; right?
5 A. No, I haven't tested it with these
6 corrections. The effect of the corrections is easily
7 tested, but I can tell you that, by inspection of the
8 data, we had here the anomalous situation of
9 relatively low betas for SBC, and the model was
10 looking at high non-ILEC percentages, which is
11 inconsistent with what the model hypothesis was
12 proposing. If we make the corrections that you've
13 identified, and I certainly will do that, then, in
14 point of fact, we will have a situation where we have
15 relatively low non-ILEC and a relatively low beta,
16 which is exactly consistent with the model, and I
17 would expect that the model results would improve.
18 Q. Let's go back to the beginning. The
19 hypothesis you were testing was that the increasing
20 RBHC betas that we've been observing of late were
21 caused not by increased competition, but by increased
22 diversification; right?
23 A. That's correct.
24 Q. We now know that the increased
25 diversification that you purported to calculate is

1 wrong; right? That's wrong. Your numbers are off.
2 A. Some of the data points are off, but
3 correcting them would improve the result of the
4 model. It would almost certainly provide a stronger
5 result, a more -- a stronger regression result than
6 with the erroneous statement, because the corrections
7 are consistent with the hypothesis.
8 Q. So the data would then show that non-ILEC
9 assets have not been increasing, but betas have?
10 A. No, sir. The model is testing the
11 relationship between the beta and the non-ILEC
12 assets, and what it would show is that, for SBC,
13 right now we had a situation where we had non-LEC
14 percentages being fed to the model and relatively low
15 betas, that is, betas below one. That's anomalous to
16 the hypothesis.
17 If we make these corrections, we will have
18 the same betas, which are below one, but now we'll
19 have relatively lower non-ILEC proportions.
20 Therefore, the relationship that the model was
21 attempting to examine will be stronger, not weaker,
22 and the model will produce a more -- a -- it will
23 better satisfy the hypothesis, demonstrate the
24 validity of the hypothesis than would this erroneous
25 data. So I thank you for the correction, because it

1 will improve my ability to make this point.
2 Q. Well, be that as it may, what we do know and
3 have established is that the numbers for SBC are
4 mostly wrong; right? We've established that;
5 correct?
6 A. Yeah.
7 Q. Okay. Now, let's talk about Verizon for a
8 second. Still in Exhibit 662, and you have a couple
9 of appendices there, and also towards the back, I'm
10 going to count this, count out the number of pages
11 from the --
12 JUDGE MACE: Are you talking about your
13 excerpt that you supplied us or the actual exhibit?
14 MR. BERRY: This is the actual exhibit, Your
15 Honor.
16 JUDGE MACE: Okay.
17 THE WITNESS: I'm sorry, 662 is the 10-K,
18 is the SBC 10-K.
19 MR. BERRY: I'm sorry, I've got you on the
20 wrong exhibit.
21 THE WITNESS: Okay.
22 Q. This is 655.
23 A. Okay.
24 Q. You have an attachment there labeled Data
25 Sources that starts 10 pages from the end of the

1 exhibit.

2 A. All right.

3 Q. I think it's ten pages.

4 A. Is there a title to the page?

5 Q. Yeah, it says on the -- at the top left, it

6 says Data Sources.

7 A. Okay. Yes.

8 JUDGE MACE: This is Exhibit 655?

9 MR. BERRY: Yes, Attachment -- Exhibit 655.

10 JUDGE MACE: Is it the attachment for

11 Technical Description of Regression Analysis?

12 THE WITNESS: Yes, it's at the back of that

13 attachment.

14 MR. BERRY: Yes, that's the exhibit, and --

15 JUDGE MACE: I see it.

16 CHAIRWOMAN SHOWALTER: Hold on.

17 JUDGE MACE: It has the number one at the

18 bottom. It's --

19 CHAIRWOMAN SHOWALTER: This, by the way, is

20 why we paginate exhibits. It happens to be my pet

21 peeve.

22 MR. KOPTA: Well, it should be directed at

23 me, instead of counsel for Verizon, so I'll take the

24 tongue lashing.

25 CHAIRWOMAN SHOWALTER: Oh, sorry about that.

1 THE WITNESS: And to me.
2 MR. BERRY: Greg, I was trying to be a
3 gentleman.
4 MR. KOPTA: I appreciate that, Brad, as was
5 I.
6 JUDGE MACE: All right. Has everybody found
7 the Data Sources page in Exhibit 655? Okay. Looks
8 like we're on the page.
9 MR. BERRY: Okay.
10 Q. Let's go, Dr. Selwyn, to the page -- page
11 four of Data Sources. And there -- actually, on page
12 -- it starts on page three. There you're listing the
13 sources of the data from which you calculated the
14 non-ILEC numbers in your regression analysis; right?
15 A. Yes.
16 Q. If we go over to the following page, with
17 regard to Verizon, we see that their 10-Ks from 1999
18 through 2002 are listed.
19 JUDGE MACE: You're talking now about
20 Verizon Communications, Inc. on page four or some
21 other --
22 MR. BERRY: Yes.
23 JUDGE MACE: Okay.
24 MR. BERRY: Verizon Communications, Inc.
25 around the middle of page four.

1 Q. And there we see second quarter 2002 10-Q,
2 second quarter 2001 10-Q, second quarter 2000 10-Q,
3 and then we see Verizon New Jersey, Inc., and there
4 we see, for Verizon New Jersey, Inc., a 2002 10-K,
5 2001 10-K, 2000 10-K, and 1999 10-K. Do you see
6 that?
7 A. Yes.
8 Q. We also see 10-Qs for Verizon New Jersey for
9 the second quarter of 2002, second quarter of 2001,
10 and second quarter of 2000. Do you see that?
11 A. I call attention to Footnote Five at the
12 bottom of page four.
13 Q. We were going to go there.
14 A. Okay.
15 Q. There you say, Verizon Communications, Inc.
16 has 15 other ILEC subs, and then you list them, and
17 you say, Each affiliate filed its 10-K and 10-Q on
18 the same days as Verizon New Jersey. Do you see
19 that?
20 A. Yes.
21 Q. And you know that because you reviewed them;
22 right?
23 A. Yes. Well, my analysts reviewed them, yes.
24 Q. You reviewed them -- he or she reviewed them
25 under your supervision; right?

1 A. Yes.

2 Q. And you were satisfied -- well, strike that.

3 Now, would it surprise you, Dr. Selwyn, to learn that

4 Verizon stopped filing 10-Qs with regard to certain

5 of its subs in 2002?

6 A. Yes. I mean, yes, I'm aware of that, and in

7 fact, I think they may have stopped filing them with

8 respect to others even earlier.

9 Q. Okay. So you were aware of the fact that

10 Verizon stopped filing 10-Ks and 10-Qs for six of the

11 16 subs that you list sometime in 2002; right?

12 A. I believe that's right.

13 Q. Okay. If that's the case, how do you make

14 the statement that each affiliate filed its 10-K and

15 10-Q on the same days as Verizon New Jersey when you

16 have 10-Ks and 10-Qs for Verizon New Jersey listed

17 for 2002, second quarter of 2002? How did you review

18 those if they didn't exist?

19 A. Well, I think, in an attempt to conserve

20 paper, the analyst probably was a little

21 overabbreviated in his description. I suppose we

22 should have listed all of them.

23 Q. This was the analyst who made this mistake?

24 A. Yes.

25 Q. And he was abbreviated in his description,

1 you say?
2 A. Well, I know that he and I discussed the
3 fact that certain 10-Ks stopped being filed, and we
4 attempted to make extrapolations to account for that.
5 So he was aware of it and I was aware of it. And if
6 the footnote is misleading, I apologize.
7 Q. Is the footnote misleading, Dr. Selwyn?
8 A. Well, apparently, it is, to the extent that
9 if it was -- if it is interpreted as implying that
10 every one of the 15 affiliates filed 10-Ks or 10-Qs
11 on the date specified as Verizon New Jersey and some
12 did not, then I guess it is misleading.
13 Q. Isn't that what it says, Dr. Selwyn?
14 A. Well, fine. You got me.
15 Q. May I just have one moment? I want to
16 return to the topic that we promised we'd return to
17 regarding the Virginia Arbitration Order, when we
18 were apparently disagreeing whether the Wireline
19 Competition Bureau had accepted Verizon's number.
20 And I'd like to direct you to Exhibit 127, which is
21 the Virginia Arbitration Order, page 46, Paragraph
22 104.
23 COMMISSIONER OSHIE: Paragraph 104, Counsel?
24 MR. BERRY: Yes.
25 COMMISSIONER OSHIE: Thank you.

1 THE WITNESS: I see it.
2 Q. The FCC accepted Verizon's number; correct?
3 A. But not its methodology.
4 Q. Did the FCC accept Verizon's number?
5 A. It would appear that it did.
6 MR. BERRY: No further questions at this
7 time.
8 JUDGE MACE: Dr. Gabel.
9
10 E X A M I N A T I O N
11 BY DR. GABEL:
12 Q. Dr. Selwyn, I'd just like to begin by a
13 follow-up question on the discussion you just had
14 regarding SBC and how the error of measurements might
15 have influenced your regression analysis.
16 A. Yes.
17 Q. I'd like you to turn to Exhibit 651, Table
18 Two, at page 42.
19 CHAIRWOMAN SHOWALTER: Can you repeat that?
20 DR. GABEL: It's Exhibit 651, which is Dr.
21 Selwyn's direct testimony, page 42, Table Two.
22 THE WITNESS: I have it.
23 Q. All right. Am I correct that, from note
24 two, that initially you had dummy variables for all
25 of the holding companies, but only one was

1 statistically significant, and that was SBC?
2 A. Yes.
3 Q. And could you explain what a statistically
4 significant dummy variable would indicate in this
5 type of regression?
6 A. Well, it would indicate that there's
7 something anomalous about that particular company in
8 this case. In other words, that the SBC results were
9 inconsistent with the rest of the data in the model,
10 which, in fact, is certainly understandable if the
11 underlying data were incorrect.
12 Q. Okay. Then, turning to page 45 of the same
13 exhibit, Table Four, you have dummy variables for
14 Qwest and Verizon, but no longer SBC. The error in
15 measurement problem that you discussed this
16 afternoon, would that same problem exist with the
17 data that you used in Table Four?
18 A. Yes.
19 Q. Given your familiarity with the data, do you
20 have any sense of why the SBC dummy was no longer
21 statistically significant in Table Four, but it was
22 in Table Two?
23 A. I can't answer that in the abstract. You
24 know, these are complex calculations that frequently
25 take on a life of their own and you just see how they

1 work out. It is interesting in this case that we had
2 -- in this case, the SBC was not significant,
3 BellSouth was not significant. It's really -- I'm
4 not sure -- I'm not sure that you can necessarily
5 read any specific conclusion into this, nor, by the
6 way, can you read any specific conclusion into the
7 other -- I mean, certainly a data error of the type
8 that counsel identified is a possible explanation for
9 why the SBC dummy was significant, but it could well
10 be significant even if the data were not in error.
11 We just don't know until we run it.
12 Q. Turning to page 49 of the same exhibit, at
13 line 23, you identify Sprint as an independent
14 interexchange carrier. Do you see that?
15 A. Yes.
16 Q. Now, in the state of Washington, Sprint owns
17 local exchanges. Would those local exchanges be part
18 of the assets and part of the market valuation of
19 this company that you identify at line 23?
20 A. They would.
21 Q. Okay. If -- I guess I'm curious why you
22 chose Sprint, since Sprint not only owns a long
23 distance company, but also owns local exchange
24 companies. Why did you choose Sprint as the firm
25 that was representative of an independent

1 interexchange carrier?
2 A. Well, my recollection is that WorldCom, due
3 to its myriad of problems, that betas were not being
4 reported for WorldCom, and so WorldCom was not a
5 viable choice. And I don't recall why AT&T was not
6 included in that. There may have been a reason. In
7 any event, since the figure is close to one, it
8 wouldn't have mattered one way or the other.
9 Q. And why was that, Dr. Selwyn?
10 A. Well, again, the goal of this analysis was
11 to identify, through the use of comparables, the
12 betas that would have been associated with the
13 non-ILEC components of the Regional Bells for the
14 purpose of extracting from the total parent company
15 beta the non-ILEC component -- the ILEC component. I
16 would refer you to Paragraph 93 of the Virginia
17 Arbitration Order, which I refer to in my testimony
18 at page 47. This is Exhibit 651. The comment that I
19 quote, which begins at line one of that page, is
20 that, Since betas may be thought of as a weighted --
21 JUDGE MACE: Dr. Selwyn, can you slow down,
22 please?
23 THE WITNESS: I'm sorry.
24 JUDGE MACE: Thank you.
25 THE WITNESS: Quote, Betas may be thought of

1 as a weighted average of the betas for each line of
2 business in which they -- and they is referring to a
3 conglomerate company -- operate. So in effect, what
4 I've done is, picking up the cue from the Bureau's
5 language, I undertook to extract the betas for the
6 non-ILEC components of the Regional Bells, leaving me
7 as a residual with the beta or estimate of the beta
8 for the ILEC component.
9 Q. In your analysis, Dr. Selwyn, you look at
10 pure unlevered ILEC data and you have, for example,
11 at page 53, you look at Verizon, SBC, BellSouth and
12 Qwest. Why did you not consider companies like
13 Citizens or Valor or Century, which are also ILECs,
14 to some extent, who are obligated to provide
15 unbundled network elements?
16 A. Well, I felt that the -- again, the approach
17 that I used was not to identify the -- well, let me
18 back up. The right-hand column that says Pure ILEC
19 Segment is the calculated number. In other words, I
20 identified the wireless segment, the broadband
21 segment, the long distance segment and the
22 international segment, and then associated a
23 comparable beta with each of those and then
24 calculated the pure ILEC segment.
25 So why I didn't include the others was that

1 I was looking for companies that were most comparable
2 with Verizon, and those would be, in fact, the other
3 ILECs, you know -- I don't believe -- I'm not really
4 -- I don't know enough about some of the smaller
5 independents to understand the full extent of their
6 business relationship, business structure. For
7 example, as you pointed out, Sprint is in both the
8 long distance business and is in the local exchange
9 business. So I suppose I could have performed the
10 same analysis, but I confined it to the Regional
11 Bell.
12 Q. Okay. Now, Dr. Selwyn, I'd like to ask you
13 turn to Exhibit 657. This is your surrebuttal
14 testimony of May 12th.
15 A. I have it.
16 Q. Page 10.
17 A. I have it.
18 Q. All right. Here you have two firms that
19 sort of stand out, Qwest having a zero long-term
20 earnings growth, and you have AT&T having a negative
21 long-term earnings growth of negative 13.8.
22 Now, earlier today, I was asking Dr.
23 VanderWeide about which firms you include and exclude
24 from a sample, and as I understood, he provided an
25 explanation of why he excluded firms that had a zero

1 or a negative earnings growth. I was wondering why
2 you chose to include two firms that, as I understand,
3 would have been excluded from his sample?
4 A. Well, because my reading of the Virginia
5 order and of the Triennial Review Order is that we're
6 looking for telecommunications firms. And I happen
7 not to agree with Dr. VanderWeide's rationale for
8 excluding companies with zero or less than zero
9 growth forecasts. His explanation that, in effect,
10 the DCF would blow up or just doesn't produce
11 reasonable results under those circumstances is not,
12 in my view, a sufficient reason, because, for
13 example, if the earnings growth were just a teeny bit
14 above zero, then he would have included it, but that
15 would have produced exactly the same kind of
16 anomalous result, as he seemed to be suggesting, as
17 if it was just under zero.
18 It seemed to be an arbitrary position that
19 didn't make any sense. I think we wanted to look at
20 the industry as a whole, and that's why I confined
21 the analysis to the industry as a whole.
22 CHAIRWOMAN SHOWALTER: Can I ask a little
23 follow-up question, because I realize I was going to
24 ask Dr. VanderWeide about that fact. But if he also
25 excluded the bottom quartile and the top quartile,

1 does that have the effect of also excluding the one
2 that's just a teeny bit over zero or not?
3 THE WITNESS: Well, that certainly has that
4 effect, but it also -- remember what he did was to --
5 first thing he did was to exclude financials. As I
6 understand it, first thing he did was to exclude
7 financials. Then the next thing he did was to
8 exclude companies that paid no dividends. Then the
9 next thing he did was to exclude companies that had
10 zero or negative growth. And I may have the sequence
11 wrong, but what we were left with is, by my count, is
12 I believe 104 companies that survived all of his
13 cuts.
14 CHAIRWOMAN SHOWALTER: But I'm not sure you
15 mentioned the last one he did, which was exclude the
16 bottom quartile and the top quartile.
17 THE WITNESS: Well, I think he excluded the
18 below zero ones before he excluded the bottom
19 quartile. That was my point. So in other words,
20 before he even got to the quartile exclusions, he had
21 already gotten rid of the companies with negative
22 earnings forecasts.
23 CHAIRWOMAN SHOWALTER: But I guess my point
24 was, by excluding the bottom quartile, whenever he
25 excluded it, didn't he also -- or I don't know if

1 it's bottom or top, but by excluding both those
2 quartiles, didn't he also then exclude the just over
3 zero companies?
4 THE WITNESS: Oh, okay. Apparently, yes.
5 CHAIRWOMAN SHOWALTER: So isn't it
6 consistent with his idea that the DCF --
7 THE WITNESS: Well --
8 CHAIRWOMAN SHOWALTER: -- only really
9 applies in the middle or only applies well in the
10 middle?
11 THE WITNESS: Well, I don't know whether
12 it's consistent with or inconsistent. I mean, here's
13 the point. The Virginia Order requires -- has a
14 two-part requirement. It requires that the cost of
15 capital be set in relation to the risks associated
16 with telecommunications firms that are -- that
17 confront facilities-based competition. Now,
18 virtually all of the telecommunications firms in the
19 S&P Industrials are in that bottom quarter that Dr.
20 VanderWeide excluded.
21 So it seemed to me that, you know, at a
22 minimum, his very -- you know, one of his cuts
23 essentially was directly contrary to exactly what the
24 Bureau had proposed, because we're really not
25 interested in -- I don't see how the specific

1 prescription is satisfied when you exclude
2 telecommunications firms and include all sorts of
3 unrelated industries, because that doesn't teach us
4 anything about the market conditions and the capital
5 attractiveness and other financial issues confronting
6 telecommunications firms. And the excuse by saying,
7 Well, I excluded the bottom, I excluded the top, and
8 in fact, that actually made the number lower is,
9 quite frankly, completely off point and doesn't teach
10 anything at all.
11 The DCF is not a particularly good approach
12 to developing cost of capital to begin with for all
13 of the reasons that I describe in my exhibit, and the
14 fact that it doesn't work for telecommunications
15 firms by, apparently, by Dr. VanderWeide's own
16 admission, since he excluded all of them, is all the
17 more reason why it shouldn't be adopted.
18 CHAIRWOMAN SHOWALTER: I have some follow-up
19 questions, but I had interrupted Dr. Gabel's line, so
20 I'll wait.
21 JUDGE MACE: I wanted to call the
22 Commission's attention to the fact that it's a little
23 after 5:00, and I wanted to find out what you want to
24 do in terms of going forward with Dr. Selwyn.
25 CHAIRWOMAN SHOWALTER: Keep going.

1 JUDGE MACE: Keep going. All right.
2 Q. Dr. Selwyn, I want to make sure I understood
3 you correctly. Earlier today, in response to a
4 question from Mr. Berry, I understood you to say that
5 the Verizon Arbitration decision by the Wireline
6 Bureau of the FCC did not accept the notion of a
7 regulatory risk premium adjustment. Did I understand
8 you correctly?
9 A. That is my understanding, yes.
10 Q. Okay. Could you identify where in the order
11 -- and if you don't have it right at hand, we can
12 just take it as a bench request. Would you rather do
13 that?
14 A. I'd rather do that, yeah, given the hour.
15 Q. Okay. And even though -- despite the hour,
16 I still sort of want -- I would like to end with the
17 same question that I posed to Dr. Shelanski
18 yesterday. The Commissioners are faced with a lot of
19 complicated questions in a proceeding like this.
20 What type of guidance can you provide, just as an
21 overall perspective, on resolving the objective of
22 the act which promotes price competition versus the
23 objective of the act of promoting facility-based
24 investment? Any just general, but brief suggestions
25 on how to balance off what could be characterized as

1 conflicting objectives?

2 A. Well, I don't believe that the act can be

3 interpreted as promoting facilities-based

4 competition. I think the act is agnostic as between

5 facilities-based competition, resale competition, or

6 UNE-based competition. It seeks to encourage

7 efficient competition, and that would imply that if

8 the UNE prices are properly set, then competition

9 should develop using entrant investment in facilities

10 only where that would be more efficient.

11 So for example, we would expect to see

12 entrants invest in the infrastructure to provide

13 services at retail, because they can do that without

14 suffering the -- the economies of scale associated

15 with retailing telecommunications services are

16 nowhere near as substantial, for example, as the

17 economies of scale and scope associated with network

18 functions. So we can expect to see competition at

19 the retail level even where competition at the

20 network level is not necessarily possible.

21 What the act seeks to do is to encourage

22 competition by making available ILEC network

23 resources where the ILEC is the most efficient

24 producer. And even, for example, the Triennial

25 Review Order, in a portion of it which was not

1 vacated by the D.C. Circuit, expressly recognizes
2 that, in the case of single residential and small
3 business mass market loops, an impairment continues.
4 So now we have this -- almost a Catch 22
5 that the state commissions have been handed by the
6 FCC. The Catch 22 is that you are asked to make an
7 assumption about facilities-based competition for
8 UNEs, at the same time and in the very same order,
9 I'm speaking of the TRO, in which the FCC also
10 decides that where there is facilities-based
11 competition, there is no impairment.
12 So in other words, you're asked to assume a
13 condition that, by definition, if it existed, you
14 wouldn't have to assume because you wouldn't have to
15 get involved in setting rates for these elements,
16 because the ILEC would not be required to provide
17 them as UNEs.
18 So what we're trying to do is to simulate
19 the cost conditions that exist under competition, and
20 that includes things like, in addition to network
21 costs, it also addresses, for example, risk. The --
22 an ILEC that has 90 plus, 95 percent plus of the mass
23 market subscriber lines in an area, either at retail
24 or through UNEs or through wholesale services,
25 confronts enormously less risk and virtually none of

1 this cancellable lease risk that we've been hearing
2 so much about than, for example, a CLEC, which has to
3 construct a network and yet can only expect to serve
4 a very small fraction of the community.
5 If a CLEC wants to go down a particular --
6 provide facilities-based services down a particular
7 street, CLEC has to put cable in place to serve
8 potentially any particular individual customer on
9 that street, even though only a relatively small
10 fraction of them will ever take service. The ILEC,
11 on the other hand, is in a position to take plant
12 that probably costs almost the same amount as the
13 CLEC has to spend and can expect to serve the
14 overwhelming share of the market in that
15 neighborhood, which means that the ILEC is not
16 confronting anywhere near the risk that the CLEC is
17 confronting.
18 The fact that the CLEC might confront a
19 higher cost of capital than an ILEC is exactly why
20 the act provides for UNEs where it is impractical for
21 a CLEC to acquire its own facilities.
22 So we shouldn't be looking at the cost of
23 capital that a CLEC would confront. We have to be
24 looking at the cost of capital that an ILEC of the
25 scale, in this case, of Verizon, of an incumbent LEC,

1 with 95 or more percent share of the market,
2 confronts. And that is the correct way to do it.
3 It's consistent with the act, it's consistent with
4 efficient competition, and a lot of the intrinsic
5 kinds of arguments that have been presented here
6 simply divert the Commission from focusing on that
7 essential point.
8 DR. GABEL: Thank you. I have no further
9 questions.
10
11 E X A M I N A T I O N
12 BY CHAIRWOMAN SHOWALTER:
13 Q. I have a -- well, what I will call a
14 clarifying question, but what I really mean is I want
15 to clarify in my own mind what approach you're taking
16 versus Mr. VanderWeide. And I'm not looking for a
17 critique of his approach; I just want to see if my
18 characterization is correct. It seems to me that he
19 starts, in determining cost of capital, with the
20 generic company in a competitive environment. And he
21 has a method of doing that, which is those middle
22 quartiles. And then he adds on a percentage to
23 reflect particular risks in a UNE-type company.
24 Although, from his description, he -- that additur
25 could have been a negative had we been looking at

1 some other kind of company. But he's basically
2 starting in a competitive environment and making an
3 adjustment.
4 Now, it looks to me as if what you are doing
5 is you start with the risk-free situation, kind of
6 the non-competitive situation, i.e., treasury bonds,
7 and then build up to account for risk. Is that
8 correct? Am I comparing -- am I at least even
9 comparing one approach to another that is trying to
10 achieve the same answer?
11 A. Sort of, but not precisely.
12 Q. Okay.
13 A. And let me -- and I'm not doing this by way
14 of critique, but I will try to describe my
15 understanding of what the discounted cash flow
16 approach that Dr. VanderWeide supports attempts to
17 do. It is not -- he is using generic firms, the
18 mid-range of the S&P industrials, but the DCF model
19 standing alone does not address risk as such.
20 What it does is that it interprets the
21 market price earnings relationship, market
22 expectations of growth and the price that customers
23 are willing to pay for shares of the company's stock
24 as, in a sense, inferentially suggesting whatever
25 level of otherwise unquantified risk the market

1 subsumes.
2 So in other words, you take the price of a
3 stock, whatever it happens to be, you look at its
4 earnings, you look at its earnings growth, that gives
5 you a yield level and a growth level, and whatever
6 level of risk the market has already factored into
7 the price of the stock is captured in the DCF, as he
8 does it, but there's no specific risk parameter, such
9 as a beta, that is involved.
10 What he then does is he then says, Well, now
11 we've done that, but now I'm going to sort of glue
12 onto it a unique risk that he seeks to ascribe to
13 incumbent LECs with respect to the provision of UNEs,
14 which he describes as cancellable leases. And then,
15 having essentially used market -- the already
16 discounted -- risk-discounted prices in developing
17 the DCF, he then tacks this on on top of it.
18 I would argue that that, for a lot of
19 reasons, that's wrong, if for no other reason --
20 Q. But, actually, I'm really not interested in
21 that right now.
22 A. Now, let me describe --
23 Q. I'm just trying to get a characterization.
24 A. All right. What I've done is applied the
25 Capital Asset Pricing Model, which is the method that

1 the Wireline Competition Bureau used. And I would
2 refer you specifically to Table Seven in Exhibit 251,
3 at page 56, which is essentially a summary of what
4 I've done in comparison to what the Bureau did.
5 Q. The Bureau, okay. Well, I'm looking at an
6 even more general level.
7 A. I'm referring you to this in order to
8 respond to your question about how risk gets added
9 here.
10 Q. All right. But can I just take this
11 question --
12 A. Sure.
13 Q. -- to a much more general level?
14 A. Okay.
15 Q. Is it generally the case that Dr.
16 VanderWeide is beginning with a generic company in a
17 competitive situation and then performing a couple of
18 operations on it, whereas you were beginning with a
19 risk-free situation and performing a couple of
20 operations on it? Is that correct? I'm not trying
21 to -- I'm trying to avoid the actual details of
22 things. I'm just trying to -- it seems to me that
23 you're beginning from different starting points.
24 He's starting competitive and analyzing that
25 situation, a totally different methodology, and you

1 are starting in a risk-free situation and analyzing
2 that, and having to then make an adjustment for more
3 risk. Is that correct?
4 A. Well, yes and no. And I'm not trying to be
5 difficult, but yes, this Capital Asset Pricing Model
6 starts with a risk-free return and then adds to it a
7 market-wide risk premium assuming a market-wide beta
8 of one, which is the average risk for the market as a
9 whole. So in that sense, Dr. VanderWeide and I are
10 doing the same thing. In other words, he's looking
11 at the market for purposes of DCF; I'm looking at the
12 market for purposes of a market-wide risk.
13 Q. So is it roughly comparable, by which I mean
14 you can compare -- his middle two quartiles is
15 comparable to the stage of your adding in the beta of
16 one?
17 A. Yes.
18 Q. Okay.
19 A. That's at least roughly comparable.
20 Q. Okay. I'm just trying to think of ways to
21 think about this. I mean, I'm not even pretending
22 that they're the same operation. So you begin with
23 the risk-free, then beta of one, and then ask some
24 questions about how to adjust that in order to get an
25 accurate reflection of cost of capital?

1 A. Right, and there are two issues that I'm
2 looking at in making that adjustment. One is, to the
3 extent that a telecommunications firm, in particular,
4 in this case, an RBOC, differs from the market
5 because the market includes firms in all kinds of
6 other industries that have no particular relationship
7 with telecommunications, and then the second is, to
8 the extent that the telecommunications firm is itself
9 a conglomerate, only one portion of which is actually
10 an incumbent local exchange carrier, which is all
11 that's relevant to being a provider of UNEs
12 confronting facilities-based competition.
13 I'm further disaggregating the risk
14 associated with a conglomerate to exclude the
15 non-ILEC portions of the conglomerate.
16 Q. All right.
17 A. In fact, to take the portfolio apart.
18 Q. Well, I was wondering, when you said it
19 seems wrong to have excluded all of the relevant
20 telecommunications companies by -- when Dr.
21 VanderWeide excluded the bottom and top quartiles.
22 Is it also plausible that it's because the
23 telecommunications industry is not actually fully
24 competitive right now, or it's very lumpy, that that
25 is why the telecommunications companies don't fall

1 into the middle two quartiles?
2 A. Well, that is -- that, I believe, is his
3 argument, and I disagree with it, and let me explain
4 why. The Capital Asset Pricing Model, when we speak
5 of risk, and this also is the way the Bureau spoke of
6 risk in the Virginia Order, we're talking about
7 something referred to as systematic risk. Systematic
8 risk relates -- refers to the variation of a firm's
9 earnings vis-a-vis the overall economy. So that, for
10 example, we're looking at the extent to which a firm
11 will respond in the event of changes in macroeconomic
12 conditions like, you know, a recession or a boom
13 period. That type of variation tends to be far more
14 sensitive to, for example, the so-called income
15 elasticity of the product that a particular company
16 produces than to the level of competition.
17 In other words, a company that is in the
18 business of producing essential goods or services,
19 and the example I use in the testimony is a water
20 utility, will experience very little variation in
21 earnings based on variations in economic conditions
22 generally.
23 A company, on the other hand, that is in the
24 business of producing very discretionary products or
25 services, for example, the travel industry or

1 something of that nature, where -- luxury goods
2 industries, where people tend to cut back during
3 economic slowdowns or are willing to spend
4 disproportionately during boom periods, those will
5 tend to experience relatively high betas. That is
6 the principal source of variation in risk.
7 And what my regression analysis
8 demonstrates, notwithstanding the errors that Mr.
9 Berry pointed out, I don't think it will affect it,
10 is that the extent of competition is not itself a
11 material factor in affecting systematic risk, and
12 it's systematic risk that we're talking about.
13 That's what the Bureau has suggested is the basis for
14 adjustment.
15 So telecommunications -- the
16 telecommunications services generally tend to be less
17 discretionary than other services and, consequently,
18 are likely to exhibit relatively lower betas.
19 Q. And does the fact that a product is more
20 like a commodity or less like a commodity affect
21 that? For example, you know, clothes are one thing
22 and electrons, I would say, would be at the commodity
23 end.
24 A. I don't think so. I think it's more --
25 I think, you know, the real issue is income

1 elasticity. In other words, how likely is somebody
2 -- will demand respond, demand for a product respond
3 to changes in income. The products with high income
4 elasticity will tend to be produced by -- the
5 companies that produce them will tend to have high
6 betas; companies with low income elasticity, that is,
7 where demand remains fairly stable over broad ranges
8 of income levels, will tend to have low betas.
9 That's the principal source of variation.
10 Q. But is it a company that has low elasticity
11 that matters or an industry?
12 A. Well, it's some of both. Larger companies
13 are better able -- industry certainly matters. I
14 mean, in other words, there's no question that the
15 cruise industry or the resort industry or the travel
16 industry are going to exhibit -- or capital goods
17 industries, industrial machinery, products, computer
18 industry, things like that, will exhibit greater
19 volatility with business cycle conditions. But even
20 within a particular industry, companies will exhibit
21 different degrees of variation. A company with a
22 dominant market share, for example, even when faced
23 with competition, will still tend to have less
24 business cycle variation than a smaller company,
25 where a small change in demand can have a very

1 material impact on its earnings.
2 For example, a small CLEC that has --
3 facilities-based CLEC that has a lot of fixed costs,
4 a very small change in demand can have a profound
5 effect on earnings, whereas a large ILEC would not
6 exhibit the same type of earnings variation. So it's
7 a combination of size and industry.
8 Dr. VanderWeide, for example, pointed out
9 his belief that Verizon Wireless has a lower beta --
10 would have, if it were separately traded, a lower
11 beta than AT&T Wireless or Sprint PCS or Nextel. And
12 for the very same reason, we would expect a Regional
13 Bell, a large Regional Bell like Verizon, which is
14 like the 18th largest company in terms of market cap
15 among the S&P 500, would experience a lower degree of
16 systematic risk than a smaller company.
17 And to the extent that those factors affect
18 risk and also affect the degree of efficiency with
19 which an ILEC can provide its services, they have to
20 be considered. And it would be wrong and would
21 produce cross-subsidy if you imputed to an ILEC risk
22 conditions that were characteristic of much smaller
23 firms or firms in different industries that had
24 nothing to do with telecom.
25 Q. And I'm following this, and your discussion

1 seems very rooted in reality, that is, there are big
2 companies and there are small CLECs. And how does
3 that square with the TRO, which seems, anyway, at
4 least on first reading, to call for a fairly abstract
5 price-setting methodology that simply assumes out in
6 the future somewhere, for the purposes of the
7 methodology, that there just is this complete
8 competition, which seems somewhat at odds with the
9 reality that you're talking about?
10 A. Well, I think you have to read the TRO
11 comprehensively and not focus on one or two
12 paragraphs. And read comprehensively, in terms of
13 criteria for determining whether or not impairment is
14 present, we have a situation -- first of all, I'm
15 trying to remember whether it was in the TRO or in
16 the Virginia Order or maybe even both, but my
17 recollection is there was an observation at one point
18 that different UNEs -- maybe it was in the Virginia
19 Order. I will attempt to find it and provide it.
20 The different UNEs or different services can
21 themselves have different degrees of risk. And I
22 don't believe that it is reasonable or appropriate to
23 assume a uniform level of risk across all services.
24 The TRO sets out criteria under which ILECs
25 will be required to provide UNEs and under which

1 ILECs will not be required to provide UNEs. So we
2 start out by slicing off all of the segments of the
3 ILEC's business in which the ILEC is not required to
4 provide UNEs. Obviously, those are the business --
5 those are the segments of the business in which
6 competition is not only perhaps already here, but is
7 considered to have some likelihood of developing.
8 Then we have the segments of the ILEC's
9 business that -- for which impairment continues to
10 apply. And in those cases, the ILEC, and I believe
11 I've cited a paragraph from the TRO to the effect
12 that the ILEC is the most efficient producer of
13 certain services, in particular, loops. So you can't
14 -- while, at a theoretical level, what the TRO is
15 asking you to do, and I'll even suggest correctly so,
16 is to consider the effects of competition. There is
17 no generic effect of competition, not even within the
18 telecommunications industry, let alone across all
19 markets.
20 What the FCC states, at Paragraph 90 in the
21 -- I'm sorry, the Bureau states at Paragraph 90 in
22 the Virginia Order is that, without any evidence to
23 suggest the difference between telecommunications and
24 the industrials as a whole, it will use -- it will
25 assume a beta of one. But I read that as inviting

1 evidence to suggest otherwise, and that's what I've
2 attempted to do here.
3 And so we're looking at, number one, telecom
4 firms exhibit less systematic risk than the market as
5 a whole. Number two, ILECs exhibit less systematic
6 risk than their parent RBOCs. Number three, the
7 segments of the ILEC that are providing those
8 services that are continued to be required to be
9 provided as UNEs exhibit less risk than even the ILEC
10 overall. And that's not to say there's no risk.
11 There is risk. I'm not suggesting otherwise, and I
12 think that, fully consistent with -- that you can and
13 should make a determination as to how much that risk
14 is associated with competition realistically, as it
15 affects that segment of the ILEC's business in which
16 it continues to be obligated to provide UNEs, and
17 that you make an adjustment to the cost of capital
18 for that purpose.
19 But to sort of take these broad -- assume,
20 you know, the conglomerate -- taking the conglomerate
21 BOC and letting its much riskier businesses drive the
22 cost of capital for UNEs, that's pure cross-subsidy.
23 You're basically forcing the monopoly element to pay
24 more so that the competitive components of a company
25 can pay less. That's an absolute cross-subsidy, and

1 you have to disaggregate cost of capital between
2 competitive and monopoly segments, notwithstanding
3 the fact that you need to address what the FCC is
4 asking you to do, and that is to recognize the risks
5 associated with facilities-based competition for
6 UNEs.
7 But recognize, also, that there is that
8 Catch 22, because if there really is facilities-based
9 competition, there's no UNE.
10 Q. All right. But however you have scoped it
11 down in your answer or your discussion just now, do
12 you agree that we are supposed to set prices for some
13 subset of the universe as if there is full
14 competition? I mean, I keep hearing in your answers
15 that we're supposed to look at how much there really
16 is or how much risk there really is, but then I look
17 at this TRO sentence that seems to suggest otherwise.
18 A. Well, I mean, there are degrees of
19 competition in markets, ranging from, you know,
20 cutthroat competition, where there are a whole bunch
21 of firms doing the same thing, let's take the
22 wireless industry for the moment. I mean, wireless
23 telecom, even the largest wireless carrier, which for
24 the moment is Verizon, still only has about a 35
25 percent share. In other industries, in the fast food

1 industries, one of the ones that I had cited,
2 obviously a tremendous amount of competition, and yet
3 all of those companies have betas well below one.
4 So we have to look at -- there is no such
5 thing as competition as a generic matter. It's all
6 relative. The issue here, actually, that you're
7 confronted with and that the FCC is getting at sort
8 of goes to this point that -- I believe Dr.
9 VanderWeide raised several points, and perhaps
10 correctly so. You have -- under the TELRIC rules,
11 you're supposed to reprice based upon forward-looking
12 cost conditions.
13 So sitting here today, we look at the cost
14 conditions as they presently exist and investments
15 that are made and they're going to have a certain
16 life and you go through all the cost models or
17 whatever and you crank out a number. And now, come
18 back three years from now and we take another look
19 and perhaps some of those conditions have changed.
20 Maybe some costs have gone up, maybe some costs have
21 gone down. Well, he's hypothesizing the possibility
22 the costs have gone down.
23 And obviously, if you set a rate based on
24 the assumption that you're going to recover costs
25 over a 17-year period and, in fact, three years later

1 you have to reduce the rate because, on a prospective
2 basis, the costs have gone down, then that creates
3 the possibility that the company will not be able to
4 earn a return on its investment. That's sort of the
5 premise.
6 Now, how do you address that problem. Well,
7 one way to address it is to suggest that the issue
8 relates to depreciation, more so -- depreciation
9 rates more so than cost of capital. If there are
10 realistic prospects, you can make technology and cost
11 trend forecasts that show costs will be going down in
12 the future, that can be addressed through means.
13 That's not a risk issue at all, actually; that's an
14 obsolescence issue that can be addressed through some
15 other process.
16 But there are countervailing factors, as
17 well. The copper, the same copper that is being
18 installed today and is being used for purposes of
19 these cost models, the cost of that copper that's
20 being used to price out UNEs can also be used to
21 provide other services in the future. Broadband
22 services, if we were -- for example, if we were here
23 a dozen years ago and someone suggested you could get
24 six megahertz of bandwidth on a copper loop, they
25 would have thought you were crazy, and yet the phone

1 companies are now doing that with DSL-type offerings.
2 And I understand that there are even now some trials
3 to send video signals over copper pairs.
4 So copper may have a lot more life, and the
5 prospect of having copper go down, the cost of copper
6 go down or the cost of alternates to copper go down
7 has to be offset with the prospect of increasing
8 demand. There are a lot of factors involved.
9 The notion that, you know, taking all of
10 this into consideration, the very kinds of
11 diversification that Dr. VanderWeide suggested made
12 Verizon Wireless less risky than stand-alone wireless
13 companies, also means that an RBOC, even facing
14 facilities-based competition, is less risky because
15 it has more reuse opportunities, not only within the
16 same service, but also to reuse that same plant for
17 other purposes and to introduce new services in the
18 future. By the way, most of which it will not be
19 required to provide as UNEs.
20 Q. When we're looking at an ILEC in a
21 competitive situation, does that situation include
22 the wireless and cable worlds that -- I don't know if
23 that -- if that concept even translates to something
24 numerical, but does the meaning a competitive
25 environment include intermodal competition?

1 A. I don't think it does, for this reason, for
2 a couple of reasons. First of all, in the case of
3 TRO itself, the Commission, the FCC, basically did
4 not indicate that it would consider intermodal
5 competition as a demonstration of nonimpairment, for
6 the most part. So we already -- that's still almost
7 off the table.
8 Also, intermodal competition, to the extent
9 it is present, affects retail services at least as
10 much, if not potentially more, than it affects UNEs.
11 The risk, in a lot of ways, the risk of cancellation
12 is greater for retail services than it is for UNEs,
13 and I can explain why, if you'd like, but the -- I
14 think that's an issue that might come up perhaps in a
15 general rate case, where you're looking at the
16 overall cost of capital, the overall cost conditions
17 affecting the company. I don't see it --
18 Q. Why wouldn't it be relevant, when you're
19 thinking about a network, the land line network of
20 which there must be UNEs, why wouldn't it be relevant
21 that, say, land line, as a share of the whole pie, is
22 shrinking, if it is?
23 That is, if you consider cable and wireless
24 a threat to the share of all of land line, then why
25 doesn't that affect the judgments that we're making,

1 either in models or risks or otherwise, because it
2 might increase the risk that some part of the network
3 that is built will not get used, just as a CLEC might
4 not lease and might build own facility instead, maybe
5 customers, end use customers, will leave the land
6 line network and go over to wireless, and neither the
7 ILEC nor the CLEC will be providing land line?
8 A. Well, to the extent that such risks are
9 perceived by the capital markets to prevail, to
10 apply, they would already be captured, either in the
11 DCF or in the CAPM. In other words, they would be
12 captured in forecasts, they would be captured in
13 betas applicable to telecommunications firms, they
14 would be captured in price earnings ratios. They
15 would already be there.
16 So whether or not we're using the CAPM or
17 discounted cash flow, if used properly, the risks
18 that the market currently perceives applicable to
19 intermodal competition would be captured. In
20 addition, you also have to remember, and this goes to
21 Dr. VanderWeide's point about diversification,
22 Verizon, as I mentioned, Verizon has 35 percent share
23 of the wireless market, so when Verizon loses a land
24 line to -- outright loses a land line customer to a
25 wireline customer, it probably has at least a 35

1 percent chance of picking up that customer in its
2 wireless affiliate. It's also able to use its
3 network to offer new services that weren't even
4 contemplated when the network was first constructed,
5 such as DSL or potentially even video services.
6 All of these factors have to be counted.
7 You can't just sort of narrowly look and say, Oh,
8 well, you know, a land line that goes away is gone.
9 A lot of the land lines that have gone away, if we
10 look at just retail end user access line statistics,
11 have been replaced by DSL, which is, in fact, for the
12 most part, a non-regulated service. So you have -- a
13 customer has two access lines, one of which they
14 traditionally use for the Internet. They get rid of
15 the second one, get a DSL line. The reported
16 statistics suggest that the line went away, but the
17 revenue from that line simply went below the line to
18 DSL, and the company still keeps it.
19 Q. Okay.
20 A. You have to look at the stuff
21 comprehensively. You can't just say I'm going to
22 look at intermodal competition without considering
23 all of these offsetting factors.
24 CHAIRWOMAN SHOWALTER: Thank you.
25 JUDGE MACE: Commissioner Hemstad.

1 COMMISSIONER HEMSTAD: I have no questions.
2 JUDGE MACE: Commissioner Oshie.
3 COMMISSIONER OSHIE: I have no questions.
4 JUDGE MACE: Mr. Berry.
5 MR. BERRY: No questions, Your Honor.
6 JUDGE MACE: Mr. Kopta.
7
8 R E D I R E C T E X A M I N A T I O N
9 BY MR. KOPTA:
10 Q. I have just one for you, Dr. Selwyn. Do you
11 recall a discussion with Dr. Gabel with reference to
12 page 45 of Exhibit 651-T, your Table Four, and the
13 impact of the errors in the SBC data?
14 A. Yes.
15 Q. And as I recall your discussion with him,
16 you testified that the calculations that go into
17 creating this table were too complex to determine how
18 that error would play out. Is that correct?
19 A. Well, as to the specific question that he
20 asked me, which related to the dummy variables.
21 Q. Right. Yet, in discussing with Mr. Berry
22 Exhibit 655, the table that he had shown to you the
23 data underlying Appendix One, you discussed with him
24 what the impacts of the change in the erroneous data
25 would result. Do you recall that?

1 A. Yes.

2 Q. Would you explain why you had a different

3 response to Dr. Gabel than you had to Mr. Berry?

4 A. Yes. Dr. Gabel's question was a very

5 technical question, which related to a variable,

6 so-called dummy variables, which are used in

7 regression models for the purpose of identifying and

8 capturing conditions that do not directly relate to

9 the hypothesized relationship, but that rather may

10 result from other conditions.

11 So for example, we assign separate dummy

12 variables to all but one of the Bells of the

13 individual Bell companies for the express purpose of

14 capturing something, if there may be some attribute

15 of one company that is unique that the regression

16 analysis would then identify and sort of separate out

17 from the principal purpose of the analysis.

18 The issue that I was discussing with Mr.

19 Berry and why I expressed the opinion that the

20 correction would actually improve the regression

21 results is that, if you notice -- remember, the

22 hypothesis we were testing is that the principal

23 source of the increase in beta was the percentage of

24 non-ILEC assets. And the -- which, in fact, the

25 model estimated developed a coefficient for and

1 determined was statistically significant, as I've
2 indicated.
3 If you look at, for example, the figures for
4 BellSouth, where we have betas in the range of .8,
5 .8, .8 -- you know, .8, .7, and we see non-ILEC
6 percentages in the 40 percent range, going actually
7 down to 36 percent range, and similarly we see the
8 betas all staying in roughly that same range, that
9 would suggest, as I've indicated, that relatively low
10 non-ILEC would not have that big an impact on overall
11 risk. We go now to Qwest, where we have -- we
12 started out with -- the first figure's actually a US
13 West figure, before the merger, 14 percent non-LEC
14 and a beta of .75, and then, as soon as the merger
15 takes place, the non-ILEC share jumps up into the
16 high sixties and beta jumps up into the 1.5, 1.6
17 range.
18 For SBC, we were looking at some very high
19 numbers when -- before the error was discovered, and
20 yet we had relatively low betas, which is sort of
21 inconsistent with the hypothesis. So correcting the
22 percentages now produces a result that, by
23 inspection, is pretty consistent with the same
24 results for BellSouth and what I would have expected
25 to happen.

1 And therefore, I think that the model will
2 -- the model results would be better and would be
3 more robust simply because now I'm seeing betas that
4 are consistent with the percent non-LEC that I would
5 expect. Similarly, Verizon, we have somewhat higher
6 beta and the percent non-LEC going from 31 percent to
7 up in the close to 45 percent, and we see a jump in
8 the beta in that situation. That was the basis for
9 my opinion. Obviously, this is something that can be
10 addressed mathematically if we're able to find some
11 source of the Ameritech and SNET data. It's not in
12 the 10-K, but if we can find some alternate source
13 for it and make the appropriate adjustments, I think
14 we can improve this result.
15 MR. KOPTA: Thank you. That's all I have.
16 JUDGE MACE: Mr. Berry.
17 MR. BERRY: Nothing more for this witness,
18 Your Honor, but we would, given the opinion that Dr.
19 Selwyn has expressed twice now, that correcting the
20 errors would actually improve his analysis, Verizon
21 would request the opportunity to recall Dr.
22 VanderWeide, who tells me that he can abide by the
23 five-minute rule to address this one subject. And so
24 we'd request the opportunity to do that, but we don't
25 have any more questions for Dr. Selwyn.

1 JUDGE MACE: Well, before we turn to that
2 topic, I just want to do one housekeeping thing. You
3 presented some cross exhibits for Dr. Selwyn.
4 They're numbered 658 through 664. Do you offer those
5 in evidence?
6 MR. BERRY: We do, Your Honor.
7 JUDGE MACE: Is there any objection to the
8 admission of Proposed Exhibits 658 through 664?
9 MR. KOPTA: No objection.
10 JUDGE MACE: Thank you.
11 MR. BERRY: Thank you, Your Honor.
12 JUDGE MACE: Thank you. Dr. Selwyn, you're
13 excused. Thank you very much.
14 THE WITNESS: Thank you.
15 CHAIRWOMAN SHOWALTER: Was there any
16 objection?
17 JUDGE MACE: Good point. Is there any
18 objection to this proposal?
19 MR. KOPTA: Well, I'd like to know the basis
20 of why Dr. VanderWeide would testify regarding this
21 particular error, this particular analysis. I don't
22 believe he addressed this in his testimony and I
23 don't see how bringing him up now to address this
24 subject that he hasn't addressed before would be
25 appropriate.

1 CHAIRWOMAN SHOWALTER: Well, I've got a
2 question on this. In effect, it's -- Mr. Selwyn has
3 revised his testimony by conceding that some of the
4 figures were wrong and then further stating that, if
5 corrected, it would further support his thesis. I
6 wondered at the time whether we might just ask for a
7 revised table, an exhibit. That's what we often do.
8 Then I sort of wondered whether that affects many
9 little figures throughout the testimony, so I didn't
10 suggest it.
11 But that's one possibility, just let's --
12 instead of having Dr. Selwyn sort of speculate in an
13 informed way and Dr. VanderWeide speculate also an
14 informed way, doesn't a revised exhibit just answer
15 the questions, and then, if there was any need for
16 Verizon to respond to that revised table for some
17 reason, that would be fine. We'd, you know, give a
18 couple days.
19 I was going to ask Dr. Selwyn, well, how
20 long would it take you to do the revised table if you
21 got the data to do it correctly. And you might be
22 discussing among yourselves whether you have an
23 objection to this method or not.
24 DR. SELWYN: In answer to your question,
25 Your Honor, to run the regression would take very

1 little time. My only concern is the data sources
2 that we would need. We can get Ameritech and SNET
3 data from FCC sources, but those are not strictly
4 comparable to the financial reporting because of
5 differences in asset reporting for regulatory
6 purposes and for financial purposes. However, we may
7 be able to make adjustments and come up with some
8 approximation that would allow us to perform it. I
9 believe that it could be done fairly -- either -- if
10 it can be done at all, it can be done fairly quickly,
11 and I will discuss it with my staff and see if we
12 can't get it done quickly and provide it to you by
13 the first of the week.
14 CHAIRWOMAN SHOWALTER: Well, then, is
15 another way to handle this is to let Dr. VanderWeide
16 give his equally informed speculation on what a
17 correction would do, in the event that there might
18 not be a correction, and so, in a way, he'd be on an
19 even plane then. If there is a correction, it comes
20 in, and if anything else needs to be said about it,
21 it could, but at that point I would think we'd be
22 able to see for ourselves.
23 MR. KOPTA: I think that's a reasonable
24 proposition. I think it makes sense to try and
25 correct it if we can and then give Verizon an

1 opportunity to respond. Since Dr. Selwyn's unclear
2 about whether he will be able to do that, then I
3 suppose it's only fair to allow Dr. VanderWeide to
4 have his say.
5 CHAIRWOMAN SHOWALTER: And it's only going
6 to take five minutes.
7 JUDGE MACE: Dr. VanderWeide, you've already
8 been sworn in. Would you just come back to the
9 witness stand?
10 Whereupon,
11 DR. JAMES H. VANDERWEIDE,
12 having been previously sworn by Judge Mace, was
13 recalled as a witness herein and was examined and
14 testified as follows:
15 THE WITNESS: Should I begin?
16 MR. BERRY: I'll pose a question.
17 JUDGE MACE: Go ahead.
18
19 R E D I R E C T E X A M I N A T I O N
20 BY MR. BERRY:
21 Q. Dr. VanderWeide, you heard Dr. Selwyn's
22 testimony to the effect that if he corrected the
23 errors in his regression analysis, that it would
24 produce results that are still consistent with his
25 premise. Did you hear that?

1 A. Yes, I did.

2 Q. Do you agree or disagree with that?

3 A. I strongly disagree.

4 Q. Could you explain why?

5 A. Yes. In a regression analysis, one gets a
6 positive effect if an increase in one variable causes
7 an increase in another variable. In this case, we
8 see, looking at the data underlying Appendix One,
9 which it's kind of hard to explain, because it's not
10 on a page.

11 CHAIRWOMAN SHOWALTER: This is in Exhibit
12 655?

13 THE WITNESS: Yes, and it's Attachment Four.

14 JUDGE MACE: It's the same chart that was --

15 THE WITNESS: Yes.

16 JUDGE MACE: -- up on the easel?

17 THE WITNESS: Yes. And we see that there
18 was an increase from .39 in the non-ILEC asset in
19 1H00 to .6328 in 1H03. And likewise, there was an
20 increase in the beta from .825 in 1H00 to .975 in
21 1H03. So because that increase in the non-ILEC asset
22 was associated with a comparable increase in the
23 beta, it looked, in the regression, like the non-ILEC
24 -- the increase in the non-ILEC asset caused --
25 caused the increase in the beta. However, the

1 increase in the non-ILEC asset was due to an error in
2 the data.
3 So if the non-ILEC asset stayed constant
4 over this period of time, then you would have no
5 increase in the non-ILEC asset associated with an
6 increase in the beta, and we could not say that the
7 non -- an increase in the non-ILEC asset caused an
8 increase in the beta, because there was no increase
9 in the non-ILEC asset.
10 Likewise, with regard to BellSouth, we see
11 that the non-ILEC asset went from .47 in 1H00 to .36
12 in 1H03. So that was a decrease, and yet we see that
13 beta went up from .825 to .900. So we have a
14 decrease in the non-ILEC asset associated with an
15 increase in beta, which disproves the theory. That
16 is, an increase in the non-ILEC asset or the -- which
17 is the opposite, an increase in the -- a decrease in
18 the non-ILEC asset should have caused a decrease in
19 the beta, and in fact, the decrease in the non-ILEC
20 asset caused an increase in the beta.
21 So there's absolutely no doubt, it's just a
22 matter of regression analysis, that if the non-ILEC
23 asset doesn't increase, or if it increases less, at
24 the same time that the beta increases, you will get a
25 lower effect of the non-ILEC asset as an explanatory

1 variable. That is just plain and simple regression
2 analysis, and it's just incontrovertible.
3 CHAIRWOMAN SHOWALTER: All right. Well,
4 then, why don't we get -- have a bench request of
5 getting the revised information from AT&T. It would
6 be a revised table under this exhibit or corrected
7 table under this exhibit. And that was Exhibit 655.
8 And let us know if you can't produce it.
9 THE WITNESS: Well, one difficulty is that
10 there are no reported data for Ameritech or SNET.
11 CHAIRWOMAN SHOWALTER: I see.
12 THE WITNESS: So one just can't correct the
13 data, because they didn't report. SBC did not report
14 separate assets for RB -- for Ameritech or SNET. So
15 one can't easily correct this data.
16 CHAIRWOMAN SHOWALTER: Well, that may turn
17 out to be the answer, but I think we have qualitative
18 -- we have a qualitative discussion at the moment and
19 perhaps there will be a quantitative bit of evidence
20 coming in.
21 JUDGE MACE: Dr. Gabel has asked if he could
22 ask a question.
23
24 E X A M I N A T I O N
25 BY DR. GABEL:

1 Q. Just in case this exhibit cannot be
2 corrected, and I understand that it's a request not
3 only to correct Appendix One, but the associated
4 regressions, and when that's done, there's a full
5 explanation about how the data was created, since
6 there is a question about the availability of data
7 for SNET and Ameritech.
8 But turning to the actual regression
9 analysis and Table Two that I asked Dr. Selwyn about,
10 here we have a negative --
11 CHAIRWOMAN SHOWALTER: Which Table Two is
12 this?
13 DR. GABEL: I'm sorry, page 42 of Exhibit
14 651.
15 Q. Do you have that table before you, sir?
16 A. Yes, I do.
17 Q. Now, you see that the SBC dummy has a
18 negative coefficient value; is that correct?
19 A. Yes.
20 Q. And am I correct in my understanding that a
21 dummy variable says, Well, if you take into account
22 the other variables, facility-based competition,
23 percent non-LEC and leverage, there's something else
24 going on with SBC that lowers the dummy by negative
25 .26?

1 A. Yes.
2 Q. Yes. And I'd like to have your explanation
3 of -- doesn't that mean that, all else -- well, let
4 me see. I'd like you to tell me if my
5 understanding's correct. Doesn't that indicate, all
6 else equal, you would have expected SBC to be higher
7 by 2.6, that is, the beta would be higher by .26, but
8 it was lower than was anticipated, given the value of
9 the other explanatory variables? Would you like me
10 to restate that?
11 A. I believe I understand it. As Dr. Selwyn
12 correctly explained, there are a lot of complex
13 interactions going on and it's difficult to make a
14 simple statement about that. What the dummy variable
15 tells you about is not, however, the slope of the
16 regression; it tells you only information about the
17 intercepts. And so all this -- all it would say is
18 that the constant term would differ between the two,
19 but it doesn't say anything about the regression
20 coefficient, that is, the effect of the non-ILEC on
21 the beta. It just says that the whole curve would
22 move up or down, but it doesn't say anything about
23 the slope of the curve. And the effect that he's
24 talking about, that is, the effect of
25 facilities-based on the beta only has something to do

1 about the slope.

2 So I don't think that whether that SBC dummy

3 is significant or not would have any impact on the

4 relationship between -- on the coefficient that we're

5 interested in, that's the coefficient for the

6 facilities-based -- I mean, the coefficient for the

7 percent of non-ILEC.

8 Q. Let me ask you just one follow-up topic.

9 Are you familiar with the term errors in measurement

10 in regression analysis?

11 A. Yes, I am.

12 Q. All right. If there is an error in

13 measurement, do you know if that biases all the other

14 parameter estimates?

15 A. Yes, it does.

16 DR. GABEL: Thank you.

17 JUDGE MACE: Anything else for Dr.

18 VanderWeide? Thank you. It appears that we have

19 finished with Dr. Selwyn, we've finished with Dr.

20 VanderWeide, and we will adjourn until tomorrow

21 morning at 9:30.

22 CHAIRWOMAN SHOWALTER: Did we give that

23 bench request a number?

24 JUDGE MACE: That would be Bench Request

25 Number Two, actually. The first one has to do with

1 the model regarding the risk premium, and the second
2 one has to do with the revised table for Dr. Selwyn.
3 CHAIRWOMAN SHOWALTER: Didn't David Gabel
4 originally have a bench request?
5 JUDGE MACE: That was the model regarding
6 the risk premium.
7 MR. KOPTA: Excuse me, Your Honor, but I
8 have in my notes that Dr. Gabel's -- or the bench
9 request was where in the Virginia Arbitration Order
10 the --
11 JUDGE MACE: He did make a request for that,
12 but we got that information on the record, so I
13 cancelled that out as a bench request, because that
14 was -- that's been explained.
15 MR. KOPTA: I think it was a different one.
16 JUDGE MACE: I'm sorry. Yeah, I think
17 you're right. I recall now. We did get some
18 information, but that wasn't it. It had to do with
19 where in the Virginia Arbitration Order does the
20 Wireless Competition Bureau reject the risk premium.
21 CHAIRWOMAN SHOWALTER: That's number two.
22 JUDGE MACE: So it's number three that is
23 the bench request for the table.
24 MR. KOPTA: And as Dr. Gabel pointed out, it
25 would be multiple tables, since he was questioning

1 about those in the testimony, as well.

2 JUDGE MACE: Correct. That's my

3 understanding.

4 MR. KOPTA: Okay.

5 JUDGE MACE: All right. We're adjourned

6 until 9:30 tomorrow morning.

7 (Proceedings adjourned at 6:02 p.m.)

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