STATE OF MISSOURI 1 2 PUBLIC SERVICE COMMISSION 3 4 5 TRANSCRIPT OF PROCEEDINGS 6 7 Hearing 8 February 3, 2004 Jefferson City, Missouri 9 Volume 5 10 11 In the Matter of a Commission ) Inquiry into the Possibility of ) Impairment Without Unbundled Loc ) Case No. TO-2004-0207 12 Circuit Switching When Serving the ) 13 Mass Market ) 14 15 16 LEWIS MILLS, Presiding, DEPUTY CHIEF REGULATORY LAW JUDGE. 17 18 STEVE GAW, Chairman, CONNIE MURRAY, 19 ROBERT M. CLAYTON, III, 20 COMMISSIONERS. 21 22 REPORTED BY: 23 KELLENE K. FEDDERSEN, CSR, RPR, CCR ASSOCIATED COURT REPORTERS 24 25

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PROCEEDINGS 1 2 JUDGE MILLS: Go ahead, Mr. Magness. I'm 3 sorry. Let me swear the witness in before you begin. 4 (Witness sworn.) JUDGE MILLS: Thank you. Go ahead, 5 6 Mr. Magness. JOHN F. FINNEGAN testified as follows: 7 8 DIRECT EXAMINATION BY MR. MAGNESS: 9 Good morning. Q. Good morning. 10 Α. 11 Would you please state your name, your Q. 12 business address and by whom you're employed. My name is John F. Finnegan. My business 13 Α. address is 1875 Lauren Street, Denver, Colorado 80202, and 14 15 I'm employed by AT&T. 16 Q. Mr. Finnegan, do you have before you what's been marked Exhibit No. 13 entitled AT&T Communications of 17 18 the Southwest, Inc., TCG Kansas City and TCG St. Louis 19 direct testimony of John F. Finnegan in this docket? 20 Yes, I do. Α. 21 Is this your testimony? Q. 22 Α. Yes. 23 Q. If these same questions were asked of you 24 today, would your answers be the same as they are in 25 Exhibit 13?

1 Α. Yes. 2 Q. Do you have any changes, additions or 3 corrections to make to Exhibit 13? 4 Α. No. MR. MAGNESS: Your Honor, I would move for the 5 admission of Exhibit No. 13, Mr. Finnegan's direct 6 7 testimony. 8 JUDGE MILLS: Are there any objections to the admission of Exhibit No. 13? 9 10 (No response.) 11 JUDGE MILLS: Hearing none, it will be 12 admitted. (EXHIBIT NO. 13 WAS RECEIVED INTO EVIDENCE.) 13 14 BY MR. MAGNESS: Mr. Finnegan, do you have before you what's 15 Q. 16 been marked Exhibit No. 14, that is the AT&T Communications of the Southwest, Inc., TCG Kansas City, Inc. and TCG 17 18 St. Louis, Inc. rebuttal testimony of John Finnegan in this 19 docket? 20 A. Yes. 21 Is this your testimony? Q. 22 Α. Yes. 23 Q. If I asked you the same questions as are in 24 Exhibit 14, would you provide the same answers if those 25 questions were asked today?

1 A. Yes.

2 Q. And do you have any changes, corrections or 3 additions to make to Exhibit No. 14? 4 I have a correction to make to what was JFF Α. Exhibit 8 in Exhibit No. 14. 5 And is this change contained in a revised 6 Q. 7 version of that JFF-8 that has been distributed to the 8 parties? 9 Α. Yes. MR. MAGNESS: And, your Honor, just for the 10 11 record, I did provide this to counsel last week when we were 12 here, thinking maybe we would get there last week, but it 13 has been distributed to the parties, and I would ask basically what your pleasure is how we mark it, whether we 14 15 should mark it as an exhibit or just attach it to 16 Exhibit 14. JUDGE MILLS: Why don't we go ahead and mark 17 18 it as a separate exhibit? I think that might be easier. 19 MR. MAGNESS: Okay. Then that would be 20 Exhibit --21 JUDGE MILLS: 33. MR. MAGNESS: -- 33, the revised JFF-8 exhibit 22 23 to Mr. Finnegan's rebuttal testimony. 24 JUDGE MILLS: And that's this one that you 25 handed me this morning?

1 MR. MAGNESS: Yes, your Honor. It's a 2 three-page document, spreadsheets, that's entitled at the top Missouri Crossover Analysis. 3 4 BY MR. MAGNESS: Did you prepare the document that's been 5 Ο. marked as Exhibit 33, Mr. Finnegan? 6 7 Α. Yes. 8 And would you explain for the record what Q. 9 alterations you made to this schedule between the filing of your rebuttal and today? 10 Sure. In the third box down entitled UNE DS1. 11 Α. 12 Loop rates, in the third column from the left side, there's a column entitled NRC that has a value of \$102.47 populated 13 in the four rows of Zone 1, Zone 2, Zone 3, Zone 4. That 14 15 number on the original Exhibit JFF-8 had been \$123.77. I 16 changed it to reflect Mr. Fleming's preferred nonrecurring charge for a UNE DS1. The net effect of that for the 17 18 amortized DS1 rate was the nonrecurring cost after it was 19 amortized went down \$1. It was \$5.84; it went down to \$4.84. 20 And where is that -- is that number reflected 21 Q. 22 in this exhibit? 23 Α. Yes. In the second column from the right in

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the UNE DS1 loop rates, there is a column entitled monthly

amortized NRC, and that shows a value of \$4.84 for the four

24

1 rows of Zone 1, Zone 2, Zone 3 and Zone 4.

2 Q. What prompted you to make this change? 3 It was after reviewing Mr. Fleming's Α. testimony, the nonrecurring charge that he appeared to 4 prefer was the \$102.47. The original nonrecurring charge 5 6 that I had was a combination of the DS1 nonrecurring charge 7 and what's called a central office access charge, or COAC, 8 it was my understanding that SBC generally applies in 9 situations like this where there is an unbundled loop that is worked on by SBC technicians. 10 11 After reviewing Mr. Fleming's testimony and 12 noting that he did not include the central office access 13 charge, my understanding was that SBC does not charge a central office access charge for any loop work, and I 14 removed it from the model. 15 16 Were there any other issues in Mr. Fleming's Q. rebuttal testimony that prompted any other changes in your 17 schedule? 18 19 Yes. There was a second change in the UNE DS1 Α. loop rates chart. Again, it's in the row entitled loop 20 cross connection cost per DS1 connection. It's in the third 21 22 column from the left. The nonrecurring charge that I had 23 used in the original model was \$45.03. Mr. Fleming's 24 preferred number was \$60.04.

25 The \$45.03 charge that I used was taken from

the interconnection agreement known as the M2A, the Missouri SBC interconnection agreement. The \$45.03 charge is an acceptable and applicable charge for cross-connecting a loop from the SBC main distribution frame to the collocation.
That charge was taken from the M2A.

6 Mr. Fleming's preference appeared to be to use 7 a different type of cross-connect option. So to minimize 8 the number of disputes, I changed the monthly NRC for the 9 DS1 cross-connect from \$45.03 to the \$60.04 value that's 10 seen in the loop cross-connection cost per DS1 connection 11 row.

12 The net effect of that change from the 13 original Exhibit JFF-8 to the revised Exhibit JFF-8 was a reduction of -- or excuse me -- an increase in the 14 15 nonrecurring charge of 71 cents. It had been \$2.13. It was 16 now \$2.84. So the net effect of the two changes to the DS1 nonrecurring charges to reflect Mr. Fleming's preferred 17 18 options was the monthly nonrecurring charge went up 19 29 cents.

20 Q. Are there any other changes reflected in this 21 revised exhibit?

A. Yes. On the second page, there was a new table or new box added, the UNE-P NRCs. When I had done the original model, it was an oversight. I was unaware that there was a charge, a nonrecurring charge for UNE-P, and

1 after reading Mr. Fleming's testimony, I recognized that 2 oversight and added the new table which indicated what the 3 NRCs were, and then similar to other NRCs in the model, those were amortized and it ended up with a monthly 4 amortized rate per line of 50 cents for UNE-P. 5 That was added to the UNE-P cost that was used 6 7 for the crossover analysis. After the 29 cent increase in the DS1 costs and the 50 cent -- 50 cents increase in the 8 9 UNE-P cost, that dropped the crossover point from 13 to 12. So your overall recommendation of 13, it is 10 Q. now your testimony that your recommendation for the 11 12 crossover or cutover number of lines would be 12; is that 13 correct? 14 That is correct. Α. 15 Q. That is after the incorporation of all these 16 changes? 17 Α. Yes. MR. MAGNESS: Your Honor, I would offer into 18 19 evidence Exhibit 33, the Missouri Crossover Analysis revised JFF-8. 20 21 JUDGE MILLS: Are there any objection to the 22 admission of Exhibit 33? 23 (No response.) 24 JUDGE MILLS: Hearing none, it will be 25 admitted.

(EXHIBIT NO. 33 WAS RECEIVED INTO EVIDENCE.) 1 2 MR. MAGNESS: And, your Honor, I would tender 3 Mr. Finnegan for cross-examination. 4 JUDGE MILLS: Mr. Lumley? MR. LUMLEY: No questions, your Honor. Was 5 Exhibit 14 received as well? 6 JUDGE MILLS: 14? No. I don't show it as 7 received. Are there any objections to the admission of 8 Exhibit 14? 9 10 (No response.) 11 JUDGE MILLS: Hearing none, Exhibit 14 is 12 received. 13 (EXHIBIT NO. 14 WAS RECEIVED INTO EVIDENCE.) 14 JUDGE MILLS: Thank you. Sage? 15 MS. MUDGE: No questions, your Honor. 16 JUDGE MILLS: Staff? MR. WILLIAMS: Thank you, Judge. 17 CROSS-EXAMINATION BY MR. WILLIAMS: 18 19 Good morning, Mr. Finnegan. Q. 20 Good morning. Α. Whenever you perform your analysis of the 21 Q. 22 appropriate crossover from mass market to enterprise 23 customers, did you consider data other than that from SBC? 24 Α. No. 25 Q. Would you give me a definition for DS0?

1 Α. My definition of DSO is the rate data can be transmitted over a facility; 64 kilobits per second is the 2 3 DS0 rate. 4 Ο. And DS1? DS1 is a rate, a higher rate. It's 5 Α. 1.544 megabits per second. 6 7 Q. So under your definition both DSO and DS1 are digital lines; is that correct? 8 9 Α. Yes. Would you turn to page 6 of your rebuttal 10 Q. testimony, which I believe has been marked as Exhibit 11 No. 14. 12 13 That was rebuttal? Α. Yes. There you discuss how you calculated 14 Q. 15 the UNE-P cost that you used in your analysis of the 16 multi-line -- well, that you used for determining the mass market/enterprise market crossover point, do you not? 17 18 Α. Yes, I do. 19 How would this analysis apply in non-SBC Q. Missouri areas of the state? 20 21 In the non-SBC areas of the state -- and I Α. 22 must admit I'm not familiar with some of the contractual 23 arrangement that Sprint or CenturyTel would have. But if I 24 were to perform this analysis for the non-SBC areas of the 25 state, I would attempt to identify what their two-wire

1 analog loop recurring rate was, their analog switch port 2 recurring rate, and their usage-sensitive recurring rate 3 elements, find out if they had, similar to SBC, a cost for 4 delivery of white pages and then calculate those numbers for the individual ILECs involved. 5 6 So you would determine a crossover point ILEC Q. 7 by ILEC, is that what you're recommending to the Commission? 8 Α. Yes. 9 Also on page 6 of your rebuttal testimony, at Q. line 21, you refer to a number of 1,668 minutes of use? 10 11 Α. Yes, I do. Did you include any supporting information for 12 Ο. 13 your use of that figure in your testimony? I described generally the types of calls that 14 Α. 15 were included in the analysis. 16 Q. How did you arrive at the figure of 1,668 minutes? 17 18 I received that figure from some of AT&T's Α. 19 folks that had been working on what we call the DSO 20 impairment model or DS0 impairment tool that is calculating what the amount or degree of impairment is on a 21 22 state-by-state basis. And in calculating the DSO 23 impairment, one of the factors that go into it is the 24 switching cost and the transport cost. To the extent that 25 those are minute-of-use sensitive, it comes up with a DSO

value. I received that number of 1,668 from one of the
 gentlemen that is running that DS0 model.

3 Q. Do you know what went into arriving at that 4 figure of 1,668 minutes?

That went into -- that included some FCC -- I 5 Α. 6 might get the acronym name a little wrong -- DEM or DEMS 7 minutes. There was also some internal AT&T data. Generally they attempted to use FCC data where it was possible on what 8 9 ILECs were reporting for minutes of use, and overlaid on top of that was some AT&T information where we may not have had 10 11 from the publicly available information all the information 12 we needed.

13 Q. Are you able to provide any more specificity 14 as to how you arrived at that 1,668 minutes than what you've 15 just testified to?

16 A. Not at this time.

Q. Would you please define UNE-P for me?
A. UNE-P is a combination of network elements
that allows a CLEC to offer a complete finished service
through that combination of network elements.

21 Q. And what combination of network elements are 22 those?

A. Generally it would be loop, switching andtransport, perhaps signalling.

25 Q. If I understand your analysis correctly, you

1 looked at a cost based on UNE-P cost versus DS1 cost; is
2 that correct?

3 A. That's correct.

4 Q. Why did you choose UNE-P as opposed to DSO,5 which it appears the FCC may have suggested?

A. I don't -- No. 1, I don't believe the FCC suggested that. I think they were loose with their terms of DSO and analog lines and voice lines. If you examine the rule, when they talk about the DSO, they talk about the DSO line used with unbundled switching. You're trying to figure out when you can no longer use the DSO line with unbundled switching.

When you have a combination after a loop and unbundled switching, to me that's UNE-P. So I don't necessarily agree that the FCC suggested that the analysis should be done on an unbundled loop to DS1 basis, rather than a UNE-P to DS1 basis.

18 Second point is, from a practical perspective, 19 what we're here to determine is, in identifying where the 20 enterprise market starts and the mass market stops, the 21 practical effect of that is one the enterprise market is 22 deemed to have started, CLECs are no longer entitled to get 23 switching at TELRIC rates.

24 So if the exercise is to find out when you can 25 no longer use UNE-P, it only stands to reason that the

1 analysis should start with UNE-P as the -- one of the 2 elements of the comparison to determine when it's more 3 economical to use a DS1 versus UNE-P.

If you're doing it unbundled loop to DS1, from CLEC perspective, UNE-P wouldn't be relevant, if your intent was to offer UNE loop all along. So it's sort of a stilted comparison or an inappropriate comparison to compare a UNE loop to DS1 when really what we're talking about is UNE-P and mass market switching.

Q. On pages 7 and 8 of your rebuttal testimony, which is Exhibit No. 14, you discuss your supporting assertions for the cost differential between marketing to mass market and enterprise customers. How did you arrive at your figure of \$625 for the marketing cost differential that you provide on page 6 at lines 9 through 10 of your direct testimony?

A. That was derived through an estimate that I
had made and that I had checked with some of the AT&T folks
that do project management for this type of service.

20 Q. How did you arrive at your estimate?21 A. The estimate was based on discussions I had

22 with some of the internal product folks.

23 Q. What information went into arriving at your 24 estimate of \$625?

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A. The information that went into the estimate

1 was a Bank of America securities report that talked about 2 what the acquisition costs were per gross ad for UNE-P. 3 They had estimated it was about \$125 per gross ad. After discussing it with some of the internal AT&T folks and 4 5 reading some of the information that's out there on this 6 type of DS1 integrated access service, it became clear to me 7 that there was significantly more effort involved in selling and marketing to DS1 customers than it was to mass market 8 9 customers. The estimate was an attempt to reflect that increase, with a check with the internal AT&T product folks 10 for the DS1 product. 11 12 Ο. Could you be more specific about the 13 information you relied on for the DS1 customer cost that you used to arrive at your differential of \$625? 14 15 Α. It was a straight multiplication of the UNE-P 16 rate times six. Why did you use a factor of six? 17 Q. 18 It was an estimate. What I'd like to point Α. 19 out, as well as the marketing cost, I had done a quick 20 sensitivity analysis last night. The model is easy enough 21 where you can change numbers around. The marketing cost, if 22 you drop it to \$260, it still remains at 12 lines. The 23 marketing cost from \$625 to \$260 are not that sensitive, or 24 the crossover point is not that sensitive to the marketing 25 costs.

1 I'll admit it was an estimate. It's not 2 necessarily based on what I would have liked to have had for 3 the information, but if folks have a preferred marketing cost they could apply, they could easily apply it to the 4 model in this case. You could drop it from 625 all the way 5 to 260; it would not affect the crossover. 6 7 MR. WILLIAMS: No further questions of this witness at this time. 8 9 JUDGE MILLS: Sprint? MS. HENDRICKS: No questions, your Honor. 10 JUDGE MILLS: SBC? 11 12 CROSS-EXAMINATION BY MR. LANE: Good morning, Mr. Finnegan. 13 Q. Good morning. 14 Α. 15 Q. In your direct examination you indicated you made some changes in JFF-8, and the first two or three of 16 17 those you indicated because those were preferred by 18 Mr. Fleming. Do you recall that? 19 Α. Yes, I do. 20 And when you say they were preferred by Ο. 21 Mr. Fleming, you didn't make the changes simply because he 22 preferred them, did you? 23 Α. Yes. I made the changes because he preferred 24 them, and that appeared to be reasonable charges in the case 25 of the central office access charge. Given that Mr. Fleming

1 did not include it in his analysis, I assumed Mr. Fleming 2 would know that SBC does not charge a central office access 3 charge when there is an installation of a DS1 unbundled 4 loop.

5 Q. You made the change in the nonrecurring cost 6 for UNE DS1 loop rates because the figure that was utilized 7 by Mr. Fleming was correct, not just because he preferred 8 it, right?

9 A. No, that's not true. The number I used, the 10 combination of the DS1 nonrecurring cost plus the central 11 office access charge, was correct.

12 Q. It's not correct if it's not charged, right?
13 A. It was the correct charge for the central
14 office access charge. That it was not charged was, to me,
15 indicated by Mr. Fleming's failure to include it or identify
16 it in his cost analysis.

17 Q. The \$102.47 figure that you used on your 18 replacement Exhibit 8, which I think is Exhibit 33, that's 19 from the M2A, correct?

20 A. I believe so. I can't remember if I used the 21 M2A itself or if I just relied on Mr. Fleming's number, but 22 I'm assuming it's the M2A number.

23 Q. You didn't check the M2A?

A. No. I was hoping Mr. Fleming was right.

25 JUDGE MILLS: Mr. Lane, are you going to ask

1 to have that marked?

2 MR. LANE: Yes, your Honor. 3 JUDGE MILLS: This will be, I believe, 4 Exhibit 34. (EXHIBIT NO. 34 WAS MARKED FOR IDENTIFICATION 5 BY THE REPORTER.) 6 BY MR. LANE: 7 8 Q. Mr. Finnegan, I've handed you an exhibit marked as Exhibit No. 64. 9 10 JUDGE MILLS: 34. BY MR. LANE: 11 I'm sorry, 34. Appendix pricing UNE schedule 12 Ο. of prices from the Missouri M2A agreement. Do you recognize 13 that as something that you reviewed in the course of 14 15 preparing your testimony in the case? 16 A. Hold on a second. I want to review a couple of footnotes. No. This would not be the exhibit I relied 17 18 on. 19 Q. Did you rely upon the M2A schedule of prices 20 UNE in preparing your testimony in the case? 21 I relied on the June 27, 2003 version. This Α. is an August 16th, 2001 version. 22 23 Q. All right. Let me ask you to take a look 24 at -- in Exhibit 34 the first page under the four-wire 25 digital loop in Zone 1.

1 MR. MAGNESS: Your Honor, I'm going to object to the line of questioning. Mr. Finnegan examined the most 2 3 recent price schedule that's currently in effect for CLECs under the M2A. Mr. Lane is showing him an old schedule, 4 5 which we've just established he's showing him a 2001 6 schedule, which I think, if you review the footnotes, you'll 7 see is both not current, and two, not what Mr. Finnegan 8 examined. 9 So I'd object to its entry into evidence or its use to question Mr. Finnegan about M2A rates when he's 10 asking him to look at a document that's not the one 11 12 Mr. Finnegan reviewed. 13 JUDGE MILLS: Mr. Lane? 14 MR. LANE: The ones I'm going to ask him about 15 weren't changed, your Honor. That's what I was going to go 16 through with him line by line, since he's not agreed to it. 17 And in any event, I can ask the Commission to take official 18 notice of this. It's something that was filed with and 19 approved by the Commission and formed part of the M2A when 20 the Commission approved it. 21 JUDGE MILLS: Explain to me the purpose of 22 going through the old rates as opposed to new rates, if 23 these are, in fact, old rates. 24 MR. LANE: They haven't changed. The ones he 25 dealt with in his testimony didn't change, your Honor.

1 MR. MAGNESS: Now Mr. Lane is testifying about 2 what the current rates are, rather than showing the witness 3 something that's actually in effect. I'd add, I think it 4 would be more appropriate to show Mr. Finnegan what he 5 actually testified he reviewed to test his knowledge of what 6 he reviewed, rather than something he did not review.

JUDGE MILLS: Well, I mean, you can show a witness anything you want. If he hasn't reviewed it and he's not familiar with it, then there won't be a foundation for it, but certainly Mr. Lane can ask him questions about it. I'm not going to prohibit questioning based on that, but it may certainly go to the admissibility once we -- if we get to the point where it's going to be offered.

And I still must confess that I'm a little baffled about why we're using outdated rates if, in fact, these are outdated rates.

MR. LANE: They're not. I can cover this with the witness, your Honor. If you look at the note column on the left, on the first column on all of these it identifies what rates are permanent and what rates are subject to change. If you go to the last page, you look to see what that note means, some of them are permanent, some of them were subject to change in the 438 case.

24 The rates that I'm going to discuss with him 25 were not changed. They're not marked as being subject to

1 change. They're marked as permanent. They are the rates 2 that are in effect today, because they were not made subject 3 to change in the subsequent docket. 4 JUDGE MILLS: Okay. And, Mr. Finnegan, you looked at a document similar to this with a different date; 5 6 is that my understanding from Mr. Magness' objection? 7 THE WITNESS: I looked at a document with a 8 different date. I don't know how similar or how different 9 they were. 10 JUDGE MILLS: Well, I think we can proceed 11 with questioning based on this. 12 BY MR. LANE: 13 Referring you on the first page of Exhibit 34, Q. under the first column or the first box, fourth one up from 14 the bottom, four-wire digital Zone 1, do you see that entry? 15 16 Α. Yes, I do. Shows a monthly recurring charge of \$91.06. 17 Q. 18 Do you see that? 19 Yes, I see it. Α. 20 That's what you utilized in your testimony, Ο. 21 was it not? 22 Α. Yes. 23 Q. If you look to the left of that, it's marked 24 note 1A. Do you see that? 25 A. Yes.

1 Q. If you look to the last page, you see the 2 definition of the description of 1A as a permanent 3 TELRIC-based rate from final Missouri Commission Order in TO-97-40, less voluntary reductions? 4 That's what it says. I have no idea what it 5 Α. 6 means. 7 Q. Okay. Do you have the exhibit that you utilized with you today? 8 Not with me on the stand. 9 Α. Back in the courtroom? 10 Q. I may or may not have, but I'd have to search 11 Α. 12 through some of the materials I have. You didn't bring it with you as backup? 13 Q. I have it on the computer. 14 Α. 15 Q. Referring back again to the loonies -- UNE -yes, it is loony. That was a freudian slip, I think, my 16 17 mistake. The nonrecurring charge for the Zone 1 four-wire digital loop is \$102.40, correct? 18 19 A. I missed the first part of the question. Can you reask it, please? 20 The nonrecurring charge for four-wire digital 21 Q. loop Zone 1 is \$102.40, correct? 22 23 Α. Are you asking about any particular exhibit? 24 Ο. Exhibit 34. 25 A. Yes, you had just asked me about Exhibit 33,

1 and it is \$102.47 on Exhibit 34.

2 Q. And that's what you utilized in your analysis 3 now -- in your revised analysis that you say was what 4 Mr. Fleming preferred, right? I used a rate of \$102.47 from the schedule of 5 Α. prices dated -- it was June 27th, 2003. 6 7 Q. Okay. Your testimony is limited to the DS1 crossover issue, correct, not the geographic market issue? 8 9 Α. Correct. And you've presented a cost model designed to 10 Q. identify the DS1 crossover point, correct? 11 12 Α. Correct. Do you agree that the crossover analysis is to 13 Q. establish the break point between the mass market and the 14 15 enterprise markets for purposes of applying the TRO's 16 directives concerning impairment analysis for unbundled local switching? 17 18 Α. Yes. 19 And for enterprise customers, the FCC has Q. 20 already determined CLECs are not impaired without access to unbundled local switching, right? 21 22 Α. That's correct. 23 Q. For the mass market customers, the Commission 24 will later determine whether there's non-impairment based 25 upon the trigger analysis and the potential deployment

1 analysis, correct?

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2 Α. That's my understanding. 3 Would you agree that one of the more Q. significant differences between your model and that of 4 Mr. Fleming's model is the treatment of data revenues? 5 6 Yes, I'd agree that's a significant Α. 7 difference. 8 And in your model you don't consider data Q. revenues at all, correct? 9 10 I consider the data revenue in the analysis Α. 11 and concluded it was not applicable in the model. So when we look at your model, there's nothing 12 Ο. we can look at and find a figure for data revenues anywhere 13 14 in there, right? 15 That's correct. Α. 16 And you recognize that the FCC's rule Q. concerning the crossover analysis requires the Commission to 17 18 take into account increased revenue opportunities, correct? 19 Α. That's what the language says. However, my 20 conclusion and my analysis form the conclusion that there is, in fact, no increased revenue opportunities by virtue of 21 22 providing service via a DS1 based architecture. 23 Q. And you recognize that the FCC specifically 24 directed the consideration of data revenues both in setting

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the geographic market by identifying high-revenue customers

1 and in the potential deployment test as well, correct? 2 Α. Can you reask that question? I missed the 3 first part of it. 4 Ο. Yes. Would you agree that the FCC specifically directed the consideration of data revenues 5 6 both in setting the geographic market and looking at high 7 revenue customers and in doing the potential deployment 8 analysis? 9 Α. Yes. On page 22 of your direct, you discuss the 10 Q. reasons a customer might not want a DS1 service. Do you see 11 12 that? 13 Α. Yes. 14 Ο. If the Commission sets a crossover at four 15 lines, a customer with five DSO lines could still order that 16 from a CLEC, right? 17 Α. When you say DSO lines, do you mean unbundled analog loops? 18 19 Ο. Yes. 20 If the Commission set the crossover point at Α. four lines, from a legal perspective, the CLEC would be free 21 22 to order unbundled loops as they would like. 23 Q. And that would be at TELRIC prices? 24 Α. From a practical perspective, I'm not sure 25 that it would make economic sense, nor would the CLECs have

the broad reach of customers that they would have had with
 the UNE-P service.

3 Q. And I understand that's your position. My 4 question is, would it be at TELRIC prices?

A. I'm certainly not a pricing expert, but my
understanding of Mr. Gillan's testimony yesterday was maybe,
maybe not.

8 Q. So you don't know? You're relying on9 Mr. Gillan?

10 A. I don't know what the pricing scheme the 11 Commission chooses --

Q. Let me stop you. I think you may have misunderstood my question. I'm talking about with regard to the loops themselves, the CLEC could order those and those would be at TELRIC prices, correct?

16 A. Yes.

Q. Switching is where we may have a difference between what you see as the price and what SBC Missouri sees as the price, right?

20 A. Yes.

21 Q. Let me flip over and talk about some of the 22 inputs to your model. One of the items that you included 23 was the marketing cost to acquire an enterprise customer 24 versus the cost to acquire a mass market customer, correct? 25 A. Correct.

1 Q. Would you agree that the other witnesses 2 that provided models to support a crossover analysis, 3 Mr. Fleming and Mr. Maples, neither one included any 4 marketing differential cost, did they? 5 I don't believe they did. Α. 6 In reviewing the FCC's rule on the crossover Q. 7 analysis, didn't the FCC limit the analysis to the cost of 8 serving the customer, not the cost to acquire the customer? 9 Α. No. 10 Do you have the TRO with you? Q. 11 No. Α. Did you rely upon the TRO in performing your 12 Ο. 13 analysis here? 14 Α. Yes. 15 Q. You read all the relevant sections with regard 16 to switching and crossover? Α. I hope I did. 17 18 MR. LANE: Your Honor, may I approach the 19 witness? 20 JUDGE MILLS: Yes, you may. 21 BY MR. LANE: 22 Mr. Finnegan, I'm going to show you the FCC's Q. 23 TRO order in this case, Appendix B, page 22, Rule 24 51.319(D)(2)(iii)B4 and ask you to take a look at that, 25 multi-line DS0 end users.

1 JUDGE MILLS: What page? 2 MR. LANE: Page 223. 3 JUDGE MILLS: Thank you. Have you had an 4 opportunity to review it? 5 THE WITNESS: No. I have reviewed it. 6 7 BY MR. LANE: 8 Q. And would you agree with me that that rule 9 that you've just reviewed requires consideration of the cost of serving a customer, but does not utilize the word 10 acquisition cost anywhere in the body of it? 11 12 Α. No. No. 1, this rule doesn't mention cost at all. It talks about the point at which multi-line end user 13 customers could be served in an economic fashion, and in 14 15 terms of could be served in an economic fashion, I include 16 the marketing costs to win that customer a part of serving the customer. 17 Q. Do the words "acquisition cost" appear 18 19 anywhere in the rule? 20 As I pointed out, cost appears nowhere in the Α. rule. Acquisition cost doesn't appear in the rule. Loop 21 22 cost doesn't appear in the rule. Nonrecurring cost doesn't 23 appear in the rule. Recurring --24 Q. Mr. Finnegan, that's not -- my question was 25 limited to acquisition costs. I didn't ask you to list all

1 the other costs that aren't included. Okay?

2 If you were to remove the marketing 3 differential cost in its entirety from your analysis, that would decrease the crossover point, would it not? 4 5 Α. Yes. I ran that last night. Reducing the 6 marketing cost to zero drops it from 12 to 11. 7 Q. The purpose of the crossover analysis is to determine the point at which it makes sense to serve the 8 customer with DSOs versus a DS1, correct? 9 Correct. 10 Α. And at the point that the CLEC is making that 11 Q. 12 decision, it's already acquired the customer, has it not? 13 Α. No. Ο. The CLEC has made the decision whether to 14 15 serve a particular customer via DS1s or DS0s without showing 16 whether they have a customer? Yes. And I'll explain. In a post-crossover 17 Α. 18 point world, if let's say, the crossover point is 12 lines, 19 if a customer calls up and says, I have 8 voice lines, or I 20 have 6 voice lines, then they'll be treated in a mass market fashion. They'll probably be treated via telephone sales 21 22 only. If that same customer were calling up and said, I 23 have 15 lines or 20 lines, the CLEC is going to direct them 24 to a different channel, say, we'll have someone contact you, 25 and a salesperson or an account executive will contact that

1 customer.

So the -- the marketing both to the mass 2 3 market and the enterprise market in the post-crossover world, it's got to be set up so it's efficient, and there 4 5 are going to be different sales channels employed, depending 6 upon what the crossover point is. 7 Q. Once the customer has agreed to sign up for service from a CLEC, you're at the point where you're trying 8 9 to decide how to serve them, you can't save any of the 10 marketing costs by serving them via DS1s or DS0s; those 11 marketing costs have been expended already, have they not? 12 The premise that the CLEC has made a decision Α. 13 prior to signing up the customer is not a valid premise, so I don't know how to answer that question. 14 15 Q. All right. So if a customer presents itself 16 to you and wants to order a number of lines from you, the CLEC at that point has to determine how it's going to serve 17 18 the 19 customer. You've already incurred the marketing costs at 20 that point, right? 21 Α. No. 22 Q. The marketing costs aren't saved, are they, if 23 you decide to serve them with a DS1 versus DS0s? 24 Α. I don't follow the question. If a customer

25 comes up and says they have a number of lines past crossover

1 point, there's going to be an account executive sent out to 2 that customer to find out what their needs are, and those 3 marketing costs are not going to be saved. Those marketing costs are going to be incurred. 4 5 If the customer calls up and says, I've got three lines, then we're going to serve them via telephone 6 7 sales. We're not going to send an account executive out. 8 Does AT&T have any products that include an Q. integrated offering of data and voice? 9 Yes. I'm not intimately familiar with the 10 Α. AT&T products, but my understanding is we do. 11 12 Ο. Did you look at that in connection with 13 preparing your testimony in this case? Not extensively. 14 Α. 15 Ο. Isn't it true that AT&T's integrated access 16 products that it offers utilize voice lines as low as four to six lines? 17 I'm not aware of it. If it was as low as 18 Α. 19 four lines, I would expect you're also going to need to have 20 a lot of data, a lot of data channels as well. And that's a specific offering that AT&T has. 21 Q. 22 You can combine both data and a voice over a DS1 circuit, 23 right? 24 Α. We have a -- we have DS1 based products. As I 25 stated, I don't know what the minimum amount is. I don't

1 know if it goes as low as four. I don't know enough about 2 the AT&T product line. 3 Q. Would you turn to your direct at page 10, 4 lines 10 to 13. Excuse me. That was lines 10 to 13? 5 Α. 6 Q. Right. 7 Α. Page 10? Yes. In there you reference up front 8 Q. 9 marketing costs that you say are generally not dependent upon the number of lines served at the customer's location, 10 11 correct? 12 Α. Correct. What other nonrecurring and investment costs 13 Q. are not dependent upon the number of lines served at the 14 customer's location? 15 16 Α. The DS1 cost for nonrecurring/recurring is generally independent of the number of channels utilized on 17 that DS1 or the number of lines served. The channel bank 18 19 equipment is generally independent of the number of lines 20 served, and the cost to install the equipment is generally independent of the number of lines severed. 21 22 The cost to remove the equipment is 23 generally -- well, that would be -- the removal wouldn't be 24 up front. The CP investment, the DS1, recurring and 25 nonrecurring costs and the CP investment.

1 Q. Okay. Thank you.

2 Would you also turn, then, to page 13 of your direct? And the question that begins on line 10, you've 3 discussed a UNE-P migration recurring charge of \$1.05; is 4 that correct? 5 That's correct. 6 Α. 7 Q. And you indicate that you did not utilize that in your analysis because it was relatively small, in your 8 opinion? 9 10 Α. Yeah. 11 And did this change in your Exhibit 8 to your Q. 12 rebuttal? Is this still your correct testimony? With the changes that I had explained, the 13 Α. nonrecurring cost would certainly be included now in the 14 15 Exhibit 33. 16 Q. So the discussions on lines 10 through 18 of page 13 of your direct are no longer correct? 17 18 Α. Yes. 19 On page 14 of your direct, you identify the Q. 20 cost of the UNE-P. Do you see that? Yes. 21 Α. 22 Q. I'm going to focus on Rate Zone 1 where you 23 display a monthly UNE-P rate of \$16.60. Do you see that? 24 Α. Yes, I do. 25 Q. And you recognize that neither Mr. Fleming nor
1 Mr. Maples included the UNE switching charges in their 2 analysis, correct? 3 Yes, I recognize that as a flaw. Α. 4 And in your analysis, can you explain where Ο. you got to \$16.60? 5 6 There's actually an exhibit in my rebuttal Α. 7 testimony. It is Exhibit 14, Exhibit JFF-7. 8 All right. Let's go through that. First Q. 9 let's talk about your direct at page 14. You indicate that the UNE-P is comprised of a number of charges and the first 10 11 is the rate zone specific unbundled analog loop cost. What did you utilize for Zone 1? 12 13 \$12.71. Α. And the next that you list is a monthly return 14 Ο. 15 switch charge. What did you include in that? 16 The non-usage-sensitive portion was \$1.74. Α. And could you tell me, then, the next is the 17 Q. 18 usage-sensitive cost, and you list four of those -- no, five 19 of those in your direct on page 14. So first let me ask 20 about the switching costs. What was your usage-sensitive switching cost that you used for Rate Zone 1 to lead to your 21 22 \$16.60 rate? 23 Α. I don't have the exact breakout. As can be 24 seen in Exhibit 14, Exhibit JFF-7, a composite of all of 25 those costs were \$1.64.

1 Q. Okay. But I want to go through them 2 individually. Are you not able to calculate the switching 3 cost for Rate Zone 1? 4 No, only the composite costs for all of them. Α. Okay. How did you go about determining the 5 Ο. switching cost for Rate Zone 1? 6 7 Α. I obtained that number from the AT&T folks that were doing the DSO impairment model. 8 9 Q. Didn't you utilize the M2A for that? The folks that did the impairment model 10 Α. 11 utilized the M2A. And did you review the M2A? 12 Ο. 13 Α. Yes. Taking a look at Exhibit 34 that you have in 14 Ο. 15 front of you, turn to the second page under local switching. 16 Do you see that entry? 17 Α. Yes. 18 And for Zone 1, is the rate .00162? Q. 19 Α. Yes. 20 And is that the rate that you would have Q. utilized in computing your local switching costs? 21 22 Α. Without having the most recent version of the 23 MTA, I don't know if those are the same rates or not. 24 Ο. And would you look to the left under the note 25 column for Zone 1 switching. Do you see it's marked as 1A?

1 A. Yes.

2 Q. And if you flip the last page of the exhibit, 3 does 1A indicate that that's a permanent TELRIC-based rate from final Missouri Commission Order in TO-97-40, less 4 voluntary reductions? 5 6 Α. Yes. 7 Q. That rate hasn't changed, then, has it? Α. I have no idea. 8 9 How would you multiply -- what figures would Q. you multiply to come up with the cost of local switching 10 under your analysis? You have to have a number of minutes 11 of usage assumed, correct? 12 13 Α. Yes. 14 And is the number you assumed 1,668? Q. 15 Α. No, it was not the 6 -- 1,668 minutes did not get applied to every rate element. There were local minutes 16 of use that were applied to the local switching rate 17 18 element. 19 What minutes of use that comprise the Ο. 20 1,668 figure that you used were not included in your analysis of the local switching charges? 21 22 Α. I don't have the exact breakdown of what 23 minutes were used and what minutes were not used. What I am 24 aware of is the 1,668 did not get applied to every rate 25 element. The folks that were doing the model only used the

1 types of calls that would apply to the specific rate 2 element.

Q. Okay. If you're going to utilize unbundled local switching from SBC Missouri, if the CLEC is going to do that, they use that for local calls and for interLATA calls, right?

A. I don't know for sure if interLATA or8 international would also not be included in that.

9 Q. Well, I'm trying to get how you determined it, 10 because it's important to determine whether your 11 calculations are correct. So can you tell me, of the 12 1,668 minutes you used in your analysis, which ones -- which 13 of those minutes you did not apply the local switching 14 figure to?

15 A. No.

16 Q. You don't have any information with you to 17 tell you that?

18 A. I have information from folks that were
19 running the model that indicated the switching costs were
20 \$1.64.

21 Q. You don't know how they came up with that in 22 terms of detail, do you?

A. Generally, they use the rates from the M2A
and, based on the types of minutes that were applicable,
used that to calculate a cost.

1 Q. But, Mr. Finnegan, the rate that's in the M2A 2 for local switching applies to all calls that utilize 3 switching, all 1,668 minutes, do they not? 4 Not necessarily. Α. Can you give me examples of what would not be 5 Ο. included of minutes of that 1,668 that would not have the 6 7 local switching charge apply to it? 8 I can't think of any off the top of my head. Α. 9 All right. And if you applied the switching Q. charge in Zone 1 of .00162 to all 1,668 minutes that you 10 utilized in the model, you'd come up with a figure of \$2.70, 11 12 wouldn't you? 13 Α. I don't know. I don't have a calculator in 14 front of me. 15 MR. LANE: May I approach, your Honor? 16 JUDGE MILLS: Yes, you may. BY MR. LANE: 17 18 Q. Have you done the calculation? 19 I have multiplied .001620 times 1,168. Α. 20 And the answer would be \$2.70? Ο. 21 Α. Yes. 22 Q. What figure did you use for local switching --23 I'm sorry -- for all switching that you identified in your 24 Exhibit 7 to your rebuttal? 25 Α. \$1.64.

1 Q. Go back to your direct at page 14, in the --2 line 4 where you're identifying other applicable 3 usage-sensitive costs. The next one after switching is 4 shared transport. How much of the \$1.64 that you had is comprised of shared transport? 5 I don't know the exact breakdown. 6 Α. 7 Q. Can you tell me how you would compute the charge for shared transport up to the 1,668 minute level 8 9 that you utilized in your model? There's some portion of that 1,668 that is 10 Α. going to be assumed to be carried over shared transport, and 11 12 whatever that assumed per-minute amount is, that would be 13 applied to the shared transport rate element. 14 Some of the calls stay within the same central Ο. 15 office where the call occurred, and those wouldn't have the 16 minutes applied to it, correct? That would be a reasonable understanding. 17 Α. And all of the minutes that reflect calls that 18 Q. 19 go beyond the originating central office would have a shared 20 transport charge associated with them under the UNE-P environment, right? 21 22 Α. Yes. 23 Q. Okay. And so that would be added to whatever 24 figure is correct for the switching charges that you first 25 indicate on line 14 of page 14 of your direct; is that

1 correct?

2 Α. I don't know for sure how the charges 3 interrelate. 4 Q. And you can't tell us what the figure should be for shared transport, is that right, that's included in 5 your model? 6 7 Α. Figure meaning the minutes? 8 Q. Minutes and the cost. 9 Right. Α. Cannot? 10 Q. 11 Α. I cannot. The next item that you list on page 4 of your 12 Q. direct at page 14 is the cost for -- usage-sensitive cost 13 for signaling. Can you tell me what those costs were in 14 15 your analysis? 16 Α. No, not an exact cost. What inexact cost can you tell us? I'm not 17 Q. sure I follow that. 18 19 That those costs make up part of the \$1.64. Α. 20 And you can't break that \$1.64 down at all, Q. 21 right? Correct. 22 Α. 23 Q. How about databases, same question, can you 24 tell me how much of the \$1.64 is database charge? 25 Α. No.

1 Q. How about daily usage file? 2 Α. My understanding is that was a generic cost 3 and that SBC does not charge for daily usage file. 4 Ο. What's that understanding based on? Based on discussions with the folks that had 5 Α. done the model. 6 7 Q. Okay. And did you review that assumption that 8 they made to determine whether it was valid? 9 Α. No. You don't know as you sit here whether there's 10 Q. a daily usage file that applies or not? 11 12 Α. My understanding was it does not. 13 Q. But you have no basis for it other than your discussions with the model, with people that ran the model? 14 15 Α. Right. 16 Then in your rebuttal you identify an Q. additional charge that would go to the monthly UNE-P rate 17 18 that relates to distribution of a white pages directory, 19 correct? A. That's correct. 20 And that would add 51 cents to your analysis 21 Q. of the UNE-P cost, right? 22 23 Α. That's correct. 24 Ο. So if we utilize the analog loop cost of 25 \$12.71, the switch port charge of \$1.74, a usage charge for

switching only of \$2.70, plus a 51 cents white pages 1 2 distribution cost, you get a figure substantially in excess 3 of \$16.60, right? 4 Α. It would be excess. I don't know if I'd characterize it as substantially in excess. 5 6 Q. And that wouldn't include charges for shared 7 transport, signaling, or database, correct? 8 No, that's not correct. Α. 9 Q. If the appropriate charge for switching is \$2.70, that figure doesn't include charges for shared 10 transport signaling or database usage, right? 11 12 Α. I haven't agreed that the appropriate charge 13 for switching is \$2.71. 14 But you're not able to identify any portion of 0. 15 the minutes -- of the 1,668 minutes that you identified that 16 should not have the local switching charge applied to it, have you? 17 18 I have not, but that does not mean that all of Α. 19 the minutes should apply. 20 One of the other factors that you considered Ο. in your cost model was the amortization of the nonrecurring 21 costs, correct? 22 23 Α. Correct. 24 Q. And you utilized a two-year period, correct? 25 Α. That's correct.

Q. And that was substantially lower than the
 eight-year time frame that Mr. Fleming used, correct?
 A. Yes.

4 Q. And your sensitivity analysis, does that make 5 a difference?

6 When you change the amortization from Α. 7 24 months to 100 months -- and I must say 100 months is very 8 long. If a customer had signed up at the date of the 9 signing of the Telecommunications Act of 1996, we'd still be 10 attempting to recover the nonrecurring charges for that 11 customer. But if you change the amortization period from 24 12 months to 100 months, it drops it from 12 to 11. If you change it from 24 to 48 months, it stays at 12. 13

14 Q. That's if nothing else changes in the model, 15 right?

16 All else being the same, that's correct. Α. And if the UNE-P cost were higher, that would 17 Q. 18 also have an impact on the crossover analysis, correct? 19 Α. Yes. And if the UNE-P costs were lower, that 20 would also have an impact on the crossover analysis. 21 You didn't use a UNE cost rate that you Q.

22 thought was too low, did you?

Q.

A. No. I thought we were just generally talkingabout mathematical possibilities.

25

And the churn rate for an enterprise customer

1 is substantially lower than the churn rate for a mass market 2 customer, correct? 3 Α. I wouldn't say that. 4 Ο. What's the churn rate for a mass market customer and what's the churn rate for an enterprise 5 customer? 6 7 Α. I did not identify mass market or enterprise 8 specific church rates. 9 Q. Does that mean you used a churn rate that is applicable to both equally? 10 11 I used an industry-specific churn rate. Α. 12 Ο. And the industry-specific churn rate, was that focused on enterprise customers? 13 14 It didn't specifically identify whether it was Α. 15 enterprise or mass market. 16 Q. One of the hallmarks of a mass market customer is the decision not to go with long-term contracts, but 17 18 instead to utilize monthly contracts for their service, correct? 19 20 A. Yeah. 21 And that's what the FCC noted, right? Q. 22 Α. Yes. 23 Q. Enterprise customers on the other hand 24 typically sign up for term agreements, right? 25 Α. I don't know if it's typical. I'm sure both

I ILECs and CLECs would like to have as many customers as possible sign contracts, but I don't know what the percent of enterprise customers is that sign contracts versus those that don't.

Q. And AT&T offers contract terms to enterprise
customers of one to five years and longer, correct?
A. I'm not specifically familiar with the AT&T

8 contract terms.

9 Q. If a customer signs a term contract for a year 10 or longer, then that customer is going to have a lower churn 11 rate than one that signs up for month-to-month service, 12 correct?

Not necessarily. That would depend upon what 13 Α. the penalties were for early termination of the contract. 14 And a CLEC that's efficient would set a rate 15 Ο. 16 for termination that allows the CLEC to recover the termination charges if the customer leaves early, correct? 17 I'm not familiar with what the termination 18 Α. 19 clauses of CLECs or ILECs are, but I would imagine a CLEC would balance the cost of the termination with the 20 likelihood of the possibility that the termination expense 21 22 is going to scare customers off.

Q. And you haven't tried to determine for purposes of your model whether there's a churn rate that's applicable to enterprise customers that is different than an

1 industry-wide figure for churn, right?

2 A. That's right.

Q. You also include installation costs of thechannel bank equipment, correct?

5 A. Yeah.

Q. And you base the reasonableness of your
installation costs by quoting from Allegiance's tariff
nonrecurring charge of \$899 for integrated access service,
correct?

10 A. That's partially correct. I also rely upon 11 the prices quoted by AdVan for the installation of the AdVan 12 equipment that both I and Mr. Fleming used in the analysis.

Q. Focusing on the Allegiance tariff nonrecurring charge at \$899 for integrated access service, would you agree that that's revenue to Allegiance when a customer signs up for that service?

17 A. Not necessarily.

18 Q. Isn't a tariff charge something that is

19 assessed by the CLEC to the customer?

20 A. Not necessarily.

21 Q. Are you familiar with the tariffs and how they 22 work generally?

23 A. Yes, generally.

24 Q. And if there's a charge in the tariff, the 25 provider assesses the charge to the customer, correct?

1 Α. Unless there's a waiver or a promotion that 2 permits a waiver. 3 Okay. And when you quoted from Allegiance's Q. tariff nonrecurring charge \$899, did you quote from any 4 waiver that would apply? 5 6 Α. No. 7 Q. So that's a charge that Allegiance assesses to its customer for signing up for that service, right? 8 9 A. No, not necessarily. My knowledge of the CLEC industry and discussion with CLECs is, more times than not 10 that charge is waived. 11 More times than not. Have you done an 12 Ο. 13 analysis to come up with that? 14 Α. No. Is that off the top of your head? 15 Q. 16 Α. No. It was with discussions with CLECs and some internal AT&T folks. 17 Q. Now to the extent that Allegiance doesn't 18 19 waive the charge and assesses the charge that its tariff 20 says it's going to, that's revenue to Allegiance, right? 21 A. Yes, that would be, and there would also be 22 revenue if --23 Q. That --24 Α. -- Allegiance or SBC charged an installation 25 charge for a UNE-P or a POTS retail service.

1 Q. And you included those charges in your 2 analysis, right? But you didn't include revenues for the 3 installation of the channel bank, right? I did not include any charges a customer would 4 Α. pay a CLEC or SBC or the installation in their POTS service. 5 6 So you have the POTS side, but you don't have Q. 7 any corresponding revenue, correct? 8 That's generally how the model was performed. Α. 9 MR. LANE: That's all I have. Thanks. JUDGE MILLS: Thank you. CenturyTel? 10 MR. DORITY: No additional questions. 11 12 MR. LANE: Judge, I'm sorry. I don't know if 13 I did this yet, but I'd like to ask the Commission to take official notice of the -- Exhibit 34, the appendix pricing 14 15 UNE schedule of prices from the M2A. 16 JUDGE MILLS: Mr. Magness? MR. MAGNESS: Your Honor, I would ask that if 17 18 this is admitted either as official a notice exhibit, or 19 otherwise, that it just be in the record that it's -- its 20 use is limited specifically to the line items that Mr. Lane addressed. I don't think the record should include this if 21 22 it can then be used in the record as proof of some other 23 sort of rate that isn't current. 24 JUDGE MILLS: Yeah. I mean, this exhibit is 25 nine pages, and it's something like 50 lines per page. As I

1 recall, Mr. Lane asked the witness about one line and about maybe two boxes on that one line, and I don't know what the 2 3 rest of it is. There's some indication on the record that at least some of this may be outdated and no longer current. 4 5 But to the extent that this shows that the rates for four-wire digital in Zone 1 were as they're shown 6 7 on this exhibit as of 8/16/01 and that they're still current today, then the Commission will certainly take official 8 9 notice of that. 10 As Mr. Magness points out, the rest of the 11 exhibit, I don't think there's any foundation for. We don't 12 know if it's current or not. So I'll take official notice 13 of those numbers you just discussed and confirmed with the 14 witness. Thank you. Redirect? 15 16 And let me -- for at least the rest of the 17 morning, the Commissioners are in the twice weekly agenda 18 meeting and unable to be here this morning. I don't know 19 for sure whether or not they're going to have questions for 20 the witnesses we get through this morning, so I'm going to ask all the witnesses to stick around at least until lunch 21 22 time. 23 If that poses a major inconvenience, we can 24 talk about that and I'll see if I can get an answer from the 25 Commissioners about whether they have questions or not about

1 specific witnesses that need to make travel plans.

2 But barring any specific travel problems, I'm 3 going to ask all the witnesses to stay around until I have a chance to confirm with the Commissioners whether or not they 4 5 have questions. 6 Mr. Magness? 7 REDIRECT EXAMINATION BY MR. MAGNESS: 8 Good morning, Mr. Finnegan. Q. 9 Α. Good morning. I'd first like to talk to you a little bit 10 Q. about the discussion you had on cross about marketing costs 11 or customer acquisition cost. Do you recall that? 12 13 Α. Yeah. I'm going to read you a passage from what has 14 Ο. 15 been admitted in this proceeding as Exhibit 1. That's the 16 direct testimony of Dr. Tardiff. And let me just read this to you and ask if you agree with it. 17 18 Α. Okay. 19 I'm reading from page 6 of Exhibit 1, Q. 20 beginning at line 13. On the supply side, carriers market services differently to enterprise and mass market 21 22 customers. Individual marketing representatives typically 23 serve enterprise customers. In contrast, mass market 24 customers are often reached by mass market advertising 25 media, radio, television and print. Thus the application of

1 the standard economic method of determining a relevant 2 product or service market implies that services supplied to 3 mass market customers are in a different product market from 4 those supplied to enterprise customers. Would you agree with that statement? 5 6 Α. Yes. I think it's a recognition by 7 Dr. Tardiff that it's generally more effort and more expense 8 to market to enterprise customers than it is to mass market 9 customers. 10 Is it reasonable to expect that the individual Q. 11 marketing representative service that's required in the enterprise market, as Dr. Tardiff puts it, would be more 12 13 expensive? 14 Α. Yes. 15 Q. Mr. Lane had you look at the rule, 51.319. Do 16 you have that up there with you? 17 Α. Yes. And for the record, that's 51.319(D)(2). You 18 Q. know where it is? 19 20 Α. Yes. We're on page 22 of the rule appendix, 22 and 21 Q. 22 23. And Mr. Lane marched you through certain words that are 23 not in the rule, and you agreed that acquisition cost 24 doesn't appear in the rule, right? 25 Α. That's right.

1 Q. Do the words "data revenues" appear in the 2 rule?

3 A. No.

Q. And you agreed with Mr. Lane that there was
no, as he put it, a figure for data revenues in your
analysis. Could you just explain why that is?

A. What the analysis assumes or what the SBC appears to assume with latching onto the use of the term "increased revenue" is that somehow the CLEC is going to be able to obtain more revenue by serving a customer via DS1 than they would with multiple POTS lines. In order to do that, two things have to happen.

13 The first thing would be that the CLEC can sell more services when they serve the customer through a 14 15 DS1 than they could through multiple POTS lines. That 16 assumption is not true. If you are a POTS customers, you 17 can obtain Internet access. You can obtain high-speed 18 Internet access. You can have someone host your website. 19 Much to my chagrin, I found out that my 13-year-old daughter 20 has her own website. She is certainly not a DS1 customer, 21 and she can go out and get her own website. So web hosting 22 is something you can obtain as a POTS customer.

E-mail, you can get e-mail service through a -- by being a POTS customer. There's nothing magic about a DS1 that if you're a POTS customer you can't obtain those

services. Yes, you can get high speed Internet access, you
 can get voice service, you can have someone host your
 website, you can get e-mail when you're a DS1 customer, but
 so, too, can you get those same type of services when you're
 a multi-line POTS customer.

6 So the notion that DS1 opens up that panoply 7 of services that you can now sell to a customer simply by 8 virtue of the architecture employed, that's a fallacy. 9 That's not a true assumption.

The other assumption is that in order to 10 11 obtain this increased revenue, you should be able to charge 12 a premium price for what is essentially the same 13 functionality. That's not true either. As Mr. Fleming pointed out in his testimony, there are POTS customers that 14 15 can obtain DSL services for as much as \$150 for a line of 16 DSL. In contrast, the packages that Mr. Fleming cites as 17 CLEC offering with an integrated access service on the net 18 end up much cheaper.

In fact, Mr. Fleming himself points out that when a customer serves a former POTS customer with a DS1 service, that the customer should expect a savings in their overall telecommunications bill. So the fact of the matter is, once you reach a certain crossover point on number of lines, the revenue, if not staying the same, the customer should expect a savings.

1 This was also reflected in SBC's website for 2 its integrated access service when it talks about a customer 3 can potentially save money by going to their integrated 4 access service over what they could over multiple POTS 5 lines. So I don't agree with the assumption that you can 6 charge a premium price for a service simply because you are 7 now serving customers via DS1 architecture.

8 From a customer perspective, they're 9 interested in function. They're not interested in the architecture that provides that function. So the twin 10 11 notions of you can sell more services with a DS1 and you can 12 charge a premium price with a DS1 and those either 13 individually or together are going to result in an increased revenue opportunity, my conclusion is that's not going to 14 15 occur and there is no increased revenue opportunity by 16 virtue of serving the customer with a DS1 service.

Q. I'm going to ask you two more questions, and focusing on the discussion, I guess, which in cross was focused on JFF-7, particularly the switching costs. The dollar figures that were used in your estimates, what was your basis for believing that those were reasonable figures in going into this crossover analysis?

A. It was discussions with the gentleman that had put the model together and worked through the numbers. The process of calculating the UNE-P is quite complicated.

1 There's lots of different types of minutes, and depending on 2 those different types of minutes, there's rates that do and 3 do not apply. He has been doing these types of models for 4 quite some time and is familiar with it, and I trusted his 5 judgment and his interpretation of rates in the M2A and how 6 those rate elements would or would not apply to that bucket 7 of 1,168 minutes.

8 Q. To your knowledge, in the M2A is there a line 9 item and a current schedule of prices that just says UNE-P 10 that could be used?

11 A. No, there's not. That would make life 12 imminently more easy to do. Unfortunately, it's not there. 13 And even then, every customer every month is going to get a 14 different -- the CLEC for every UNE-P customer in every 15 month is going to get a different charge from SBC, in fact, 16 because they have different usage.

17 Q. So there are usage sensitivities within the 18 rate for UNE-P, is that what you're saying?

19 A. That's correct.

Q. Do you find of the change of the amortization rate that you just discussed to 100 months that is from the date the Telecom Act passed, which is coming up on its universe now to today, do you find that reasonable as an assumption to make in this analysis?

25 A. No. It's not reasonable. Even enterprise

1 customers, I'm not aware of anyone signing eight-year 2 contracts. It's my understanding that up until very 3 recently, you really couldn't sign a contract longer than a year in Missouri. I may be off on what the terms and 4 5 conditions are, but certainly eight-year contracts are not 6 the norm in the industry. 7 Q. And in making the changes you did that you noted this morning in JFF-8 -- you are aware of what changes 8 I'm talking about? 9 10 Yes. Α. Did you include those -- let me back up. Did 11 Q. 12 you attempt to narrow disputes with other witnesses by including those assumptions that you thought were reasonable 13 14 from the other witnesses? 15 Α. Yes. 16 MR. MAGNESS: I have no further questions, 17 your Honor. 18 JUDGE MILLS: Thank you. 19 Okay. Mr. Finnegan, you may step down. As I 20 said earlier, you're subject to be recalled if there are questions from the Commissioners. 21 22 Let's move on to MCI Witness Ankum. Actually, 23 before we do that, why don't we take a ten-minute recess. 24 We're off the record. 25 (A BREAK WAS TAKEN.)

1 JUDGE MILLS: Let's go back on the record. 2 Dr. Ankum, if you could raise your right hand. 3 (Witness sworn.) 4 JUDGE MILLS: Thank you. Mr. Lumley, you may 5 proceed. AUGUST H. ANKUM testified as follows: 6 DIRECT EXAMINATION BY MR. LUMLEY: 7 8 Would you state your name. Q. 9 Α. My name is August H. Ankum. On whose behalf are you testifying? 10 Q. MCImetro, Brooks Fiber, MCI WorldCom, 11 Α. Intermedia Communications. 12 And collectively they've been referred to as 13 Q. 14 MCI in this case? 15 Α. Yes. 16 And did you prepare and cause to be filed in Q. this matter direct testimony which has been marked as 17 Exhibit 15? 18 19 Α. Yes. 20 Do you have any corrections to that testimony? Q. Yes, I do. 21 Α. 22 Q. Would you identify that, please? 23 Α. And it's not -- well, on page 30 of my direct 24 testimony, I ask the question, have any regulatory bodies 25 recognized that the wire center is an appropriate basis for

1 conducting impairment analyses? And then I go on to refer 2 to the Connecticut Department of Public Utility Control. 3 What I've stated here is, in fact, correct, but I think for completeness sake, I must also note that the Department 4 5 subsequently has opened up the debate again and moved away 6 from a determination that the wire center was the ultimate 7 market definition to taking evidence on that issue and 8 finding that it needs to make subsequent decisions on that. 9 And I believe that issue was also raised in the rebuttal testimony of the SBC witnesses and I concur 10 that that actually did take place. So I don't have a 11 12 literal correction to be made to my testimony. I'm not 13 eliminating any sections. This is factually true. It's just that subsequent events have taken place. 14 15 Q. All right. With that notation, if I asked you 16 the same questions that are set forth in this Exhibit 15, would your answers be the same as contained therein? 17 18 Α. Yes, they would be. 19 And those answers are correct to the best of Ο. your knowledge, information and belief? 20 21 Α. Yes. MR. LUMLEY: I would move the admission of 22 23 Exhibit 15. 24 JUDGE MILLS: Are there any objections to the 25 admission of Exhibit 15?

(No response.)

1

2 JUDGE MILLS: Hearing none, it is admitted. (EXHIBIT NO. 15 WAS RECEIVED INTO EVIDENCE.) 3 4 BY MR. LUMLEY: And, sir, likewise, did you cause to be 5 Ο. prepared and filed in this matter rebuttal testimony that's 6 been marked as Exhibit 16? 7 8 A. Yes, I did. 9 Q. Do you have any corrections to that testimony? Yes, I have one correction, and that's on 10 Α. page 9, line 15, I state that the number of counties in 11 12 Missouri is 135. I have to correct that expansionist view 13 of Missouri. I believe there are only 115 counties in 14 Missouri, so the number should now read 115. With that correction, if I asked you the 15 Q. 16 questions contained in Exhibit 16, would your answers be the same today? 17 18 Yes, they would be. Α. 19 Are they true and correct to the best of your Q. knowledge, information and belief? 20 21 Α. Yes. 22 MR. LUMLEY: I would move the admission of 23 Exhibit 16. 24 JUDGE MILLS: Are there any objections to the 25 admission of Exhibit 16?

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1
                  (No response.)
 2
                  JUDGE MILLS: Hearing none, it will be
 3
    admitted.
 4
                  (EXHIBIT NO. 16 WAS RECEIVED INTO EVIDENCE.)
                  MR. LUMLEY: Tender the witness for
 5
    cross-examination, your Honor.
 6
 7
                  JUDGE MILLS: Ms. Mudge?
 8
                  MS. MUDGE: No questions, your Honor.
 9
                  JUDGE MILLS: Mr. Magness?
10
                  MR. MAGNESS: I have no questions, your Honor.
                  JUDGE MILLS: Staff?
11
                  MR. WILLIAMS: Thank you, Judge.
12
    CROSS-EXAMINATION BY MR. WILLIAMS:
13
                 Dr. Ankum, you're advocating the use of wire
14
           Ο.
    centers as a building block for defining markets, are you
15
16
    not?
                That's correct.
17
           Α.
18
           Q. And are you familiar with the testimony of
    Mr. Gillan?
19
           A. Yes, I am.
20
                 And is he not proposing that the LATA be used
21
           Q.
22
    as the market?
23
           A. That's my understanding.
24
           Q. Aren't you both coming from a CLEC
25
    perspective?
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A. I'm not sure if there is such a thing as a CLEC perspective, but I believe that he is testifying on behalf of and representing CLECs and so am I. So in that sense, yes, we're both representing interests of parties that I presume have a strong interest in an accurate finding about impairment or non-impairment with respect to local circuit switching, yes.

8 Can you explain how it is that -- or the Q. 9 bases, if possible, for why you and Mr. Gillan come from such different perspectives as to the breadth of the market? 10 If I first may quibble with your 11 Α. 12 representation, because I think that what is on the line, 13 the testimony of Mr. Gillan and myself, is really very much a common view of how the proceedings should be looking at 14 15 impairment, and so I believe that there's less there than 16 meets the eye.

The difference in the testimony, even though 17 18 the market definition and the recommendations are different, 19 I think if you look at the testimony and read it carefully, 20 I think we're both very much saying the same thing, I believe, and I've listened to Mr. Gillan speak here 21 22 yesterday, as well as that I read his testimony, and I think 23 he is very adamant about the need for the Commission to look 24 at the market on a wire-center-by-wire center basis.

25 He talked extensively in response to questions

1 coming from the Bench about the heterogeneity that exists in 2 the market and how it would be inappropriate to just take some broad view of large portions of Missouri and just say, 3 just because there is a central office switch placed by a 4 5 CLEC somewhere, that therefore you can assume that that 6 central office switch, that CLEC switch can serve customers 7 throughout, whether it's an MSA or a LATA. I don't think 8 that is what Mr. Gillan is testifying to.

9 I think in that sense I share his views that 10 the Commission, when it is looking at impairment, has to 11 take a very granular view. It cannot gloss over the 12 differences in the various wire centers and it must look at 13 the -- both the revenue side in each wire center, as well as 14 the cost side in each wire center.

15 Ultimately, of course, we are left with 16 different recommendations about where we're falling out in terms of the -- how to define the markets. I believe that 17 18 if the Commission follows Mr. Gillan's overall 19 recommendation of when we come to the trigger case, which I 20 believe that he referred to as that thing, that he didn't 21 say we're going to be agreeing on what that is, and I 22 presume that he was referring to all the companies that we 23 all look at as potential trigger companies.

And having seen some of SBC's testimony in other jurisdictions, we know that SBC will put forth before

1 the Commission certain companies that it will propose as 2 trigger companies, and the CLECs will then put 3 countervailing information before the Commission to show that those companies are, in fact, not trigger companies. I 4 5 believe if the Commission takes Mr. Gillan's position, not 6 just the markets but in its totality, that Mr. Gillan and I 7 will come out on the issue of impairment at exactly the same 8 place.

9 The only danger is that if the Commission 10 takes Mr. Gillan's recommendation about the LATA, but then 11 does not take everything else that Mr. Gillan is going to be 12 saying in the subsequent proceeding where we're counting 13 triggers, but then migrates to the view of SBC on which 14 companies should be counted, then I believe we get into a 15 very dangerous situation.

Now, why do I believe that? I just came from Connecticut where we did exactly the same proceeding as we're doing here, with one exception. In Connecticut we also had the trigger analysis rolled into the market definition part. And I see you getting restless, so I'll wrap this up for you.

22 SBC testified that if in one wire center the 23 triggers are met, it's proposing to trigger out the entire 24 MSA, irrespective of how many other wire centers there are. 25 So you have one wire center in an entire MSA and that's

sufficient for SBC to, therefore, find that CLECs are not 1 impaired with respect to local circuit switching. 2 3 That is -- of course, that is not something 4 that Mr. Gillan would advocate. So if the Commission buys 5 or adopts the recommendation for the entire LATA, surely 6 Mr. Gillan would not say, if one wire center meets the 7 trigger, then the entire LATA should be taken off the map. 8 But my fear is if we go to such a large market definition 9 and SBC does find one wire center -- and surely they'll be able to point to one wire center -- that we'll get this 10 completely irrational result. 11 12 And it's for that reason I say why you can go 13 that route. Let's just look at it on a wire center-by-wire center basis. 14 15 Q. Let me try to summarize what I believe you 16 just said. Sorry for pushing your patience here, but I 17 Α. 18 don't think there's an easy way to reconcile what appears as 19 a conflicting opinion. 20 What I was trying to get you to do is, if you Ο. could, explain how it was that you and Mr. Gillan have 21 22 arrived at different suggestions for market area. I believe 23 your response probably included that. I want to see if I 24 accurately understood your response.

25 If I understood you correctly, you're

indicating that Mr. Gillan is advocating that the triggers encompass more than just, say, a single wire center within whatever geographic market area the Commission has defined; whereas, the basis you've chosen for using the basis you've used for the market includes a consideration that a single wire center within that market could lead to a trigger that would lead to a finding of non-impairment. Is that --

A. Generally speaking. And then I also believe that if you read the TRO correctly and narrowly, there is a language in there where the FCC says you must take into account the economies of scale, and assume that a company is the only carrier serving the market. They will then look at the economies of scale, and I think you'll be hard pressed to have a switch that can serve more than a wire center.

15 A switch simply can't serve the entire LATA, 16 and a switch can serve the MSA. In fact, a reasonably sized 17 switch can serve a wire center. That's precisely why the 18 ILEC has chosen the wire center as the economic unit that 19 combines loops and switches. It's almost definitional. The 20 FCC doesn't come out and say, choose the wire center, but I 21 think if you read the language correctly and 22 narrowly -- and let me refer you to -- I believe it's 23 paragraph 495, but I'll read you the pertinent -- there's 24 one sentence, I think, that brings it all together and --25 I'm sorry. I was wrong. Paragraph 499.

1 And the sentence that I think should be the 2 important sentence really, while a more granular analysis is generally preferable, states should not define the market so 3 narrowly that a competitor serving that market alone would 4 5 not be able to take advantage of available scales and scope 6 economies. So if that CLEC or that carrier really, because 7 it doesn't say CLEC there. It's any carrier. If the 8 carrier is the only carrier serving all the customers in a 9 particular market, what are the scale economies? 10 Well, you cannot really serve more than the 11 wire center, and if you were to serve less than the wire 12 center, you surely wouldn't utilize the full economies of 13 scale and scope. So I believe this naturally leads to the wire center, in addition to all the revenue and cost base. 14 15 So I believe if the Commission wants to do a 16 granular analysis, as it should under the TRO, then it 17 naturally ends up at the wire center, because that's where 18 all the important variables are found. 19 All the revenues vary on a wire center basis, 20 all the costs vary on a wire center basis, all the decisions 21 about collocation, et cetera, et cetera, vary on a wire

22 center basis. All the critical decisions are made on a wire 23 center basis. You also find, if you listen to the market, 24 that the entry decisions are revealed to happen on a wire 25 center basis, because you can look at an MSA and you see

1 some wire centers are being served by CLECs and others are 2 not.

3 So all the decisions are there and all the 4 market indicators take place at the wire center level, so 5 why not just define that as our market.

6 Q. Let me step through some definitions, just to 7 make sure we understand what you're saying. What do you 8 mean whenever you talk about economies of scale?

9 The economies of scale, when I'm using it --Α. and I believe that the way that the FCC is using it in the 10 TRO -- refer to how costs, particularly per-unit costs vary 11 12 with the level of output. And I believe what the FCC is 13 addressing here is that when you begin to define the market, you should define it in such a way that if -- if the CLEC 14 15 after they can no longer lease the local circuit switching 16 from the ILEC, if the CLEC has to deploy its own switch, you 17 must define the market in such a way that you can calculate 18 unit costs based on a sufficient level of demand so that the 19 full economies of scale of that switch are utilized.

And the thing that the FCC, of course, is covering is perhaps a suggestion that one can define the markets on something less than the wire center basis. Let's say you choose just a subsection of the wire center. Well, clearly when we go to the operational and economic impairment phase, that will be the wrong market definition,

because even if the CLEC were to serve every customer in that subsection of the wire center and you look at what switching cost would be, you still would have switching costs that are higher than the ILEC.

5 And that would be the result of the way that you have to define the market, because if a switch can serve 6 7 40, 50,000 customers but you have defined the market as 8 being no larger than 10,000 customers, and then you ask the 9 question, well, can you as a CLEC place a switch to serve 10 10,000 customers competitively, the answer would always be no, because with 10,000 customers, even if you get all of 11 12 them, you still would have higher average cost than the 13 TLEC.

14 So by forcing the market definition onto the 15 economic and operational and impairment analysis, you have 16 prejudged the answer. You have, in fact, gamed the analysis 17 by choosing a market definition that's too small. Of 18 course, I believe that SBC is doing precisely the opposite. 19 It's choosing an MSA. This is a market definition that's 20 too large, and I believe that similar type of gaming is 21 going on there.

I think if you go to the wire center, you get just the right geographic area and the density of customers, that if there is not impairment, then the CLEC can, in fact, serve that with the CLEC switch.

Q. You also mentioned economies of scope. Would
 you define that terminology?

3 Α. It's a variant of the economies of scale. Economies of scope then refers to the -- considering that 4 5 there's more than one product that is being offered. So 6 when you're looking at the cost of placing your own switch 7 to serve a particular market, that you would take into 8 account more than just the residential customers, the small 9 business customers, more than just the mass market customers, but then you also begin to include other product 10 11 offerings as well as vertical features, et cetera. So you 12 take into account the full array of services that, let's 13 say, a Class 5 switch can be used for.

14 Q. You've used the term "wire center" several 15 times. Would you define that term?

A. When you use the term "wire center," I'm coming at it from a -- from the network technology side. I view the wire center as the center of where all the wires come together, and the wires being the loops and they all come together in this hub and spokes architecture where the central office switch is located.

22 So I view it as a hub where you have to have 23 the central office switch that is aggregating all the loops 24 that go to the customers in a particular wire center.

25 Q. Are you familiar with remote and host
1 switching?

2 A. Yes.

3 Q. How, if any way, would that affect your 4 definition of wire center, the use of a remote and host 5 switch?

I would include in the definition the remote 6 Α. 7 switches that are connected to the central office switch through the host switch. But I think it's important that 8 9 when we get to the trigger analysis phase, that we take recognition of how many of those remote switches are there 10 and the terms and conditions under which the CLECs can 11 12 connect to the loops that are served off the remote 13 switches.

As the Commission knows, the loops that are served off remote switches pose their own problems in terms of unbundling. They don't pose a problem for the ILEC; they pose a problem for the CLEC. While there is potential for collocation for some remote switches, typically you find that collocations are taking place in the central office where you have the host switch.

Also, the loops that are served by the remote are transported back to the host over an umbilical, which is a fiber facility. In terms of just a whole unbundling of loops that serve customers off a remote, you get into certain operational complications that you don't have with

customers that are served on ordinary copper loops off a
 host switch.

3 So those things, when we're looking at 4 impairment, surely with the -- in the operational and economic impairment phase, we will be talking about it at 5 6 great length undoubtedly, but also when we do the trigger 7 analysis, I believe that the Commission should be cognizant 8 of that, that it recognizes that just because there may be 9 some companies serving customers in that wire center, that 10 doesn't mean that if you take UNE-P away, that CLECs can 11 necessarily serve with their own switches the customers that 12 are served off the remote switching through UNE-L. There are operational problems that must be considered. 13 14 Are you saying that the remote switch would be Ο. used to define a wire center? 15 16 Α. It's an extension of the geographic area served by the whole switch, yes. 17 18 I guess what I'm asking, would the host switch Q. 19 define the wire center or would the remote switch define a wire center? 20 21 The host switch. Α. 22 Q. Are you familiar with the exchange? 23 Α. Yes.

24 Q. Have you seen Exhibit 27?

25 A. No.

1 JUDGE MILLS: Sprint? 2 Oh, I'm sorry. Were you done? 3 MR. WILLIAMS: No. 4 JUDGE MILLS: Okay. MR. WILLIAMS: I was trying to get my exhibit. 5 6 JUDGE MILLS: Almost lost your place at the 7 podium. 8 MR. WILLIAMS: May I approach? 9 JUDGE MILLS: Yes, you may. BY MR. WILLIAMS: 10 11 Q. Hand you what's been marked as Exhibit 27. 12 Α. Yes. Have you had an opportunity to review that 13 Q. 14 exhibit? Yeah, although I'm afraid it's not entirely 15 Α. 16 self-explanatory. Perhaps you can put a little bit of context around this for me. 17 18 Q. It's my understanding that the exhibit, the 19 first page of the exhibit -- and there's a legend that's 20 shown on there -- the red boundary that is the largest boundary shown on there describes the St. Louis MSA. 21 22 Α. Okay. 23 Q. And the blue boundary, which encompasses the 24 next largest area within the MSA, defines what's called the 25 metropolitan calling area in Missouri.

1 Α. Okay. 2 Q. The smaller lines inside which certain areas 3 are colored define exchanges, is my understanding. 4 Α. Okay. For example, it's my understanding the 5 Ο. St. Louis exchange is what's shown in tan on there. 6 7 Α. Excuse me? 8 Q. The tan area defines the St. Louis exchange. Yes. 9 Α. And then the smaller units that are described 10 Q. in there, it's my understanding, are actual wire centers as 11 12 defined by SBC and other ILECs. And I believe if you look at the legend, for the most part those are defined over 13 14 there on the legend. 15 Α. Yes. 16 Do you agree that a wire center is smaller or Q. the same size as an exchange in general? 17 18 Α. Yes. 19 And do you agree that an MSA is larger than a Q. single exchange or wire center? 20 21 Α. Yes. 22 Q. Do you know how exchanges are defined? 23 Α. My understanding is that, in general, they are 24 defined as rate centers from a retail perspective, but I may 25 be wrong about that.

1 Q. What is your understanding based on? 2 Α. Just general notions that I've picked up in 3 the industry, but I've not specifically looked it up. 4 Do you know how a metropolitan statistical Ο. 5 area is defined, which we've been referring to as an MSA? 6 I can look it up. It's in the testimony of Α. 7 the SBC witnesses, general grouping by the OMB based on 8 community of interest notions, et cetera. 9 Could you define for me DSO as you believe the Q. FCC intended to use that terminology in determining the mass 10 market/enterprise customer cutover point? 11 12 Α. I think that the FCC uses the term DSO generally throughout the TRO to refer to voice grade service 13 for mass market customer of 56 kilobit channel, and I think 14 15 it's -- when it uses that term, I believe it uses it not in 16 its strict technical term, which I understand to be a 17 digital signal, DSO, which really is more of a capacity 18 level. You can have a DSO port on a switch, for example. 19 You can have a DSO channel on a fiber facility. 20 I don't think that the FCC is using it in that vein. I think it's generally talking about the DSO level of 21 22 service provided to end user customers and other mass market 23 customers, and it does that in part to contrast it with the 24 higher level of capacity, which is the DS1 level of

25 capacity, which is typically used to serve enterprise

1 customers.

2 Q. Hasn't the FCC defined the mass market for 3 purposes of determining the crossover point? Hasn't it done 4 a specific definition? 5 Α. If you can refer to me to a place in the TRO that you have in mind? 6 7 Q. I'm looking in particular at paragraph 497, the first sentence. And what I'm referring to reads, for 8 9 purposes of the examination described here, mass market customers are analog voice customers that purchase only a 10 11 limited number of POTS lines and can only be economically 12 served via DS0 loops.

13 A. Yeah. And that's why I'm drawing the 14 distinction between the strict technical definition and the 15 way that the FCC is generally using this. In the same 16 breath, the FCC talks about analog voice customers and the 17 DSO, and the DS stands for digital signal, and it's talking 18 about an analog voice grade customer.

19 So what I'm saying is I don't think that the 20 FCC has a strict technical definition in mind, but it's 21 clear what it's talking about. It's talking about analog 22 voice customers, particularly the mass market customers that 23 are served on basically a copper pair.

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24 Q. Can you define a DS1 line for me?25 A. A DS1 is a digital signal that gives you a
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1 capacity level of 1.55 megabits.

2 Q. And how does a DS1 line compare to a DS0 line 3 in terms of capacity, if you know? 4 It gives you far more capacity, like typically Α. 24 DSOs in terms of capacity. 5 6 And could you define for me UNE-P? Q. 7 Α. UNE-P is -- I believe stands for the unbundled network element platform. Generally when we're talking 8 9 about UNE-P, we're referring to the combination of the 10 unbundled loop and unbundled local circuit switching, 11 including the vertical features that can be provided by 12 means of the end of a switch in conjunction with interoffice 13 transport, not the features but the unbundled loop part, and then offered in conjunction with -- intraoffice transport 14 15 can then be used by CLECs to basically offer service to end 16 user customers by leasing -- by leasing the facilities of the ILEC without having to provide facilities themselves. 17 18 And would you define UNE-L? Q. 19 UNE-L then takes out the -- out of that Α. package of unbundled network elements, it eliminates the 20 local switching element. So what you have with UNE-L is a 21 22 configuration where the CLEC provides its own switching, 23 local circuit switching capabilities, but leases the 24 unbundled loop from the ILEC, combines it with transport 25 back home to its own switch, and that's a UNE-L strategy or

1 configuration.

2 There's a number of other elements that have 3 to be purchased that you don't have to purchase with UNE-P. For example, you have to purchase the very expensive 4 5 collocation arrangements with UNE-L, either at the central 6 office where the loop terminates or if you have an EEL in 7 the central office where the EEL terminates. And what we'll 8 find is that -- it's the cost of collocation which, 9 depending on how it's configured, but can easily be, like, \$20 to \$30 per loop, makes that -- the UNE-L strategy 10 generally cannot be used for residential customers. 11 12 And that you need to -- so the customer that 13 you previously serve by use of the UNE-P efficiently typically cannot be used to serve residential customers, 14 15 because the collo-- among other things, the collocation 16 costs are prohibitive. On page 25 of your rebuttal testimony, which 17 Q. has been marked as Exhibit No. 16 --18 19 Α. Yes. 20 -- at lines 11 through 12, if I understand Ο. your statement there, you're saying that if the Commission 21 22 were to use wire centers as the market definition, it would 23 be able to find wire centers throughout the state of 24 Missouri and cover all of the geographic area of the state; 25 is that correct?

1 A. Yes.

2 Q. Would it be true also that if the Commission 3 were to use exchanges, it would be able to cover the entire state of Missouri in terms of geography with markets 4 designed as exchanges? 5 Yes. Strictly speaking, I believe that's 6 Α. 7 true. I believe that the Commission would lose some granularity that is required by the TRO, but yes, it does 8 cover all areas of the state. 9 And if the Commission were to use LATAs, would 10 Ο. 11 that cover all the areas of the state --12 Α. Yes. 13 -- geographically as well? Q. Yes. 14 Α. 15 Q. If the Commission were to use MSAs, would it 16 be able to cover the entire state with MSAs? No. As I point out in my testimony, there are 17 Α. 18 115 counties in Missouri, and only 35 of those counties are 19 in MSAs. So there's roughly 80 counties that are not 20 covered by MSAs, which poses a problem both for the trigger analysis, but it will pose even greater problems when we get 21 22 to the operational and economic impairment phase. 23 Q. I want to turn back to wire centers. If I 24 wanted to find out the geographic area covered by a 25 particular wire center, where would I obtain that

## 1 information?

2 Α. Actually, I'm not really -- well, let me back 3 I presume that SBC would know that, but I'm not sure up. that we have to pinpoint it down to the geographic area per 4 5 se, since ultimately the question is, what happens with 6 respect to the customers? Are we impaired, are CLECs 7 impaired with respect to certain customers? And if the 8 Commission finds that there is no impairment, then 9 irrespective of what the geographic area is, if it does it on a per wire center basis, the entire wire center will be 10 taken off the table in terms of UNE-P. 11 So that means that all the customers in that 12 wire center are taken off the table. And I'm not really 13 sure that one needs to know exactly what that geographic 14 15 area is, since we're really concerned here about Missouri 16 ratepayers and the specific location of the area is really 17 of secondary -- perhaps even less important than that.

18 Q. Are you advocating that the markets be 19 geographically defined by wire centers or an aggregation of 20 wire centers?

A. By wire center. And it's the customer served by the wire center that are important here, because all the analysis really in the end is going to be impacting the ratepayer. Either they have competitive alternatives available or they don't.

2 to find out the geography of a particular exchange, do you 3 know where I would obtain that information? 4 Exhibit 27. But I'm not sure what the basis Α. for Exhibit 27 is. I presume that SBC assists in the --5 6 well, it has an SBC logo on it. It may be defined in the 7 tariffs, but I don't think the geography is necessarily 8 defined in the tariff. I presume that SBC has somewhere 9 demarcations of specifically which portions of a city or county are in a particular exchange, but I imagine that they 10 11 likewise would be able to draw boundaries for wire centers. 12 Ο. Is your answer that you don't know? 13 No. My answer is that SBC probably knows the Α. same way that they know where the exchange boundary is. 14 15 MR. WILLIAMS: No further questions. 16 JUDGE MILLS: Now Sprint? MS. HENDRICKS: No questions, your Honor. 17 JUDGE MILLS: SBC? 18 19 MR. BUB: Thank you, your Honor. CROSS-EXAMINATION BY MR. BUB: 20 Good morning, Dr. Ankum. 21 Q. Α. 22 Good morning. 23 Q. I'd like to start by asking a couple questions 24 about your wire center recommendation a moment ago. In 25 discussions with Staff counsel, Mr. Williams, you discussed

Do you know where I would find -- if I wanted

1

Q.

1 the switch capacity, and I believe you described the wire 2 center as like a natural unit? 3 Α. Yes. 4 Ο. And this is --5 And natural not in some metaphysical way, but Α. a natural unit in the sense that it's -- SBC that has chosen 6 7 the wire center as the --8 Q. The location? The wire center location. 9 Α. 10 Q. And that's what I'd like to ask you about. Okay. Go ahead. 11 Α. The wire center location, it's defined not so 12 Ο. 13 much by switching limitations, but rather by loop length limitations; is that your understanding? 14 15 Α. No. 16 Okay. For example, with a switch, if you need Q. 17 more capacity, you can always augment the switch to give 18 yourself more capacity; is that correct? 19 No. Actually, if you go to your Exhibit 27, Α. and if you go to the -- I believe Exhibit 27 consists of 20 21 three pages, and looking at the St. Louis MSA, particularly 22 the -- the area that constitutes St. Louis downtown, which 23 is the higher density area, for example, you see that 24 there's a large number of wire centers in that dense area. 25 Well, in that dense area, you will have very

1 short loops typically. I want to say very short. Very 2 short relative to what you will find in rural areas. And 3 you see many switches. So it's not so much the loop length there that has dictated the use of -- well, let me see. I 4 5 can't count so quickly, but I see easily 15 wire centers 6 there. That means there are 15 switches to serve that area. 7 By contrast, if you go further out in the green area of the St. Clair area, I believe that has one 8 9 wire center in it with very long loops. So it really is the number of loops that you're serving on a switch that is --10 11 that determines how many switches you're going to need. 12 If you have, let's say, a million customers in 13 a particular area and they all have very short loops, there's no way you can serve them with one switch. You're 14 15 going to have to parcel that out through a large number of 16 switches, and that's precisely what SBC is doing. It's 17 basically the number of customers that you serve. 18 So loop length limitation has no bearing on Q. 19 it? 20 Loop length limitations are important when you Α. 21 construct a loop or particularly the analog signal that 22 degrades over the length, but that's where your digital loop 23 carrier system comes in clearly with -- if you have a 24 digital loop carrier system that is fiber-based, the fiber 25 you can wrap around the earth, and if you have the right

1 electronics, that signal will keep on going. And by the 2 time it gets to the central office switch, that will still 3 only be at DS1 level capacity going into the switch. 4 So I don't see the loop length as dictating how many switches you have. It's really -- it's cust-- what 5 6 I think you're confusing is if you go to rural areas, you 7 have low customer density and you just never reach the point 8 where you go to multiple switches. You simply don't have 9 the customers that require more switches. But it's not the 10 loop lengths. I think that's -- it happens to be a 11 correlation. You have long loops in sparsely populated 12 areas, but it's not the length of the loop, it's the sparse 13 population that makes it you only have one switch sitting 14 there. 15 Q. You're also serving as a witness for MCI in 16 TRO proceedings in other places around the country. For example, you mentioned Connecticut; is that correct? 17 18 Α. Yes. 19 And in Connecticut you testified already about Ο. 20 some of the same issues we're discussing in this phase of the Missouri TRO case? 21 22 Yes. In fact, in more issues. Α. 23 Q. The DSO cutover issue is one of them? 24 Α. Yes. 25 Q. It's my understanding there in Connecticut you

1 offered an economic model to support your opinion of the 2 appropriate crossover point for that state; is that correct? 3 Α. Yeah. And then some model that I believe is 4 very similar to the Sprint model. And in your view the methodology you used in 5 Ο. Connecticut followed the FCC's rules in the TRO order? 6 7 Α. Yes, consistent with. 8 MR. BUB: Excuse me for a moment. Thank you 9 for the indulgence. Your Honor, may I approach the witness? 10 JUDGE MILLS: Yes, you may. 11 BY MR. BUB: Dr. Ankum, I'm going to hand you a copy of a 12 Ο. 13 transcript from that Connecticut proceeding. That proceeding was held January 21st, 2004, and it was Case 14 No. 03-0901, PHO-1, which I'm gathering is Phase 1; is that 15 16 correct? Subject to check, I would accept that. 17 Α. 18 Well, do you want to take a minute and confirm Q. 19 that that was the transcript from the proceeding that you testified in in Connecticut? 20 I would accept that. 21 Α. 22 Q. Thank you. I'd like to direct your attention 23 to page 361, if we could. Lines 12 through 18, if you could 24 take a look at that, I believe that was the portion of your 25 testimony that was additional direct that you were providing

1 to the Connecticut department.

2 MR. LUMLEY: Your Honor, while he's examining 3 that, Dr. Ankum has not testified in this proceeding regarding specific calculations. So I'm not sure how he can 4 be impeached with other testimony. There's nothing to try 5 6 and contradict, which I assume -- I assume he's using this 7 other testimony as some sort of impeachment. 8 JUDGE MILLS: He may be, but as far as I know, 9 there isn't a question pending right now, so I don't know. I don't know whether that's going to happen or not. If it 10 does, you can certainly pose an objection to it. 11 12 MR. BUB: This may short-circuit it a little, 13 your Honor. I'm not going to really get into specific numbers that were discussed in Connecticut. I'm going to 14 15 focus my questions on appropriate methodology under the TRO. 16 BY MR. BUB: Have you had a chance to read that? 17 Q. 18 Yes. Α. 19 And is that -- on page 361 there, you're Ο. summarizing the methodology that you say was laid out by the 20 21 FCC in the TRO? 22 Α. Yes. 23 Q. Could you please read that brief summary? And 24 you might want to start at line 10. That's where your 25 sentence begins, and I think it ends someplace around

1 line 18.

2 Α. I would like to emphasize to the Commission 3 that what I'm recommending here is a methodology that follows what the FCC has laid out in the TRO, which is to 4 5 find a break point between the number of DSOs that a 6 customer can be served with versus a DS1, and to do an 7 economic analysis of where, if you take into account the revenues and the costs, where that break point might be. 8 9 Q. Thank you. Now, I'd like move a little forward to page 392, if you could. And in that section I 10 think -- yes, sir. I'd like you to look at line 16 through 11 12 22, if you could, for a minute.

13 A. Yes.

Okay. There you were being asked about your 14 Ο. 15 methodology. And if I could read the question, it says, if 16 I understand what you did, you take all the costs of a DS1 17 by zone, which would include recurring and nonrecurring, you 18 add DSS customer premise equipment cost and network cost and 19 you come up with the -- with that total in the column that's 20 monthly DS1 CPE network and DS1 cost; is that correct? And your answer was? 21

22 A. Yes.

23 Q. And then the next question on the following 24 page, the next question was, then you simply divide those 25 costs by the recurring and nonrecurring costs of a DSO loop

in each of those zones, correct? And your answer was? 1 2 Α. That's correct. 3 Q. Now, in this case you didn't perform this type of a specific analysis; is that right? 4 5 Α. That's right. But it's fair to say that if you did, you'd 6 Q. 7 follow the same methodology that you outlined in that case? 8 Generally, yes, which I believe that Sprint Α. has done. 9 10 When you modeled the cost on the DS1 side, you Q. include channel bank equipment on the customer premises; is 11 that correct? 12 13 I've not included an analysis. Α. In your methodology, the appropriate 14 Ο. 15 methodology would be to include channel bank equipment on 16 the DS1 side? I've not reviewed my testimony for that, for 17 Α. 18 the purpose of this cross-examination. 19 Q. Okay. Could you read us line 19 through 25, 20 please? 19 through 25? If SBC believes that I've used 21 Α. 22 some wrong numbers for, let's say, customer premise 23 equipment, and if they found a vendor that can provide that 24 more cheaply, then by all means, I think we should use those 25 cheaper numbers if those numbers are reasonable.

1 Q. Thank you. Also on the DS1 side you included 2 cost to equipment to multiplex a DS1 signal onto a DS3. 3 Would that be appropriate? 4 If you could refer me to the page that you Α. 5 have? 6 Sure. I'd like you to read from line 9 Q. 7 through 12, please. 8 Question: So you would either have to include Α. 9 multiplexing on the DSO side or offset both and not include that at all? 10 11 And your answer? Q. 12 Α. Correct. I think we need to back up just to give that a 13 Q. little bit of appropriate context. There you were talking 14 15 about multiplexing from DS3 to DS1. If you want to take a 16 minute to look at that, that's fine. Question: If you were starting with DS3 17 Α. 18 again, wouldn't you need to multiplex down to the DSO level and vice versa? Answer: Yes. 19 20 Thank you. And the last question in that area Ο. has to do with backhaul charges, if I could take you to the 21 22 appropriate page there. Page 405, if you could read from 21 23 to 23 for me, please. 24 Α. Question: So there would have to be backhaul 25 charges for the DSO side as well? Answer: Yes.

So in your analysis, if you include DS1 1 Q. 2 backhaul charges on one side of the equation, you'd also 3 have to do it on the DSO side as well? 4 Α. Yes. Thank you. 5 Ο. That is under a UNE-L strategy. Of course, if 6 Α. 7 you do UNE-P, then you don't. 8 And this is the analysis that you did and Q. submitted to the Connecticut department? 9 Α. This cross-examination was about that 10 11 analysis, yes. Thank you. Dr. Ankum, I'd like to switch 12 Ο. gears on you, if I may, and talk a minute about collocation. 13 14 Yes. Α. 15 Q. Can you tell us how many collocations MCI has 16 in Missouri? No. I have the total number for you of 17 Α. 18 collocations in Missouri, but not broken down by company. 19 Q. Okay. Why don't we then just talk generally. 20 Would you agree with me that the existence of a collocation 21 decreases the incremental cost for providing service on a 22 facility basis for a carrier? 23 A. Can you define for me what you mean by 24 incremental cost? 25 Q. The cost to provide service. I think we could

1 probably short circuit this with a provision from the TRO. 2 Do you have the TRO with you? 3 Α. Yes. 4 Q. I can refer you to Footnote 16 -- I'm sorry. 5 1568. Perhaps you can --6 Α. 7 Q. Page 323? 8 Α. Page 223? 9 323. Q. 10 323. Α. 11 MR. BUB: May I approach witness again, your 12 Honor? 13 JUDGE MILLS: Yes, you may. 14 BY MR. BUB: 15 It's 1568 on page 323. Are you finished? Q. 16 Α. Yes. Okay. In that footnote they describe a study 17 Q. that WorldCom performed? 18 19 Α. Yes. 20 Could you read that footnote for us, please? Q. 21 Yes. For example, a study by WorldCom Α. 22 purports to show that the average cost disadvantage a 23 company labors under relative to the incumbent is 24 significantly lower if the competitor already has its own 25 switching, collocation and transport facilities in place,

1 (\$10.03 per customer assuming the competitor has a 7 percent 2 market share) then he must build and install them (\$21.59 3 per customer). 4 Thank you. You indicated that you didn't have Ο. it broken down by company, the collocation arrangement that 5 MCI has in our state here? 6 7 Α. That's correct. 8 Can you confirm for us that -- is that a Q. highly confidential number? 9 You'd have to ask my client. 10 Α. 11 MR. LUMLEY: I would have to say yes, since I 12 can't say no. They haven't approached me about it, but I would just assume it is. 13 14 MR. BUB: We'll just approach it this way. BY MR. BUB: 15 16 Those collocation arrangements, you know that Q. there are many of them in SBC territory? 17 18 13-state area? Α. 19 Q. No. I'm sorry. A. Missouri? 20 Missouri territory. 21 Q. 22 Α. I really don't know how many collocation 23 arrangements MCI has in Missouri. 24 Ο. Oh, you only know total countrywide? 25 Α. No. I know that the number of collocation

arrangements that exist in SBC's central offices in Missouri 1 2 collectively, Staff's Data Request No. 1 lists both the 3 revenues and the number of collocation spaces. 4 Q. Okay. I misunderstood. I thought you said you didn't know how many we had -- how many MCI had in SBC 5 central offices? 6 7 Α. That's correct, but I know collectively for all CLECs. Staff asked SBC how many collocation spaces are 8 there in your central offices in Missouri. 9 So you know for all CLECs? 10 Q. 11 SBC answered the number is, confidential, XX, Α. 12 XXX. So you know collectively for all CLECs, but 13 Q. not specifically for MCI? 14 15 Α. Yes. 16 Q. Can you confirm that MCI does have collocation arrangements in the state? 17 18 Α. I cannot confirm them with certainty. I would 19 be surprised if they don't. 20 MR. BUB: We'll just leave it there. Thank you, your Honor. Those are all the questions we have. 21 22 Thank you, Dr. Ankum. 23 THE WITNESS: So disappointed. 24 JUDGE MILLS: CenturyTel? 25 MR. DORITY: No questions.

JUDGE MILLS: Okay. Mr. Lumley, redirect? 1 2 MR. LUMLEY: Thank you, Judge. 3 REDIRECT EXAMINATION BY MR. LUMLEY: 4 First, just to make sure the transcript is Ο. clear, I couldn't quite hear your answer very early on in 5 6 your discussions with Staff counsel. I just want to 7 confirm, you indicated that a CLEC with a single switch, if it was the only carrier, that it cannot serve the entire 8 LATA, correct? 9 That's correct. Cannot. 10 Α. 11 And likewise, that it cannot serve an entire Q. 12 MSA? That's correct. It cannot. 13 Α. Counsel for SBC was going over some testimony 14 Q. 15 you submitted in Connecticut on January 21st of this year, 16 correct? 17 Α. Yes. 18 And your rebuttal testimony in this case was Q. 19 prepared on January 16th of this year, correct? 20 Α. Yes. Do you view those testimonies as consistent? 21 Q. 22 Α. Yes. 23 Q. And you continue your support of the crossover 24 calculations submitted by Staff, AT&T and Sprint in this 25 matter?

A. Yes, generally speaking. And what I'm focusing on is that the Commission should use a methodology such as the methodologies rolled out by those three parties, rather than just picking a number, which I believe SBC did. There's no analysis underlying the number three or fewer whatsoever.

Q. And in response to questions from Staff counsel, you indicated that there was a -- well, you were discussing how the decision whether or not to collocate varies on a wire center basis, and you indicated that there's a cost per loop of \$20 to \$30. Do you recall that? A. Yes.

13 Q. Was that a nonrecurring item or a monthly 14 item?

A. That is -- and this is based on what I've generally seen around the country, and what I was referring to here is generally a recurring cost that carriers have to shoulder for collocation. The precise number is easily calculated in Missouri, which would be confidential, so I couldn't tell you what the number is.

But as I indicated earlier, the collocation -the number of collocation spaces, as well as the collocation revenue, which would be the more important number, the annual collocation revenues earned by SBC is reported in Staff Data Request No. 1, there's a total dollar figure.

1 Then we know from Mr. Gillan's testimony -direct testimony, page 5, that -- I think this comes out of 2 FCC's local competition report, and I believe that's a 3 public number, there's 34,000 UNE loops in Missouri. So if 4 5 you want to know roughly what the collocation cost per loop 6 is, all one needs to do is divide the revenues by the number 7 of UNE loops and then divide it by 12, and you have a 8 monthly number. And I believe that monthly number is --9 well, I can't tell you. It's proprietary, but it's --Why don't we come back to the number at the 10 Q. 11 end of our questions and we can go into a confidential 12 session? 13 Α. Okay. But when you say it's a recurring item, you're 14 Ο. 15 saying it would apply month to month on a monthly basis? 16 Α. Yes. Yes. And that's a cost that would be incurred when 17 Q. 18 utilizing the UNE-L methodology, but not incurred when using 19 the UNE-P methodology; is that correct? 20 Yes. And I think it's a critical point to Α. focus for the Commission when it's looking at the question 21 22 of whether CLECs are impaired without local circuit 23 switching, they must consider that the UNE-L configuration 24 is radically different than UNE-P and that there's going to 25 be certain cost elements, like the cost of collocation and

1 transport, that are significant and that are involved in
2 UNE-L and not in UNE-P, and that to the extent that these
3 costs are significant, they must be recouped, and that means
4 that the revenue stream you can expect.

5 A customer must be large enough to give the 6 CLEC some assurance that those costs can be recouped, and 7 that's where the revenue figures become critically 8 important. And these revenue figures, they vary from wire 9 center to wire center, based on the mix of business and 10 residential customers, and you cannot just group those all 11 together in an MSA and expect to get it right, because it's 12 precisely the granularity on a per wire center basis that 13 you need to make those determinations about impairment.

14 Q. So this cost impacts both the selection of the 15 market and the cutover analysis?

A. Impacts are critically important to the market definition. As the FCC noted -- I'll give you a specific paragraph here for completeness sake -- the same market definition must be used in both the trigger analysis and the operational and economic impairment phase. That's in paragraph 495.

And that means, because the Commission has to use the same market definition in both phases, it must consider operational and economic issues in defining the market, because if the Commission does not consider those,

then we'll get to the last phase of these proceedings and then it's basically saddled if it uses the MSA with a market definition that doesn't suit the analysis that needs to be done. And, of course, it also gets saddled with that same market definition when it does the trigger analysis.

Q. You had questions from both Staff counsel and
SBC counsel regarding the market definition issue. Just to
sum it up, why is it that you believe that the wire center
is best suited to be used as a market definition?

10 A. Impairment is defined in terms of the ability 11 of a CLEC to offer a mark -- to enter a market profitably, 12 so we must focus on profit. And what determines profit? 13 Profit is the difference between cost and revenues. That's 14 what profit is. If there's no profit, you don't enter. If 15 there's positive profit, then you enter.

Now, costs and revenues vary on a wire center basis. On the revenue side, it's the mix of customers of bis and res customers that determines what your revenue stream is going to be, potential revenue stream out of a wire center. Business customers can have easily two to three times as much revenues associated with them as residential customers.

23 So the more business customers you have in the 24 wire center, the larger is your potential revenue you can 25 earn from that wire center, the more likely you will be to

enter that wire center. Conversely, if there's hardly any
 business customers and only residential customers, then the
 potential revenue stream is significantly lower.

4 On the cost side, costs also vary by wire 5 center. First, you have the unbundled network elements. Those rates vary on a wire center by wire center basis. We 6 7 have deaveraged rates in Missouri. The UNE loop rates can 8 vary anywhere from \$12 to \$20. Given that margin for mass 9 market customers as the FCC has noted can be slim, a variation of \$12 to \$20 is very significant. You cannot 10 11 ignore that variation on the cost side.

12 The other cost that will vary from wire center to wire center is the cost of collocation, as well as the 13 availability of collocation. Not all wire centers have the 14 15 availability of collocation. Clearly the cost of 16 collocation will vary from wire center to wire center. Even 17 though the collocation space itself and power charges may 18 not vary from wire center to wire center, it's the 19 utilization of the space that will ultimately determine your 20 per unit cost.

If you are collocated in a wire center where you have a lot of business customers and you're able to market your services competitively and do so profitably, you'll be able to use that collocation space efficiently. By contrast, if you're in a wire center where you have

1 predominantly residential customers, then you may not be 2 able to attract those residential customers with prices that 3 will allow you a profit, which means if you put in a collocation space, you may not be able to utilize that 4 5 collocation space and you get very high per unit costs. 6 All these aspects, cost and revenues vary on a 7 wire center by wire center basis, and that's precisely why 8 you see, if you look at the markets -- and we haven't seen 9 this data here in Missouri, but we have seen it elsewhere -you will see great variations from wire center to wire 10 11 center.

12 It's simply inappropriate to gloss over that, 13 to group them all together, and to ignore that granularity. Staff counsel asked you whether you viewed the 14 Ο. 15 wire center as a building block, and just to follow up on 16 that, by defining the market as a wire center, the 17 Commission would not be prejudging how many wire centers 18 would then collectively be found to have impairment or 19 nonimpairment, correct?

A. Not at all. To the contrary, it would be able, to a maximum degree, to tailor its finding to what the market is actually telling it about impairment. It's not forced to either go to a binary decision where it has to worry about a large area like an MSA or portions where you would find impairment and other portions you'll find

1 nonimpairment.

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2 And I can see the Commission just sitting 3 there thinking, what do I do? Do I toss out or just throw to the wolves those customers that don't have competitive 4 5 alternatives just because, let's say, in half of the wire 6 centers, I do find nonimpairment? You don't have to make 7 those agonizing decisions if you simply choose the wire center as the market definition, and on a wire center by 8 9 wire center basis you can make the appropriate decision. 10 You never have to go through this agonizing 11 process of, do I sacrifice a large number of customers that 12 I know for a fact don't have competitive alternatives 13 because I'm forced by the MSA definition to make a binary decision about the entire MSA, even though obviously the MSA 14 15 is very heterogeneous? You will find great variation, and 16 chances are, maybe not now, but when we revisit this at some 17 point, you will find nonimpairment in some wire centers and 18 clearly you will find impairment in others. 19 Why be forced to make one decision about a 20 marketplace that is heterogeneous? I don't understand the merit in that whatsoever. 21 MR. LUMLEY: Your Honor, I think we can avoid 22 23 doing a confidential transcript if I make this an exhibit.

counsel, but I think there's enough to proceed for the

I think I'll probably have to make a few other copies for

1 moment. Is that all right?

2 JUDGE MILLS: Okay. That's fine. (EXHIBIT NO. 35 WAS MARKED FOR IDENTIFICATION 3 4 BY THE REPORTER.) MR. LUMLEY: This is 35; is that correct? 5 JUDGE MILLS: 35, yes. I believe it will be 6 7 35HC. 8 MR. LUMLEY: I think it's just proprietary. 9 Is that correct, Leo? MR. BUB: Pardon me? 10 11 MR. LUMLEY: Just proprietary? JUDGE MILLS: We'll take a five-minute recess 12 while you-all track down the appropriate designation for 13 14 this. We're off the record. 15 (AN OFF-THE-RECORD DISCUSSION WAS HELD.) 16 JUDGE MILLS: Let's go back on the record. Mr. Lumley, what did you determine with respect to the 17 18 appropriate designation on this exhibit? 19 MR. LUMLEY: Well, that wasn't the issue. I 20 believe the designation as agreed is proprietary. The concern that SBC has raised, and obviously they can speak 21 22 for themselves, is they're disputing whether Dr. Ankum 23 should have this document or not. 24 JUDGE MILLS: Mr. Lane, do you want to address 25 that question?

1 MR. LANE: Sure. Judge, this is a Data 2 Request response that we gave to Staff, and Staff isn't 3 supposed to and didn't provide it to anybody else. We 4 provided it to one or two parties that asked for it to 5 satisfy a particular issue, but it was provided to those 6 parties. It wasn't provided to Dr. Ankum.

7 And apparently there's some sharing going 8 along of proprietary and possibly highly confidential 9 information among the parties to the case, and they didn't 10 get the information from us, so they're taking it and using 11 it among themselves, which is improper under the Protective 12 Order.

13 I'm not worried about whether this gets in or doesn't get in as evidence in the case. I'm worried about 14 15 people not respecting the Protective Order that we've got. 16 JUDGE MILLS: That might -- if, in fact, that 17 is correct that is occurring, that is a worrisome event. 18 MR. LUMLEY: To clarify, your Honor, as 19 Mr. Lane indicated, I believe it was Sage obtained this 20 information legitimately by discovery. They've hired the same consulting firm that Dr. Ankum works for. The 21 22 Protective Order indicates that the material can be shared 23 with persons designated by a party as outside experts. The 24 Order does not say that experts cannot share it with each 25 other.

1 If someone has been designated by a party as an expert, they have the right to see this information. 2 3 They work at the same consulting firm. They obviously rely on each other, just as anybody else would in such a 4 5 situation. So we don't believe there's been any violation. 6 If they're indicating that it's not an objection to the 7 admission of the evidence, then I don't know that it's really a pertinent issue at the moment, or what they intend 8 9 to do about it.

10 MR. LANE: I'm going to object on the basis 11 that it's irrelevant and improper. I'm telling you I'm just 12 not concerned about the facts and figures. I'm more concerned about the violation of the Protective Order. If 13 we give a response to Staff or to somebody else, it's with 14 15 the understanding that the Staff or somebody else is going 16 to keep that and they can only use it pursuant to the terms of the Protective Order. 17

They can't share it with other parties to the case, regardless of if they're in the same consulting firm or what have you. That's not what the Protective Order says, and it's not appropriate and it shouldn't be countenanced by the Commission.

23 So I'm going to object to any use of this 24 document because it's improper, but I'm telling you why I'm 25 objecting. It's primarily because it's violative of the

Protective Order, not because of whatever other factual
 issues it may contain.

JUDGE MILLS: Well, okay. And I'm -- I think there's two different issues going on here. One is whether or not this particular exhibit is admissible, whether this witness can lay a foundation for it, and the other is whether at some point there was a violation of the Protective Order. I don't necessarily see that the two are connected.

10 If this exhibit is admissible, if this witness 11 can lay a foundation for it, then past violation of the 12 Protective Order can't be corrected by preventing this 13 exhibit from becoming part of the record. If there is and has been a violation of the Protective Order, that certainly 14 15 is something the Commission wants to address and we can address more fully, but I don't know that simply keeping 16 17 this evidence out of the record is a remedy for that event, had it occurred. 18

19 So if your objection is based solely on the 20 fact that there may have been a violation of the Protective 21 Order that led to Dr. Ankum at some point in the past having 22 gotten improper access to this document, then that objection 23 is overruled. If I'm misstating your objection, then 24 perhaps you could enlighten me.

25 MR. LANE: Let me try to clarify. I am upset

about the Protective Order. It also is improper to introduce it, and they need proper foundation. But if it's improper for them to have obtained the evidence, they can't introduce it into evidence in this case, just as if in a criminal proceeding if the police improperly obtain evidence as a result of an unlawful search, they can't introduce that evidence into the case, period.

8 The same rules apply on the civil side. So I 9 do think that it's appropriate not to admit the evidence on 10 that basis. In addition, it may be that they don't set the 11 foundation, but it's an independent grounds they didn't 12 lawfully obtain this, which they didn't, under the 13 Protective Order.

14 JUDGE MILLS: Let me --

MR. LUMLEY: Obviously just to reiterate, we don't believe there's been a violation.

JUDGE MILLS: I'm going to have to read through the terms of the Protective Order, because as I sit here, I can't recall this situation ever having come up before.

21 MR. LANE: Well, it has come up before. Not 22 in this case, but we had a similar incident back when we 23 were going under price cap regulation. There was a case to 24 examine that, and in that particular case, it was the Office 25 of Public Counsel that provided MCI in that case with
1 answers to Data Requests that we had given to Office of the 2 Public Counsel. I don't think she was here, but whatever. 3 And in that case the Commission found that they were looking both at the statute and at the Protective 4 5 Order and found that information that was provided either pursuant to the statute or pursuant to Protective Order 6 7 wasn't to be shared with other persons, regardless of 8 whether they were parties to the case or not. So I think 9 it's come up and the Commission had expressed severe concerns about that type of behavior. 10 11 JUDGE MILLS: Certainly the Commission is very 12 concerned about the improper dissemination of confidential 13 or proprietary information in -- dissemination in ways that are contrary to the way it should be disseminated according 14 15 to the Protective Order. 16 What I'm saying is, I don't -- I'm going to 17 have to refresh my recollection of exactly what the 18 Protective Order says to see if I believe that sharing 19 information between parties that are properly in the case 20 and that would otherwise, perhaps, have access to the Protective Order is, in fact, a violation of the Protective 21 Order. Okay? 22 23 MR. LANE: And I understand that. I'm stating 24 that the MCI case, the price cap case, that dealt with that 25 issue.

## JUDGE MILLS: Ms. Mudge?

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2 MS. MUDGE: The only thing I would like to add 3 is that I truly dispute the notion that there has been sharing of information amongst two parties in the case. 4 5 Nobody's asked Sage as to -- and let the record reflect that 6 Sage, in fact, did properly serve DRs, Data Requests on SBC 7 asking them for their response to the Staff's Data Requests. 8 We did eventually obtain those, and I personally sent them 9 to my consultants. 10 That is completely proper. Those are the 11 facts, and I dispute the insinuation that somehow that Sage 12 has intended or at all shared information. And I simply 13 wanted to set the record clear. JUDGE MILLS: Okay. So let me get this 14 15 straight, then. Sage got this information from SBC, sent it 16 to QSI? 17 MS. MUDGE: Yes, sir. 18 JUDGE MILLS: And, okay, so Dr. Ankum, how did 19 you get this information? 20 THE WITNESS: I signed a proprietary agreement 21 in this case. 22 JUDGE MILLS: Yes. 23 THE WITNESS: And I filed testimony on behalf 24 of MCI, but I've generally also worked with Sage, together 25 with Mike Starkey and Mr. Patrick Phipps, who I believe all

1 three of us have signed proprietary agreements. I'm on --2 generally on an e-mail list with -- that Sage uses to 3 disseminate data responses on all cases that we work on, and that's how I obtained the Staff -- that's how I obtained the 4 5 SBC's answers to Staff Data Requests, through my client relationship with Sage. 6 7 JUDGE MILLS: So you do work for Sage in this 8 case? 9 THE WITNESS: Yeah. I have both signed a proprietary agreement and I work for Sage on this case, and 10 even though I've not filed testimony on behalf of Sage, I do 11 12 work for Sage as a consultant. 13 JUDGE MILLS: Okay. So Mr. Lane, does that --I think, at least to my mind, that perhaps solves the 14 15 problem. 16 MR. LANE: Well, if he's trying to say --17 JUDGE MILLS: Hang on just a second. If Sage 18 has provided this information to an outside expert that it 19 employs, I think that is okay under the Protective Order. 20 MR. LANE: If that were the case, that would be okay. I didn't understand it that way. I understood 21 22 that he had signed a Protective Order on behalf of MCI, not 23 on behalf of Sage, and that he's obtained it in his capacity 24 of serving as the representative of MCI and a witness on 25 behalf of MCI.

1 If he has submitted a Protective Order on behalf of Sage and Sage actually hired him, then that would 2 3 be okay. I agree with that. That's not my understanding of 4 what the facts are. 5 JUDGE MILLS: I believe that's what Dr. Ankum just said. 6 7 THE WITNESS: I did not quite say it that way. I said I've signed a protective agreement. I don't know 8 9 whose -- whether that was for MCI or for Sage. That is something we have to look up. 10 11 JUDGE MILLS: Okay. 12 THE WITNESS: But I am a consultant to both 13 companies. JUDGE MILLS: This is just getting thornier 14 15 and thornier. Mr. Lane -- I'm sorry. Mr. Williams, you 16 looked as though you had something to say. 17 MR. LANE: Well, I wanted to make it clear 18 that the Staff did not provide the information to MCI, and I 19 also wanted to raise that Staff has received -- because 20 we're on this topic, Staff has received a Data Request that asked Staff to provide information that it has obtained from 21 22 other companies, and I believe under the Protective Order 23 our obligation is to notify those companies that provided 24 the information to us for them to designate what category it 25 should fall in, and then we would provide that information

1 in accordance with the Protective Order.

2 I don't know that that really helps on this 3 situation, but I wanted to make the Commission aware of 4 that. JUDGE MILLS: Okay. Let's do this. We're 5 coming up on noon. I'm going to want to look into exactly 6 7 what the Protective Order says. 8 Mr. Lumley, Dr. Ankum, I'd like you to 9 determine before we come back after lunch on whose behalf Dr. Ankum signed a non-disclosure agreement, and we'll go 10 11 from there. 12 Do you have further questions that you can 13 take up if we sidestep this issue for now? 14 MR. LUMLEY: No. This was the end. JUDGE MILLS: Let's go ahead and take our noon 15 16 recess now and we'll come back at 1:15, and we'll continue from here. We're off the record. 17 18 (A BREAK WAS TAKEN.) 19 JUDGE MILLS: Okay. Let's go back on the 20 record. Mr. Lumley? 21 MR. LUMLEY: Your Honor, I don't know that it 22 eliminates Southwestern Bell's concerns, but we're not going 23 to move forward with that exhibit with this witness, so I'm 24 finished with this witness. 25 JUDGE MILLS: Okay. I still do want to try

1 and get to the bottom of what happened, if we can.

2 MS. MUDGE: If it please, your Honor, I would 3 be happy to add, I believe there is one factual issue that I believe Dr. Ankum stated incorrectly that might assist you 4 5 in getting to the bottom of it. And if I could be permitted 6 to ask a couple of questions, I would appreciate it. I 7 don't know if you want to do it now or do it later, but 8 they're just factual questions with respect to how Mr. Ankum 9 obtained or received the actual document that now Mr. Lumley is no longer going to be offering. 10 JUDGE MILLS: Sure, let's go ahead and do 11 12 that. EXAMINATION BY MS. MUDGE: 13 Mr. Ankum, I believe before lunch you stated 14 Ο. 15 that you are on an e-mail distribution list from Sage. Let 16 me ask you, sir, with respect to the document that your 17 counsel was going to introduce in this record, did you 18 obtain that document from an e-mail distribution from Sage 19 Telecom? 20 No. My recollection was imprecise, and you Α. and I had a bit of a conversation about this. We are, of 21 22 course, working together in certain states, and I am on 23 distribution lists where you send e-mails out to QSI that I 24 am on, but I believe that this -- that with respect to this 25 discovery, I think you clarified that I did not receive that

1 through you.

2 And with respect to this specific document 3 that we were talking about that was going to be the 4 foundation for my cross-examination, that piece of paper was 5 passed to me this morning by my colleague, Mike Starkey, who 6 is with QSI as well.

7 We were looking at that particular piece this morning at the back row there, and I pieced together from 8 9 some of the other pieces of information, oh, you can make this and this conclusion from that. So that's how it came 10 about. But the particular piece of data, then, that was 11 12 going to be introduced was handed to me specifically by Mr. Starkey this morning. And you clarified and I'm --13 subject to check, I'm fully prepared to accept that 14 15 representation that I did not get that in an e-mail from 16 you. And let me ask you, then, Sage Telecom did not 17 Q. 18 share that information with you, did they? 19 I'm prepared to accept that representation. Α. 20 MS. MUDGE: Thank you, Judge. JUDGE MILLS: Okay. Well, you're going to 21 22 have to clarify that for me. What is, I'm prepared to 23 accept that representation? 24 THE WITNESS: I've not personally checked my 25 e-mail. As I'm saying, the only thing I know for certain is

1 that I got the document that Mr. Lumley was going to present 2 as the foundation for the cross, I got that piece of information from Mike Starkey this morning. 3 I do get routinely e-mails from Ms. Mudge, and 4 5 what -- when I say I'm prepared to accept that representation, I've not -- as I'm sitting here, I don't 6 7 recall what e-mails I have and have not received. So --8 JUDGE MILLS: Well, did any of those e-mails 9 contain highly confidential or proprietary information that's been revealed in the course of this case? 10 11 THE WITNESS: I got my information through MCI 12 for this case. I do work with Sage on both this case and 13 other cases, but if Ms. Mudge says that those data -- that she has not disseminated those to me, I have not looked at 14 15 those data electronically through e-mails from Ms. Mudge. 16 I've only looked at the data that MCI has given me, and this 17 piece of -- this piece of paper was prepared by Mr. Starkey 18 for me -- well, not for me, but he just pointed it out to me 19 and handed it to me. 20 JUDGE MILLS: So do you or do you not get 21 highly confidential and proprietary information that has 22 been designated in this case from Sage? 23 THE WITNESS: I don't think I do, but I 24 haven't -- as I said, I don't know for a fact, since I 25 haven't looked at any. So if Ms. Mudge says she hasn't sent

me any, then I have no reason to doubt that. I'm involved in tons of cases and get hundreds of e-mails a day. I don't know exactly what I do get and what I don't get. If Ms. Mudge tells me she doesn't send any to me, I have absolutely no reason to doubt that. Sorry to be wishy washy about this.

7 JUDGE MILLS: That's okay. In my mind, the Protective Order is not unclear at all. I don't think that 8 9 a party can give protected information to another party, other than subject to the terms of the Protective Order. 10 11 I'm reading from paragraph D of the Protective Order: 12 disclosure of proprietary information shall be made only to 13 attorneys and such employees that are working as a consultant to such attorney or intend to file testimony in 14 15 these proceedings, or to persons designated by a party as 16 outside experts.

17 And I think it would be a misreading of the 18 Protective Order to say that just because you happen to know 19 that a person has signed a non-disclosure agreement, that 20 any information that you got from any other party in the 21 case can just be passed around willy-nilly among other 22 parties. If a party -- if Party A provides Party B with 23 protected information, Party B is not free to provide it to 24 Party C simply because they know that Party C is a party to 25 the case and has signed a protective order.

1 That's not the way it's intended to work, and 2 down that path leads to secret information just going all 3 over the place. So to the extent that anybody was under the impression that that's what the paragraph meant, it doesn't. 4 5 You get it on behalf of yourself and your party, and you 6 keep it to yourself, unless some other party asks through 7 discovery for it, in which case you end up going to 8 paragraph F, and you have to tell the original party, 9 Party A, that you're going to disclose some of their information in response to discovery. You can't just give 10 11 it out because you happen to be sitting in the back row of 12 the hearing room. 13 Mr. Williams? 14

MR. WILLIAMS: Judge, Staff's actually in the position of paragraph F, and the party who the -- or at least one of the parties whose information would be disclosed has indicated an objection to that disclosure being made. Is that something that that party needs to pring before the Commission, or how should that be handled procedurally?

JUDGE MILLS: In that case, if some party has served a discovery request on you that you can't -- that you can't answer without violating the terms of the Protective Order, specifically paragraph F, then you object to responding to the discovery.

1 MR. WILLIAMS: Well, as I read paragraph F, 2 we're to provide the information after obtaining how it's to 3 be designated. The party whose information we would be 4 disclosing has indicated that they object to the information 5 being provided whatsoever. So I think we're in a bit of a 6 conundrum.

7 JUDGE MILLS: Well, you may be, and I may have misspoken, but I'm -- we've got enough to do in this hearing 8 9 without addressing problems that may or may not come to fruition, but if there is a problem with discovery, we will 10 11 convene at a separate either conference call or oral 12 argument to hash that out. But I don't think that that 13 should slow us down in getting through witnesses today. MR. WILLIAMS: I don't disagree. I was just 14 15 seeing if I could get some illumination.

JUDGE MILLS: No. I'm not going to try and give you an off-the-cuff answer to that question because I really haven't thought about it, and I don't want to get bogged down in it.

As far as I'm concerned, I think that's really all we need to do about this particular discovery. I don't know that any sanctions are in order. I don't think any irreparable harm has been done. I think had MCI asked for this information, they probably would have gotten it. And I'd hope that all the parties involved

1 are -- consider themselves admonished and will be more 2 careful to think about the way highly confidential and protected and proprietary information is passed around. 3 4 Mr. Lumley, were you done with this witness? 5 MR. LUMLEY: Yes, sir. 6 JUDGE MILLS: Then you may step down. 7 THE WITNESS: Thank you. 8 JUDGE MILLS: You may be recalled for 9 questions from the Commissioners. I just don't know yet. Okay. Let's move on to Sage witnesses. 10 11 Mr. Starkey. And, Mr. Lumley, I'm going to give you these 12 13 back, copies you provided to the Bench. 14 (Witness sworn.) MICHAEL STARKEY testified as follows: 15 16 DIRECT EXAMINATION BY MS. MUDGE: Would you please state your name and business 17 Q. address. 18 19 My name is Michael Starkey. My business Α. address is 243 Dardenne Farms Drive in O'Fallon, Missouri; 20 zip code is 63366. 21 22 Q. And who are you appearing on behalf of? 23 Α. Sage Telecom. 24 Ο. And do you have before you what has been 25 marked, first of all, Exhibit No. 17, which is the direct

1 testimony of Michael Starkey on behalf of Sage Telecom filed 2 on December 18, 2003? 3 Α. Yes, ma'am. 4 And is that testimony that was prepared by you Ο. or under your direct supervision? 5 Yes, it was. 6 Α. 7 Q. And if I asked you these questions today, would your answers be the same? 8 9 Α. Yes. And are they true and correct to the best of 10 Q. your knowledge? 11 12 Α. They are. Do you have any corrections or changes you 13 Q. need to make to Exhibit 17? 14 15 A. I just have one, which is the address I just 16 gave is not the address that's written in my testimony. I 17 once again moved. So I would replace the address that is on 18 page 1 at lines 4 and 5 with the address that I just 19 provided. 20 And just to make sure that the record is clear Ο. and the parties have a chance to write it down, would you 21 22 please repeat your address? 23 Α. Sure. It's 243 Dardenne, D-a-r-d-e-n-n-e, 24 Farms Drive in O'Fallon, Missouri, and the zip code is 25 63366.

MS. MUDGE: Your Honor, at this time, then, I 1 2 will move and offer for admission Exhibit No. 17. 3 JUDGE MILLS: Are there any objections to the 4 admission of Exhibit 17? 5 (No response.) 6 JUDGE MILLS: Hearing none, it will be 7 admitted. 8 (EXHIBIT NO. 17 WAS RECEIVED INTO EVIDENCE.) 9 MS. MUDGE: Thank you, your Honor. BY MS. MUDGE: 10 Q. And now, Mr. Starkey, I'm going to direct your 11 12 attention to what has been marked for identification for the record purposes as 18 and 18HC, and are those documents the 13 rebuttal testimony of Michael Starkey on behalf of Sage 14 Telecom, which is Exhibit 18, and then 18HC being the highly 15 16 confidential version of that same testimony? 17 A. Yes, it is. 18 And if I asked you the same questions today, Q. 19 would your answers be the same? 20 Α. Yes, they would. And are they true and correct to the best of 21 Q. 22 your knowledge? 23 Α. Yes. 24 Ο. Do you have any corrections or changes to 25 Exhibits 18 or 18HC?

A. I have just a couple. At page 3, again, I
 would replace the address that is there with my new address.
 At page 32, line 15 --

4 Let's give everybody a chance to get there. Ο. 5 Α. Page 32, line 15, I used the term IDLC, all in 6 caps. I think that's the first time I've used it in my 7 testimony, and I just wanted the parties to know that stands for integrated digital loop carrier. So I would include in 8 9 brackets after the term IDLC the words "integrated digital 10 loop carrier."

11 My next correction is at page 70, at line 22. 12 About three-quarters of the way through the sentence, you'll 13 see the word cost coupled with structure. I would replace the word "cost" with rate, such that it reads incumbent 14 15 LEC's rate structure. And that is all of my corrections. 16 Ω. And so with those corrections, if I were to ask you these same questions, would your answers be the 17 18 same?

19 A. They would.

20 MS. MUDGE: Your Honor, I will move for 21 admission of Exhibit 18 and 18HC.

JUDGE MILLS: Are there any objections to the admission of 18 or 18HC?

24 (No response.)

25 JUDGE MILLS: Hearing none, they will be

1 admitted.

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2 (EXHIBIT NO. 18 AND 18HC WERE RECEIVED INTO 3 EVIDENCE.) 4 MS. MUDGE: Thank you, your Honor. At this time I would like to tender Mr. Starkey for 5 cross-examination and clarifying questions. 6 7 JUDGE MILLS: Thank you. MCI? 8 MR. LUMLEY: No questions. 9 JUDGE MILLS: Mr. Magness? MR. MAGNESS: No questions, your Honor. 10 JUDGE MILLS: Staff? 11 MR. WILLIAMS: Thank you, Judge. 12 CROSS-EXAMINATION BY MR. WILLIAMS: 13 I'm going to ask you to define a series of 14 Ο. 15 terms that have been used in testimony during this hearing. To begin with, DSO. How would you define that for purposes 16 of the analysis for the -- in connection with unbundled 17 18 local switching for the Triennial Review Order? 19 Α. A DSO is a 64 kilobit channel on a larger digital stream. So it's a digital service and, in fact, DS 20 stands for digital service. The O stands for that smallest 21 22 unit of a digital service in the DSO, DS1, DS3 hierarchy. 23 So it's 64 kilobit digital channel generally on a larger 24 telecommunications facility.

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Q. Didn't the FCC refer to analog voice customers

1 for its -- when it's discussing the crossover between DSO
2 and DS1?

A. The FCC uses the term "DSO" a bit loosely throughout the TRO, and I think, in general speak, you can consider a DSO and an analog voice loop to be the same thing, though technologically they're not exactly, because an analog voice loop is just that, an analog facility that doesn't necessarily work in terms of kilobits, but instead works in terms of voltage.

Q. And could you describe what a DS1 line is?
A. A DS is a 1.544 megabit channel on a digital
circuit made up generally of 24 DS0s.

13Q.And would you define wire center, please?14A.A wire center is generally a

15 telecommunications network term. When the ILECs originally 16 developed their networks and built them over time, it 17 economically made sense for them to aggregate the wires that 18 reached out to their customers into centralized points where 19 they could deploy switching to reach other points in the 20 network.

Where they originally and over time developed those centers and wires and placed their switches generally became known as their wire centers and were sort of -became sort of cemented in the network as it exists today, even though technology has somewhat surpassed the need for

1 those.

2 Q. Has the use of remote and host switching had 3 any impact on what you would define the wire center to be? 4 And I've heard the answers to that question Α. 5 that the other folks gave, and my answer might be a little 6 different, and it depends on what you mean by the term 7 impact. I understand what a remote switch, remote and host 8 switch configuration is, and it can be applied --9 Let me stop you there. Why don't you just Q. describe what a host and remote configuration is? 10 Okay. In some circumstances the wire center 11 Α. 12 might be small enough that it doesn't require the full functionality of a Class 5 switch. In those circumstances 13 vendors have equipment, generally referred to as remote 14 15 switches, that encompass a lot of different pieces of 16 equipment, wherein you can place a remote switch in the wire 17 center, tie it to a host switch through an umbilical, such 18 that the host switch provides the majority of complex 19 switching functions and access to the outside network, while 20 the umbilical provides some stand-alone switching functionality. 21 22 Q. And then I'll go back. Would the use of a 23 remote host have any impact on -- well, how would you define 24 a wire center where there is a host and remote

25 configuration?

1 Α. I think for purpose of the exercise that we're undertaking in this case, which is an identity of impairment 2 3 in my mind, the centralized question is, if I wanted to access an unbundled loop in SBC's, for example, network, 4 5 where would I have to go to collocate to reach that loop? 6 If I had to collocate in the remote switch 7 site in order to access that loop, then that wire center, in 8 my mind, is a stand-alone wire center and is in our 9 recommendation a stand-alone market. If I could access that loop from the host location, which in some circumstances you 10 can, depending upon the technology, then I would consider 11 12 the host to be the generalized wire center. 13 So in my mind, we're looking at, for purposes of this analysis, how do I reach customers as a CLEC, and in 14 15 this particular scenario, how do I reach that customer's 16 loop? If I wanted to find out what the geographic 17 Q. 18 footprint was of a wire center, how would I go about doing 19 that? 20 I had the benefit of hearing your questions Α. over the last couple of days, and so I snuck out yesterday 21 22 and went down to the tariff room, and SPSC No. 17 will 23 provide you a wire center mapping, as well as an exchange 24 mapping of at least the SBC wire centers. 25 Q. And would you be able to cover all of the

1 geography of the state of Missouri by the use of wire 2 centers? 3 Α. Yes, you would. 4 Ο. And is that also true of exchanges? 5 Α. Yes. 6 Is that also true of MSAs, metropolitan Q. 7 statistical areas? 8 No, it's not. In fact, I think I have a map Α. 9 in my testimony that shows that of the seven, plus part of eight, MSAs that impact Missouri, they really cover a very 10 small geographic region. And as I think Dr. Ankum pointed 11 out, they, in fact, cover something like 35 of the 12 13 115 counties in Missouri. 14 Ο. Where does the definition of MSA originate? It comes from the Office of Management and 15 Α. 16 Budget, the Federal Register. If you look at -specifically if you look at page 82238 of the Federal 17 18 Register, Volume No. 65, about halfway down you'll find the 19 metropolitan statistical area defined. 20 Ο. Are you familiar with metropolitan calling areas in Missouri? 21 22 Α. Yes. 23 Q. And how are those defined? 24 Α. I'm not sure a single definition captures all 25 of them. I was actually on staff when we first started

1 designing the MCA around St. Louis and Kansas City. I was 2 involved in the many negotiations that went on about what 3 exchange would be included and what exchanges wouldn't. 4 My understanding of the process was that the 5 Commission was attempting to identify communities of 6 interest in a very specific sense, in terms of where 7 customers would be making calls outside of their -- outside 8 of their wire center or exchange and into other wire 9 centers, but that might also serve as sort of a community of interest, you might be calling your doctor, you might be 10 calling your school, such that those could be treated not as 11 12 toll calls but as some other form of calling, primarily 13 local. Of the different geographic markets that have 14 Ο. 15 been put forward, wire center, exchange, MCA, MSA, LATA, is 16 the wire center the smallest geographic unit? 17 Α. Of the proposals that have been made in this 18 case, the wire center is the smallest. There are potential 19 to have smaller markets than that. 20 And would the exchange be the next smallest? Ο. You mean, the -- larger than the wire center 21 Α. 22 but smaller than the rest? 23 Q. Yes. 24 Α. Yes, sir, it would. 25 Q. And then would MCA be the next unit larger?

1 Α. I've heard a lot of folks say yes, though I 2 haven't specifically compared, for example, the St. Louis 3 MSA with the metropolitan calling area, so I don't know which is larger or smaller. 4 Have you had an opportunity to look at 5 0. Exhibit 27? 6 7 Α. Just briefly. I didn't get a copy. 8 MR. WILLIAMS: May I approach, your Honor? 9 JUDGE MILLS: Yes, you may. BY MR. WILLIAMS: 10 Ω. I'm going to hand you what's been marked as 11 12 Exhibit 27. Yeah, this information suggests that the MSA 13 Α. is larger than the MCA. 14 15 Q. I believe I was asking of the MCA with respect 16 to the exchange and wire center. Oh, my fault, then. I could have answered 17 Α. 18 that without this map. Yes, the MCA, because it is made up 19 of individual exchanges and wire centers, is larger than any 20 single exchange or wire center. 21 And would the MSA then be larger than the Q. 22 metropolitan calling areas in scope? 23 Α. That's what Exhibit 27 represents, yes. 24 Ο. The term "economy of scope" has been used in 25 the TRO and discussed in the hearing today or in the

1 hearings in this proceeding. What's your definition of 2 economies of scope?

A. Economies of scope is a multi-product sort of notion in that the average cost of a company would fall if it exhibited economies of scope representative of how many products they provided, such that the larger the number of products, the lower the average cost.

Q. And economies of scale, and if you would9 contrast that with economies of scope.

10 A. Economies of scale is also a notion of average 11 cost, but instead of product specific, it's really demand 12 specific, size specific, such that as demand increases for a 13 given carrier, if that carrier has economies of scale, its 14 average cost will decrease as well.

15 Q. Are you familiar with LATAs in the state of 16 Missouri?

17 A. Yes.

18 Q. And if I wanted to find out the geographic 19 footprint of a LATA, do you know where I would obtain that 20 information?

A. I mean, I've seen a number of maps that would provide that to you. I'm trying to think what sort of authoritative source for the LATA footprint would be. I would suggest to you that one of the NECA tariffs -probably NECA Tariff 2, perhaps, might provide you LATA

boundaries. I'm not certain of that. That shouldn't be a
 difficult piece of information to come across.

Q. And if we were to exclude what I believe is the Columbia/Jeff City LATA, would LATAs constitute the largest geographic area that's been proposed as a market area in this case so far?

7 A. I think that's fair.

8 Q. Would you define UNE-P?

9 UNE-P is a combination of really three Α. unbundled network elements; the unbundled local loop, 10 unbundled local switching, and then unbundled shared 11 12 transport. It generally provides to a CLEC the ability to 13 not only reach a customer via the UNE loop, but also to rely upon the capacity available with the incumbent's switch, and 14 15 also a key important part, the availability to rely upon 16 capacity within the incumbent's interoffice transport network in order to complete and receive calls. 17

18 Q. And would you define UNE-L?

A. UNE-L really describes a business strategy wherein a carrier would -- would facilitate with its own switch in a market reaching out to customers by using the incumbent's local loop. In a typical scenario, it would represent a carrier placing a switch and then collocating in a given central office of the incumbent extending transport facilities to that collocation and then ordering individual

1 unbundled loops from the incumbent to attach to that 2 transport and ultimately back to its switch, so that you could provide dial tone from your switch to a customer using 3 4 the ILEC's unbundled loop. 5 MR. WILLIAMS: No further questions of this 6 witness at this time. 7 Judge, may I approach to obtain my exhibit 8 copy? 9 JUDGE MILLS: Yes, you can get your exhibit 10 back. 11 Sprint? 12 MS. HENDRICKS: No questions, your Honor. 13 JUDGE MILLS: SBC? 14 MR. BUB: Thank you, your Honor. CROSS-EXAMINATION BY MR. BUB: 15 16 Good afternoon, Mr. Starkey. Q. Good afternoon. 17 Α. 18 Q. I'd like to first direct your attention to 19 your rebuttal testimony on page 40. 20 Α. Okay. If you look at line 11 with me, actually 21 Q. 22 begins at the end of line 10. The significant point is that 23 the FCC declined to adopt an MSA market definition in its 24 Triennial Review Order, despite having the full opportunity 25 to do so. Do you see that?

1 A. I do.

2 Q. Okay. Would you agree with me also that the 3 FCC had a full opportunity to adopt the wire center 4 definition as you proposed? That's very true, it did. What this 5 Α. 6 particular testimony is responding to is Dr. Tardiff's 7 testimony that says that the Commission gives a clear 8 preference for the MSA. I'm suggesting that preference doesn't exist. 9 10 Would you agree with me that the FCC also Q. 11 didn't adopt your wire center proposal? That's true. They left it up to the state 12 Α. 13 commissions to adopt a market definition. 14 Let's move on to page 63 if we could. Are you Ο. with me? 15 16 Α. I am. Okay. What I'm interested in there is your 17 Q. 18 grandfather proposal that starts about line 16, line 17. It 19 says, the Commission should grandfather the current 20 customers and providers. 21 There what you mean is you're asking the 22 Commission to grandfather UNE-P customers in the event the 23 Commission finds non-impairment; is that correct? 24 Α. That's right. I'm saying customers who have 25 relied upon mass market producers like Sage who then rely

upon UNE-P to provide them service, to the extent the Commission makes any decision in this case that says those customers no longer have that competitive alternative, I think that's a disservice to the competitive environment and specifically to those customers.

6 So what we're really saying is if the market 7 has shown that UNE-P is the best way to serve those 8 customers, and we think it has, then the decision by this 9 Commission that no impairment exists shouldn't mean those 10 customers have fewer alternatives.

11 Q. When you ask for grandfathering, you mean they 12 get to keep the UNE-P?

A. Right. In this circumstance, Sage, if it had a customer that had 8 lines or 12 lines and this Commission decided, for example, that 10 was the appropriate cutoff, then those customers with 12 should still be able to receive UNE-P from Sage.

18 Q. Do you have a copy of the FCC's TRO rules with 19 you?

20 A. Yes, sir.

21 Q. Would you look at Rule 51.319(d)(2)iiii,

22 which, at least on my copy, is page 23?

A. I have page 23. I didn't keep up with the --I'm sorry.

25 Q. Small D, No. 2, iiii, and the --

1 A. I'm with you. Entitled DSO capacity?

2 Q. Transition.

3 A. Yeah.

Q. Would you agree that this particular rule
calls for transition period for migrating off unbundled
switching where non-impairment's found?

A. Yeah. I mean, the rule says what it says, but
8 it suggests that --

9 Q. And it doesn't --

10 A. It provides a mechanism by which, in a 11 situation where the Commission found no impairment, that you 12 would transition from one vehicle, i.e. UNE-P, to another.

13 Q. And the next section on the following page 14 actually provides that transition timeline, does it not?

15 A. It does.

16 Q. And it doesn't provide for grandfathering 17 existing UNE-P customers, does it?

18 A. It doesn't mention grandfathering, but nor
19 does it suggest that it isn't a possibility. Certainly
20 doesn't preclude it.

Q. Take you back to iiii, DSO capacity. If a state Commission finds that no impairment exists in a market or that any impairment could be cured by transitional access to incumbent local circuit switching, all requesting telecommunications carriers in that market shall commit to a

1 collocation plan?

25

2 Α. And there were two big "ifs" at the first part 3 of that sentence that sort of preceded what happens thereafter. I guess that's the point I'm pointing you to is 4 5 that I don't see anything in this rule that would preclude 6 this Commission in saying that impairment exists as proven 7 before DS0 customers --8 But that was assuming in my question if the Q. 9 Commission finds non-impairment exists. We'd have to talk about where they find that 10 Α. 11 non-impairment exists and for which customers before I could 12 understand better how to answer your question. 13 I'm really only interested in the UNE-P Q. customers that you believe that should be grandfathered in 14 15 situations where they otherwise would have to transition off 16 of a UNE-P arrangement when the Commission has found non-impairment. 17 18 And maybe we're talking past one another. Our Α. 19 recommendation is that the Commission not find 20 non-impairment specific to Sage customers or anybody's customers that are currently served at a number of DSOs. So 21 22 you're assuming (sic) me to not assume that. 23 Q. I understand what your position is. I 24 understood your grandfather proposal to be with the

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assumption that the Commission didn't agree with you on the

non-impairment. So I understood grandfathering to be that if you find non-impairment, let's keep these customers the way they are and only apply it to those new arrangements and those would not be available.

So what I'm trying to get at is, those
customers that are currently being served by UNE-P that you
wish to grandfather. Are you with me now?

A. I think so. I think we were talking past one another. Sage's position -- and maybe I can make it clear. Sage's position is as follows. The Commission really has to make two decisions here. It has to make a decision with respect to the geographic market, and then it has to determine sort of product market between enterprise customers and mass market customers.

Our position is that any customer currently served by a DSO of Sage, because Sage simply doesn't serve enterprise customers, it's not in its business plan, if there is only DSO based customers in the very small business and residential category.

20 So to the extent Sage has a customer on the 21 DSO today, even if that customer has nine or ten lines, 22 that's a mass market customer, and hence no decision of this 23 Commission should suggest that those customers have to give 24 back their competitive alternative of Sage in that 25 circumstance. And that's our proposal. I don't think that

1 conflicts with the rule you're reading.

2 Q. I understand what your proposal is, but if the 3 Commission does not agree with you and sets the cutoff so that anything over four and above are enterprise, I 4 5 understood your grandfather position to be that those with 6 four and above DSOs that are being served by UNE-P by Sage, 7 for example, they should be grandfathered. Is that not your 8 proposal? Maybe I don't understand your proposal. 9 I think that is our proposal. It's part of Α. our proposal. Let me tell you the importance of that in the 10 11 rule you just read me. In the part you just read me, you 12 suggest that carriers in that market shall commit to an 13 implementation plan whereby they'll transition their customers really to a different platform. In Sage's 14 15 circumstance, no transition plan is possible. 16 I mean, there's really -- they don't have a 17 switch. They don't have a circumstance by which they are 18 going to transition these customers from UNE-P to something 19 else. The only transition that would exist for these 20 customers in that scenario is a transition back to SBC, and 21 that's what we're trying to suggest in this particular 22 circumstance, this Commission should make a decision to 23 allow it.

Q. If there was another wholesale unbundledcircuit switch provider, that would be another alternative,

1 wouldn't there?

2 Α. We've been looking and we ain't found one. 3 Q. If there was another provider, that would be 4 another alternative? I guess what I'm saying is that's too big an 5 Α. "if" for me to accept because we've looked and we can't find 6 7 one. It's just not consistent with the facts that exist. 8 Q. If there was one, that would be an alternative? 9 10 A. I'm going to stick with my answer. Q. Let me go back to my original question. This 11 12 rule that we just went through time and time again, this rule doesn't call for grandfathering? 13 14 A. I think we've agreed that it neither precludes it nor does it mention it. That's what I've agreed to 15 16 anyway. Doesn't say anything here about grandfather, 17 Q. does it? 18 19 A. One way or another, that's true. 20 MR. BUB: Thank you. Those are all the 21 questions we have. 22 JUDGE MILLS: Thank you. CenturyTel? 23 MR. DORITY: No questions, Judge. 24 JUDGE MILLS: Redirect? 25 MS. MUDGE: I don't think I have any redirect.

1 JUDGE MILLS: Mr. Starkey, you may step down. 2 Let's go to Mr. McCausland. Could you raise 3 your right hand, please. 4 (Witness sworn.) JUDGE MILLS: You may be seated. 5 ROBERT W. McCAUSLAND testified as follows: 6 DIRECT EXAMINATION BY MS. MUDGE: 7 8 Q. Would you please state your full name and business address. 9 Yes, ma'am. My full name is Robert W. 10 Α. McCausland. My business address is 805 Central Expressway 11 South, Allen, Texas 75013-2789. 12 And, Mr. McCausland, by whom are you employed 13 Q. and in what capacity? 14 15 Α. I'm employed by Sage Telecom, Inc. as their 16 vice president of regulatory affairs. Now, Mr. McCausland, I'm going to direct your 17 Q. attention to what's been marked for this record as Exhibit 18 19 No. 19, which is the Phase 1 direct testimony of Robert W. 20 McCausland on behalf of Sage Telecom, December 18, 2003, and I want to ask you, sir, if you had cause to be prepared this 21 22 direct testimony? 23 Α. Yes, I did. 24 Ο. And if I ask you these questions today, 25 Mr. McCausland, would your answers be the same?

Yes, they would. 1 Α. 2 Q. And are they true and correct to the best of 3 your knowledge? 4 Α. Yes, they are. Do you have any corrections, modifications or 5 Ο. changes to anything in Exhibit 19? 6 7 Α. No, I don't. 8 MS. MUDGE: Your Honor, at this time I will offer into evidence Exhibit No. 19, which is the direct 9 testimony of Robert W. McCausland. 10 11 JUDGE MILLS: Are there any objections to the 12 admission of Exhibit 19? 13 (No response.) 14 JUDGE MILLS: Hearing none, it will be 15 admitted. 16 (EXHIBIT NO. 19 WAS RECEIVED INTO EVIDENCE.) MS. MUDGE: Thank you, your Honor. 17 BY MS. MUDGE: 18 19 And now, Mr. McCausland, may I turn your Q. attention to what's been marked Exhibit No. 20? 20 21 Α. Yes. 22 Which is noted as the Phase 1 rebuttal Q. 23 testimony of Robert W. McCausland on behalf of Sage Telecom 24 filed January 16, 2004. And, sir, let me ask you, did you 25 have the opportunity to cause to be prepared and to be filed

1 this exhibit that's been marked for identification purposes 2 as Exhibit No. 20? 3 A. Yes, I did. 4 Q. Mr. McCausland, if I asked you these questions today, would your answers be the same? 5 6 Yes, they would. Α. 7 Q. Are they true and correct to the best of your 8 knowledge? 9 Α. Yes. Do you have any corrections, modifications or 10 Q. 11 changes? No, I do not. 12 Α. MS. MUDGE: Your Honor, therefore, at this 13 time I would like to offer into evidence Exhibit No. 20. 14 JUDGE MILLS: Are there any objections to the 15 admission of Exhibit No. 20? 16 17 (No response.) 18 JUDGE MILLS: Hearing none, it will be 19 admitted. (EXHIBIT NO. 20 WAS RECEIVED INTO EVIDENCE.) 20 MS. MUDGE: Thank you, your Honor. And at 21 this time I will tender Mr. McCausland for cross-examination 22 23 and clarifying questions. Thank you. 24 JUDGE MILLS: Thank you. MCI? 25 MR. LUMLEY: No questions.

1 JUDGE MILLS: Mr. Magness? 2 MR. MAGNESS: No questions, your Honor. 3 JUDGE MILLS: Mr. Williams? 4 MR. WILLIAMS: No questions. JUDGE MILLS: Sprint? 5 MS. HENDRICKS: No questions, your Honor. 6 JUDGE MILLS: SBC? 7 8 MR. BUB: We just have a few, your Honor. JUDGE MILLS: Okay. 9 10 CROSS-EXAMINATION BY MR. BUB: 11 Q. Good afternoon, Mr. McCausland. 12 Α. Hi. You're the vice president of regulatory 13 Q. 14 affairs for Sage; is that correct? 15 Yes, sir. Α. 16 And your responsibilities with Sage include Q. regulatory compliance, regulatory policy, things like that? 17 18 Yes, sir. Α. 19 Would that include responsibility for Sage Q. tariffs? 20 21 Sure. Α. 22 Q. Including those in the state of Missouri? 23 Α. Yes, sir. 24 Q. In fact, your name appears, I believe, at the 25 bottom of each of the Sage Telecom tariff pages that are
1 filed in this state; is that your understanding? 2 Α. At least some, perhaps all now. 3 Q. Okay. Are you familiar with the rates that 4 Sage charges for service in Missouri? Yes, sir, in general. 5 Α. 6 Q. Okay. Do you have those rates with you? 7 Α. No, not in front of me. 8 Can you confirm from your independent Q. 9 knowledge that the basic local service charges that Sage charges for residential customers is \$25? 10 11 Approximately. 24.90 was my recollection. Α. 12 Ο. And business is about \$29 for basic? Again, approximately, that's my recollection. 13 Α. And is it true that your company focus really 14 Q. 15 is on service packages? 16 Α. Yes, sir. So if you'd look at your company's website, at 17 Q. 18 least for the residential customers, you'd see a plan called 19 Home Choice Plan for 24.90. Is that what you're referring 20 to? 21 Yes, sir. Α. Would that include a few vertical services 22 Q. 23 like call forwarding, busy line, call forwarding don't 24 answer, caller ID and some long distance? 25 Α. In general, yes, sir.

1 Q. Is it 100 minutes of long distance; is that 2 what it is? 3 Α. 60, I believe. 4 Q. And then you also have a plan called Sage Unlimited Plan. 5 MR. BUB: Actually I found something here that 6 7 might help us. May I approach the witness? 8 JUDGE MILLS: Yes, you may. BY MR. BUB: 9 If the record can reflect that I've handed 10 Q. 11 Mr. McCausland a copy of a page from the Sage website 12 listing the residential service packages, so if we could back up to the Home Choice Plan, the monthly rate, if you'd 13 confirm, is 24.90; is that correct? 14 15 JUDGE MILLS: Mr. Bub, do you have a copy for 16 Mr. McCausland's counsel? MR. BUB: I'm sorry. 17 BY MR. BUB: 18 19 Q. The Home Choice Plan, 24.90? A. Yes, sir. 20 And free long distance minutes, 100? 21 Q. 22 Α. It says 100. My recollection, as I indicated, 23 is 60, but I may be wrong or this may be a typo. 24 Q. Okay. And then Sage has for residential 25 customers what they call Sage Unlimited Plan; is that

1 correct?

2 Α. Yes, sir. 3 Q. \$44.90? 4 Α. Right. And free minutes, looks like unlimited? 5 Ο. That is correct. 6 Α. 7 Q. And for this plan, you have looks like all the vertical features that Sage might offer, anonymous call 8 9 rejection, right, auto redial, call blocker, is that 10 correct? 11 That's what it appears to be, yes. Α. 12 Ο. Call forwarding, call return, call waiting, a 13 large package of vertical features; is that correct? 14 There is definitely an assortment of features, Α. 15 yes, sir. 16 At least according to this page, the one's Q. that you'd have to pay extra for would be enhanced 17 18 voicemail, non-listed service, non-published service, 19 personalized ring, and it looks like the rest come with the 20 package. Is that your understanding? 21 Well, I'd say the document speaks for itself. Α. 22 We could go through each of these, obviously, if necessary. 23 Q. Generally your understanding is that this Sage 24 Unlimited Plan has a large number of vertical features that 25 are included in the plan, plus unlimited long distance?

1 Α. I wouldn't say a large number of vertical 2 features that are included in the plan. Obviously there's 3 some additional add-ons for an additional charge. 4 Q. Why don't you go through and tell us the ones that are included? 5 It indicates call forwarding, busy line with 6 Α. 7 call forwarding is included, the -- I missed the one at the top, 900 and 976 restriction is available for no charge. 8 Call forwarding, don't answer with call forwarding, it 9 indicates is also included according to this. 10 Q. We'd already covered anonymous call rejection, 11 auto redial, call blocker and call forwarding; is that 12 13 correct? 14 I'm sorry. Repeat the question. Α. 15 Q. We already established that anonymous call 16 rejection, auto redial, call blocker, call forwarding, those were all included as well? 17 18 They're shown here as being \$2 each. Α. 19 We may have been talking about two different Q. things. 20 This is the only document that you provided to 21 Α. 22 me, sir. 23 Q. I apologize. Let's look at the Sage 24 Unlimited. 25 Α. All right. That might be helpful. Just to be

1 clear, I'm now looking at a different document, and maybe we
2 should start again.

3 Q. Let me back up and do that one again. The4 second one is the unlimited plan, is it not?

5 A. The document that you just handed me is6 identified as Sage Unlimited Plan.

7 Q. Why don't you tell us the features real quick 8 on that?

All right. 900/976 restriction is shown as 9 Α. included, anonymous call rejection, auto redial, call 10 blocker, call forwarding, call forwarding busy line with 11 12 call forwarding, call for -- pardon me -- call forwarding 13 don't answer with call forwarding is included. Call return, call waiting, call waiting ID, call waiting ID with options 14 15 with call waiting ID, it says. Caller ID, name. It says 16 must purchase caller ID number.

Caller ID number is included as well. Collect 17 18 call block at the customer's option. New Sage voicemail basic is included. Per line block is shown as included. 19 20 Priority call, remote access to call forwarding, selective 21 call forward, speed calling 8 and three-way calling. 22 Q. And for that does Sage charge \$44.90; is that 23 correct? 24 Α. Showing Sage unlimited plan, \$44.90 monthly

25 rate, yes, sir.

MR. BUB: Your Honor, I'd like to approach the
 witness.

3 JUDGE MILLS: Okay.

4 BY MR. BUB:

Mr. McCausland, I'm handing you an article 5 Ο. from the St. Louis Business Journal. It's from the 6 7 March 15th, 2002 print edition. This is printed off the 8 Internet, address is at the bottom. And in it -- it's an 9 article announcing Sage's entry into the Missouri market, and I'm going to ask you to read a quote from the president 10 and chief executive Jim Houlihan, and also we'll be entering 11 12 this as an exhibit for purposes of completeness. But at this point I'd just like to read that one sentence. 13

14 A. If I may, I'd like to read the entire document15 first. Thank you.

16 Q. Absolutely.

A. All right. Now, if you would, please ask yourquestion.

19 Q. Sure. I can ask you. And the quote I'm 20 directing your attention to pretty much asks the question, 21 is Sage for everyone? And I believe if you could read that 22 quote.

A. This at the bottom, it says, quote, the obvious target is Southwestern Bell customers, but we're not -- we're not for everyone, end of quote, Houlihan said.

1 Why not? Quote, if you can't use 100 minutes of long 2 distance or caller ID, we wouldn't be for you, end of quote. 3 MR. BUB: Thank you. Your Honor, at this point Ms. Mudge asked that this be part of the record. I 4 5 don't have any objection to making this an exhibit. That statement was the only thing that I was interested in, but 6 7 we can have it marked and I'll get copies later. 8 JUDGE MILLS: We'll just hold off. We'll mark 9 it after you have sufficient copies. That way we can mark it, pass it around and talk about it then. 10 11 BY MR. BUB: 12 Ο. Mr. McCausland, I'd like to shift gears on you 13 and ask you about some highly confidential information, but not any substance. In preparing for this case, did you 14 15 review any highly confidential information? 16 Of Sage or other parties? Α. 17 Q. Other parties. 18 I'm sure that I did, but I don't have a Α. 19 specific recollection. 20 Did you review any Southwestern Bell highly Ο. confidential information? 21 22 Α. In preparation for today? 23 Q. Yes, sir. 24 Α. Not that I recall, no, sir. 25 Q. Did you receive any highly confidential

1 information of Southwestern Bell?

2 Α. I'm sure that I have during the proceeding. 3 Q. Do you know -- could you tell us what that 4 was? 5 Α. Well, of course, the documents we've seen here over the past several days of the hearing, some of which I 6 7 believe were SBC highly confidential. I don't have a 8 specific recollection prior to the beginning of the hearing. Where did those documents come from? 9 Q. During the hearing, they've been provided as 10 Α. part of the process when you-all distributed to the parties. 11 12 Ο. Where did you get them, sir? From counsel. 13 Α. MR. BUB: Excuse me. 14 15 MR. LANE: Judge, I'm actually not sure what 16 motion to make here, but Mr. McCausland's an employee of a 17 party. He's not entitled to see highly confidential 18 information, and this is another example of an apparent 19 misuse or ignoring of the Protective Order in the case. I 20 don't know whether -- if that's not true, I'll stand corrected, but that's just what he testified to. I would 21 22 ask that all the testimony of Sage be stricken in this case. 23 JUDGE MILLS: I believe -- and correct me if 24 I'm wrong, Mr. McCausland -- didn't you just say that, of 25 course, you must have reviewed highly confidential

1 information but that you couldn't remember any of it, that 2 you couldn't remember specifically if you saw any? 3 THE WITNESS: Right. Yes, sir. 4 MR. LANE: I'm sorry. I thought he said that 5 he looked at the specific exhibits in this case that were 6 marked as highly confidential during the hearing and passed 7 around. I thought that's what he said. 8 THE WITNESS: May have been proprietary. I 9 don't recall. 10 JUDGE MILLS: So you did, in fact, look at all the testimony that's been marked proprietary and highly 11 12 confidential, is that your testimony? THE WITNESS: I wouldn't say all. I think 13 14 that I've seen some. 15 JUDGE MILLS: Okay. Do you understand that 16 you probably shouldn't have? Do you understand the terms of the Protective Order in this case? 17 18 THE WITNESS: I thought I did. 19 JUDGE MILLS: Okay. And what is your 20 understanding of your access to highly confidential and proprietary information? 21 THE WITNESS: Well, certainly any party's 22 23 information that is highly confidential or proprietary I 24 could not use for business purposes, nor would I. 25 JUDGE MILLS: But do you think you have access

1 to it? 2 THE WITNESS: Well, now I suspect that I 3 don't, but --4 JUDGE MILLS: Up until a few minutes ago, did you think that you had access to it? 5 THE WITNESS: I hadn't really given it much 6 7 thought. I haven't sought it out, obviously. 8 JUDGE MILLS: Ms. Mudge? MS. MUDGE: Your Honor, I think what he has 9 done is he has testified that in the preparation of his 10 testimony, which is being sought to be struck, he did not 11 12 review any documents, any proprietary or highly confidential documents, and yet that is the subject of the motion to 13 strike is -- deals with exhibits -- as I understand it, 14 Exhibits 19 and 20. And I believe he's testified that he 15 16 did not rely on or review any proprietary or highly confidential information. 17 18 It was in the context -- any review was in the 19 context of sitting in the hearing room, and that's it. So I 20 don't -- I'm not -- I'm not disputing the issue. It's kind of what one deals with the preparation of the testimony, 21 22 which is the subject to the motion to strike, versus what he 23 did sitting in here for the past three days. I think those 24 are two different issues. 25 JUDGE MILLS: Maybe yes, maybe no. I haven't

1 really gotten to thinking about the motion to strike yet. 2 I'm still trying to figure out exactly what he saw, when he saw it, and how he saw it. I mean, is it -- is what 3 4 happened that when you were sitting here in the hearing room 5 you were reading all the highly confidential testimony as the witnesses were testifying? 6 7 THE WITNESS: No, sir. I remember seeing some exhibits sitting on the table that had HC identified on 8 9 them. 10 JUDGE MILLS: Okay. And did you read those 11 exhibits or were those exhibits handed to you? Did you take 12 them and look at them? THE WITNESS: I don't recall that I read the 13 exhibits, but I may have looked at them. I certainly looked 14 15 at them long enough to recognize HC. 16 JUDGE MILLS: I mean, if that's the extent of 17 it, then I'm not sure we really have a problem here. There 18 may be. There may be some issue with how closely the chairs 19 are put together, in any event. 20 MR. LANE: Judge, I thought he indicated that 21 he read testimony in this case that was marked HC. 22 JUDGE MILLS: I didn't hear that, and I'll ask 23 you that. Have you read testimony in this case that was 24 marked HC? 25 THE WITNESS: I really don't have a specific

1 recollection of that which I read which was identified HC. 2 JUDGE MILLS: Okay. Mr. Lane, I don't 3 remember him saying that, and so what he's saying I don't 4 think is inconsistent with what I heard him say before. 5 MR. LANE: Well, Judge, up until a minute ago 6 he thought he was allowed to read it. He just now suspects 7 that he's not, and he indicated that he reviewed materials 8 in preparation for this, and if he reviewed any testimony of 9 the case, it contained HC material. JUDGE MILLS: Well, actually that's not true. 10 11 There are, I think, roughly 24 pieces of testimony of which 12 only 3 or 4 are highly confidential. So I don't know that 13 he did see highly confidential testimony, and I don't know that you know either. 14 15 THE WITNESS: And also what I will say is, you 16 know, I never saw any of it without my counsel, and she's 17 very, very thorough, so I'm confident that I didn't see 18 anything that I wasn't supposed to. 19 JUDGE MILLS: Well, let me say this: I think 20 if there was -- if there was reason to believe that this witness had improperly seen highly confidential testimony 21 22 during the course of this hearing, I think that would be an 23 unfortunate event and there may be repercussions from that. 24 I have not yet had it demonstrated to my satisfaction that 25 that happened, nor has it been demonstrated to my

satisfaction that he did, in fact, see highly confidential
 information in the preparation of his testimony that was
 prefiled.

4 If that had happened, that would probably be a 5 different sort of event, and there may be different repercussions from that, but I don't know that that happened 6 7 either. There seems to be, at the very least, a somewhat uninformed, if not casual and lackadaisical attitude towards 8 9 highly confidential and proprietary information, and I 10 deplore that. I think that's something that we really need to focus on. 11

12 The Protective Order in this case, it's the 13 one that the Commission uses in most of its cases, and it may be different from the Protective Order in other states, 14 15 and it probably is. But simply because it's issued 16 regularly and routinely in telephone cases doesn't mean that 17 it should be ignored, discarded, you know, worked around. 18 The highly confidential information is not available to 19 in-house experts. Proprietary information is, under certain 20 circumstances, and there's just no way around that.

So once again, I don't think that in this particular instance there's any real reason to think that Mr. McCausland has violated the Protective Order, but I'm somewhat appalled that he didn't recognize what it meant by the time we got to this point in the proceeding.

1 So to the extent that there is a pending 2 motion to strike his testimony, that's denied, but I have to say again that I don't -- I don't appreciate the way that 3 this witness has shown his lack of knowledge about the way 4 5 highly confidential and proprietary information should be 6 treated. 7 So with that, I think we're probably ready to move on. And again, I'll caution the parties, all of the 8 9 parties, to pay close attention to what's highly confidential and who you're giving it to and who you're 10 showing it to. 11 12 THE WITNESS: Thank you. MR. BUB: We have nothing further, your Honor. 13 JUDGE MILLS: Thank you. After SBC, we have 14 15 CenturyTel? 16 MR. DORITY: No questions, Judge. JUDGE MILLS: Ms. Mudge, redirect? 17 REDIRECT EXAMINATION BY MS. MUDGE: 18 19 Mr. McCausland, you were asked some questions Ο. about Sage's residential service offerings, both the 20 unlimited plan as well as the Home Choice Plan. Do you 21 22 recall that line of questions? 23 Α. Yes, I do. 24 Ο. And I believe that SBC counsel actually 25 provided you with a listing of the -- sort of the features,

1 so to speak, of each of those packages, correct? 2 Α. Yes. 3 Let me ask you, Mr. McCausland, do either of Q. those plans, either the Home Choice or Unlimited Plan for 4 residential customers include any data services? 5 6 Α. No, no data. 7 Q. And do you recall, sir, if there is a comparable type of plan for both -- for business customers 8 9 of Sage, both the -- the Home Choice and the Limited? I think it's actually called Business Choice. 10 There is a comparable choice not involving 11 Α. 12 data. 13 Q. And can Sage provide data to a business 14 customer? 15 Α. No. 16 Can Sage provide data to a residential Q. 17 customer? 18 Α. No. 19 Now, with respect to the -- also the documents Q. that SBC counsel provided you, which I believe provides a 20 list of all the features and prices, does that document that 21 22 you have in front of you contain all the terms and 23 conditions for the purpose of obtaining and using either the 24 unlimited plan or the Home Choice Plan for Sage? 25 Α. No, neither does. Neither of the documents

1 does contain terms and conditions.

2 Q. And where would that be found? 3 Α. In Sage's tariffs and statements of terms and conditions of service where the interstate service is. 4 MS. MUDGE: Those are all the questions I 5 have. Thank you, Judge. 6 7 JUDGE MILLS: Mr. McCausland, you may step 8 down. Let's go to Staff witnesses. Before we do, we 9 will take a five-minute recess. We're off the record. 10 (A BREAK WAS TAKEN.) 11 (EXHIBIT NO. 35HC WAS MARKED FOR 12 IDENTIFICATION BY THE REPORTER.) 13 JUDGE MILLS: Let's go back on the record. 14 15 Mr. Williams. Mr. Thomas, will you raise your right hand, 16 please. 17 (Witness sworn.) JUDGE MILLS: Thank you. You may be seated. 18 CHRISTOPHER C. THOMAS testified as follows: 19 DIRECT EXAMINATION BY MR. WILLIAMS: 20 Would you please state your name and provide 21 Q. 22 your business address. 23 A. My name is Christopher C. Thomas and my 24 business address is Governor Office Building, Suite 500, 25 200 Madison Street, Jefferson City, Missouri 65101.

1 Q. By whom are you employed and in what capacity? 2 Α. The Missouri Public Service Commission as 3 Regulatory Economist II. 4 Did you prepare and cause to be filed in this Ο. case what's titled rebuttal testimony of Christopher C. 5 6 Thomas marked as Exhibit No. 21, both an HC version and a 7 version with the highly confidential material redacted? 8 Α. Yes. 9 Q. Do you have any revisions to that testimony? Yes, I have one change to the testimony 10 Α. itself, and several to the schedules attached to the 11 12 testimony. Would you walk us through Exhibit No. 21HC and 13 Q. provide those changes? 14 Yes, I would. First of all, page No. 3, 15 Α. 16 line 22, where it says 10 voice grade equivalent lines, that should be 11 voice grade equivalent lines, pursuant to 17 18 Mr. Maples' testimony. 19 MR. LANE: I'm sorry. Could you repeat that? 20 THE WITNESS: Oh, absolutely. Page 3, line 22, where it says 10 voice grade equivalent lines, that 21 22 should be 11 voice grade equivalent lines. 23 Now, the other changes are to my highly 24 confidential exhibits, and, Judge, I believe Mr. Lane 25 indicated that since my changes deal only with the names of

1 exchanges, he was okay with me revealing the exchange names 2 and the wire center names. 3 MR. LANE: Yeah, we didn't mark the exchange 4 names as confidential, Judge. That's fine. 5 THE WITNESS: We're using exchange names, Judge, from another case. 6 7 BY MR. WILLIAMS: 8 Q. Are all of the exchanges you're going to list SBC? 9 They are all SBC exchanges, and the changes 10 Α. are pursuant to Mr. Fleming's rebuttal testimony. 11 12 Ο. And are those changes also reflected in what's 13 been marked as Exhibit 35HC? 14 Α. Yes. Yes, they are. 15 Ο. And that's the document that reflects the 16 changes that you'll be making from Exhibit 21HC? 17 Α. Schedules 1, 2 and 3, yes, sir. Okay. On 18 Schedule 1-1, the exchange Blue Springs should be removed 19 from the list. Schedule 1-2, the exchange Fairgrove should 20 be removed from the list. Schedule 1-3, the exchanges of Nixa, Republic and Rogersville should be deleted. And on 21 22 Schedule 1-4, the exchange Willard should be removed. 23 Q. You may want to slow down a little. 24 Α. Sure. Okay. Schedule 2-1, the Blue Springs 25 exchange should be -- the schedule -- excuse me -- the

1 schedule should indicate that the Blue Springs wire center 2 is found within the Kansas City exchange. So the exchange 3 name column should be changed from Blue Springs to Kansas 4 City. 5 MS. HENDRICKS: Excuse me. Is there an extra copy of what's just been handed out? 6 7 MR. WILLIAMS: Sorry. 8 THE WITNESS: Schedule 2-2, the wire centers 9 of Fairgrove, Nixa, Republic, Rogersville and Willard within the Springfield, Missouri MSA, the exchange name should be 10 changed to reflect Springfield, the Springfield exchange. 11 12 MR. LANE: Sorry. Could you do that again? 13 THE WITNESS: The wire centers of Fairgrove, Nixa, Republic, Rogersville and Willard should be changed to 14 15 reflect -- the exchange name should be changed to reflect 16 Springfield. Schedule 2-3, in the St. Louis, Missouri MSA, 17 18 the wire center of Weldon Springs, the exchange name should 19 read Harvester. Schedule 2-5, wire center switch is not in 20 an MSA or micro MSA. The wire center Sunrise Beach should reflect the exchange name Gravois Mill, and also the first 21 22 footnote with the single star should be deleted, as it's not 23 applicable any longer. 24 BY MR. WILLIAMS: 25 Q. Do you have any other revisions?

1 Α. Yes, to Schedule 3. And these are the same 2 revisions we made before. In Blue -- excuse me. On 3 Schedule 3-1, the Blue Springs exchange -- the Blue Springs 4 wire center should reflect the Kansas City exchange, and I would highlight that entire line consistent with the 5 6 highlighting on the schedule. 7 Schedule 3-2, the Fairgrove, Nixa, Republic, 8 Rogersville and Willard wire centers should reflect the 9 Springfield exchange, and the shading should be done appropriately. And on Schedule 3-3, the Weldon Springs wire 10 11 center should reflect the Harvester exchange. Do you have any further corrections? 12 Ο. 13 I do not. Α. Why have you made those changes? 14 Ο. 15 Α. I made those changes pursuant to page 15 of 16 Mr. Fleming's rebuttal testimony where he pointed out some inaccuracies in my wire center exchange groupings. 17 18 And just to be totally clear, Exhibit Q. 19 No. 21HC, the schedules attached to that with the revisions 20 you just provided for the record would result in the schedules that have been marked as Exhibit 35HC? 21 22 Α. That's correct. 23 MR. WILLIAMS: Staff offers Exhibit 35HC and 24 Exhibit 21, both HC and the redacted version that does not 25 include the highly confidential material.

1 MR. MAGNESS: Your Honor, before it's 2 accepted, I have no objection to the exhibit, but could we 3 clarify for the record what is HC in this? It sounded as if the listing of Missouri exchanges going up all the way 4 5 through Schedule 1 may not be -- need to be HC. 6 THE WITNESS: The SBC exchanges may not need 7 to be HC, but I do not have the permission of the other 8 companies listed in that exchange to release their 9 information at this time. And if you go through that schedule, there are lots of -- all the ILECs in Missouri are 10 11 listed in that schedule. 12 MR. MAGNESS: So could we declassify the first 13 three pages where the SBC exchanges are listed? The less that is HC, it's going to be easier for the record going 14 15 forward. 16 MR. WILLIAMS: I would say that it's -- that's 17 up to SBC. 18 MR. DORITY: Your Honor, I share Mr. Magness' 19 concern about the exchanges that are listed and the fact 20 that they're denoted as highly confidential, and I appreciate and understand why Mr. Thomas labeled them as 21 22 such, having taken this particular list of an aggregate of 23 all of the ILEC exchanges from an exhibit that had been 24 previously marked highly confidential in another proceeding. 25 However, I would respectfully submit that I

1 know the SBC, Sprint, CenturyTel company exchanges, ALLTEL 2 exchanges are listed on the Commission's website. I would also submit that at least they used to be listed on the 3 company's annual reports, and I'm sure they're listed in the 4 public tariffs that are on file with the Commission. 5 And I'm a believer in the Commission's 6 7 standard Protective Order and the reasons for highly confidential and proprietary designations. I would hate to 8 9 see this be the poster child for those that want to change the use of the Commission's standard Protective Order, and 10 11 for that reason alone, I would suggest that there may be a 12 valid reason to remove the HC designation for the listing of 13 exchanges for the ILECs. MR. LANE: I join that. Your Honor, there's 14 15 no need for it to be HC. 16 JUDGE MILLS: Okay. That covers CenturyTel and SBC, ALLTEL and Sprint. 17 MS. HENDRICKS: There is no reason for the 18 19 exchanges to be listed as HC. 20 MR. LANE: I believe every exchange is listed in the company's tariffs, your Honor. 21 22 JUDGE MILLS: I agree. I don't disagree with 23 that. I'm a little uncomfortable taking on myself on behalf 24 of ALLTEL, who's not even in this proceeding, that we're 25 going to make all this information public, because I have no

1 idea what ALLTEL thinks about that.

2 MR. MAGNESS: Your Honor, if we -- just 3 picking up SBC, Sprint, CenturyTel, I think it gets us at 4 least up through page 1.7. At least that's some improvement on what's in the public record. Maybe the rest of it could 5 6 be addressed subsequently prior to the second phase when 7 we're going to be talking about this a lot. 8 JUDGE MILLS: I don't think it's going to be a 9 problem. I just don't want to do it on the fly today. 10 MR. MAGNESS: I understand. 11 JUDGE MILLS: To that extent, I think we can 12 take the big three, if I dare call them that and -- because they're here, and call that public, and we'll work on 13 getting the rest of it in the public domain as well. 14 15 MR. DORITY: Thank you, Judge. 16 JUDGE MILLS: You're welcome. So where were we? You had offered Exhibit 21. 17 18 MR. WILLIAMS: 21HC and 35HC. 19 JUDGE MILLS: Are there any objections to the admission of Exhibit 21 and 21HC? 20 21 (No response.) 22 JUDGE MILLS: Hearing none, it will be 23 admitted. 24 (EXHIBIT NO. 21 AND 21HC WERE RECEIVED INTO 25 EVIDENCE.)

1 JUDGE MILLS: Are there any objections to the 2 admission of 35HC, which is the corrected Schedules 1 3 through 3 of Mr. Thomas's rebuttal testimony? 4 (No response.) JUDGE MILLS: Hearing none, that will be 5 admitted as well. 6 (EXHIBIT NO. 35HC WAS RECEIVED INTO EVIDENCE.) 7 8 MR. WILLIAMS: Judge, do I understand 9 correctly that Schedule 1 through page -- I guess it's marked as 1-7 is now not HC, based on representations by the 10 11 parties here? 12 JUDGE MILLS: Yes, that's correct. 13 MR. WILLIAMS: Thank you, Judge. 14 MR. LANE: And that would be on both 15 Exhibit 35 and on --16 JUDGE MILLS: The original schedule attached to his testimony, although I think to a large degree that's 17 been sort of superseded and overtaken by this but, yeah, it 18 19 would be also public. 20 MR. WILLIAMS: Thank you, Judge. JUDGE MILLS: Thank you. Cross-examination, 21 22 CenturyTel? 23 MR. DORITY: No questions. 24 JUDGE MILLS: Sprint? 25 MS. HENDRICKS: No questions, your Honor.

JUDGE MILLS: SBC? 1 2 CROSS-EXAMINATION BY MR. LANE: 3 Q. Good afternoon, Mr. Thomas. 4 Good afternoon, Mr. Lane. Α. 5 Mr. Thomas, your background is in economics Ο. and finance, correct? 6 7 Α. That's correct. 8 Q. And you've never worked for a CLEC, have you? 9 Α. I have not. 10 Have you ever designed a network for a CLEC? Q. 11 No, sir. Α. Okay. Despite not being -- are you an 12 Ο. 13 engineer? 14 I'm not an engineer. Α. 15 Q. Despite not being an engineer and having only 16 a background in economics and finance and not having worked for a CLEC, do you feel qualified to address the questions 17 18 before the Commission, including the appropriate scope of 19 the geographic market and the DS1 crossover point? I do. 20 Α. 21 Is defining markets, is that something that Q. 22 economists do with regularity? 23 Α. That is something economists do. 24 Ο. Let me first address the DS1 crossover. On 25 pages 4 and 5 of your testimony, would you agree that you

identified two data points that are to be considered for the crossover from the FCC's rule, the first being increased revenue opportunities and the second being the point where multiple customers can be served with the high-capacity loop in the carrier's own switching?

6 A. Yes, sir.

Q. Let me focus first on the increased revenue
opportunities. Would you agree that only Mr. Fleming has
expressly included increased revenues in his analysis of the
crossover point?

11 A. I would say he's the only party that's12 included data revenues in his analysis, Mr. Lane.

13 Q. And you had criticized Mr. Fleming's approach 14 on the basis that it required the CLEC to generate data 15 revenues, correct?

16 A. That's correct.

Q. To the extent that there's increased revenue opportunities from data, that's something that the FCC requires be included in the analysis of the crossover, correct?

A. I'm not sure that I'd say in the analysis of the crossover. Maybe in the impairment analysis to come later, but I'm not certain that I'd agree with you that it's in the crossover analysis.

25 Q. All right. Have you reviewed the FCC's rule

1 on this with regard to crossover?

2 Α. You mean the rule that I stated in my 3 testimony? 4 Ο. It would be Appendix B to the TRO on page 22, and it's 51.319(d)(2)(iii)B4? 5 6 Yes, sir, as it's stated on page 4 of my Α. 7 testimony. 8 And that rule specifically requires as the Q. 9 first of the two data points the -- any increased revenue opportunity at a particular location, right? 10 The increased revenue opportunity, yes, sir. 11 Α. 12 I don't know that it includes any increased revenue opportunity, but yes. 13 14 Ο. To the extent that there is an increased revenue opportunity from data, then that's required to be 15 16 included in the analysis of the crossover point, correct? To the extent that it's been demonstrated, and 17 Α. I don't think that it has been in this proceeding. 18 19 Ο. All right. I understand there's some difference, but to the extent that there is an increased 20 revenue opportunity from data, it's required by the rule, 21 22 not just permitted but required by the rule, correct? 23 Α. I think that you could say that. 24 Ο. And rather than saying that Mr. Fleming 25 requires CLECs to generate data, wouldn't it be more

1 accurate to say that Mr. Fleming demonstrates that increased 2 revenues from data must be recognized? 3 Α. I'd say that's certainly -- that's certainly a 4 good representation of his testimony. Regardless of where the Commission sets the 5 Ο. DS1 crossover point, would you agree that CLECs remain free 6 7 to order multiple DS0s in excess of that crossover point to serve a particular location? 8 9 Α. The DSOs alone, yes, sir. And the DSOs that they could still order would 10 Q. be at the TELRIC rate, correct? 11 12 Α. That's correct. And above the cutoff point, the FCC has 13 Q. determined that CLECs are not impaired without access to 14 15 unbundled local switching, correct? 16 Similar to the enterprise market, yes, sir. Α. 17 Q. And it is the enterprise market? 18 Absolutely. Α. 19 Whatever the cutoff is set at, that point Ο. above includes or comprises the enterprise market, right? 20 Those customers would be treated as part of 21 Α. 22 the enterprise market. 23 Q. And below the cutoff or the crossover point, 24 those customers would be considered part of the mass market 25 for purposes of the impairment analysis, right?

1 A. That's correct.

2 Q. And that's what we'll undertake in the next 3 phase?

4 A. That's correct.

5 And if the Commission finds that there is not Ο. 6 impairment with regard to access to unbundled local 7 switching for mass market customers in any particular 8 geographic area, then the CLECs at that point could either utilize their own switch or, for those operating in SBC 9 10 Missouri's territory, continue to acquire unbundled local 11 switching, but not at the TELRIC rate, right? 12 Α. Priced pursuant to the 271 requirement, yes, 13 sir. And the FCC has spelled out those requirements 14 Ο. 15 as being just and reasonable rates under Sections 201 and 16 202 of the Federal Act, right? That's my understanding. 17 Α. 18 Were you present during Mr. Finnegan's Q. 19 cross-examination? 20 I was. Α. And would you agree that there are problems 21 Q. 22 with some of the inputs that he utilized in his analysis of 23 the crossover point? 24 Α. I would agree that specifically the 25 1,668 minutes and its application to the usage component of

1 his UNE-P rate is questionable, in my mind.

2 Q. That's because the local switching rate that's 3 contained in the M2A applies to all switching minutes of whatever type, correct? 4 5 Α. I'm not certain of that, Mr. Lane. You'd have to point me to a reference. On a certain type or all 6 7 minutes? I'm sorry. 8 To all minutes. Q. To all minutes? I'm not sure of that. 9 Α. Is that where -- what you're uncertain about? 10 Q. Yes. Yes. That's part of it. 11 Α. 12 Ο. And you recognize, do you not, that when a CLEC takes unbundled local switching and utilizes it for 13 purposes of carrying long distance calls for long distance 14 15 companies, that that CLEC is entitled to either originating 16 and/or terminating access, correct? That's correct. 17 Α. 18 And so the incumbent in that case isn't Q. 19 billing either originating or terminating access when the 20 CLEC is utilizing the incumbent's unbundled local switching, 21 correct? 22 Α. That's correct, There may still be tandem 23 switching, but I'm not sure how that breaks out into the 24 UNE-P, Mr. Lane. 25 Q. Tandem switching is another element under the

1 M2A, under the appendix for UNE price, is it not? 2 Α. Could you point it out to me? 3 Q. Sure. That sounds familiar. I would like to see it. 4 Α. 5 MR. LANE: May I approach the witness, your 6 Honor? 7 JUDGE MILLS: Yes, you may. BY MR. LANE: 8 9 Q. Showing the fourth page of Exhibit 34, appendix pricing UNE schedule of prices, would you agree 10 that it reflects a per minute of use charge for tandem 11 12 switching? Yes, I would. 13 Α. And so if a CLEC utilizes tandem switching in 14 Ο. 15 the course of providing either local or long distance calls, 16 then that charge from the M2A would apply, correct? That's correct. 17 Α. 18 And so for a long distance call, the only Q. 19 charge that the ILEC gets to make for the use of its 20 switching facilities to the CLEC utilizing unbundled local switching is the per minute of use charge reflected in the 21 22 M2A for those that are under the M2A? 23 Α. That's correct. 24 Ο. So the 1,668 minutes of use that are utilized 25 in Mr. Finnegan's analysis would all require application of

1 the per minute of use charge contained in the M2A, correct? 2 Α. To the extent that it's applicable, yes. As I 3 indicated, I wasn't sure about that. 4 Q. Do you have any reason to believe that it's not applicable at this point? 5 6 Α. I do not. If you're willing to represent 7 that, I'll accept it. 8 And Mr. Finnegan was the only one to utilize Q. 9 marketing costs in his analysis, correct? 10 I believe that's correct. Α. 11 And would you agree with me that it's Q. 12 inappropriate to consider marketing costs when determining 13 the crossover point because the customer has already been acquired at that point and it's a question now of 14 15 determining how the customer's going to be served? 16 A. I don't know that I'd necessarily agree with that. 17 18 Q. Do you disagree with it? 19 I don't have any specific evidence one way or Α. 20 another, Mr. Lane, and I've heard both sides of the story in the hearing room this week. And I'm not sure where I fall 21 22 out on it, to tell you the truth. 23 Q. Okay. You were also present for the 24 cross-examination of Mr. Maples from Sprint? 25 A. Yes, I was.

1 Q. You're aware that he used statewide average 2 figures to determine his crossover point? 3 Α. Yes, sir. 4 Would you agree with me that that's an Ο. 5 inappropriate way to determine the crossover point? 6 I would not agree on that. Α. 7 Q. Would you agree with me that when a CLEC has a 8 customer that they're serving and the CLEC is making the 9 decision whether to serve via multiple DSOs or serve via a DS1, that that decision is going to be based on the cost of 10 11 DSOs and the cost of DS1s from the ILEC in whose territory 12 that customer sits? 13 On an individual CLEC basis, yes, sir. Α. And on an individual customer basis, that's 14 Ο. how they make the decision, right? 15 16 Α. Yeah, Yeah, And so it would be appropriate, would it not, 17 Q. 18 when the Commission is setting a crossover point, to set one 19 separately for SBC, Sprint and CenturyTel, correct? 20 That would be ideal, but I don't know that Α. it's necessary. And I think the Commission was given a 21 22 directive that they had to set a crossover point, and I 23 think the best evidence they've got is a statewide average 24 crossover point at this point. 25 Q. Well, Mr. Maples was the only one that

1 utilized a statewide average, wasn't he?

2 A. That's correct.

3 And if the Commission chooses to utilize Q. either Mr. Fleming or Mr. Finnegan's analysis, then they 4 5 wouldn't be using a statewide average, would they? 6 Α. They would not. 7 Q. They'd be using an ILEC-specific rate, right? That's true, and they'd be left with the 8 Α. 9 problem of how to apply that in non-SBC areas potentially. To the extent that somebody comes forward and 10 Q. 11 asks for non-impairment to be declared in that area, right? 12 I'm not sure. The direction given to the Α. 13 Commission in paragraph 497 says, the Commission shall determine, Mr. Lane, and I -- it seems to me that the 14 15 Commission has to determine the crossover point. And I 16 don't know that that's dependent upon any specific request. 17 Q. If there were no party anywhere in the state 18 asking for a finding of non-impairment with regard to 19 unbundled local switching for mass market customers, the 20 Commission wouldn't have to determine a crossover point, 21 would it? 22 Α. I'm not sure of the answer to that, Mr. Lane. 23 Q. Can you see any practical reason why they 24 would need to?

25

Α.

Because there's no impairment in the DS1 above

market, and I think that still for purposes of paragraph
 497, it says, the Commission shall determine the cutoff. So
 I think they still would have to do it.
 Q. And if the Commission determined a specific

5 cutoff for SBC Missouri and for Sprint and for CenturyTel, 6 they could also later determine, if necessary, a crossover 7 point for anyone else who sought to have unbundled local 8 switching declared to be delisted as a UNE because of 9 non-impairment, right?

10 A. I'm not sure of the answer to that, Mr. Lane.
11 It seems to me that it's a directive to set a crossover
12 point.

13 Q. But would you agree that the more accurate 14 crossover point for SBC Missouri would be utilizing SBC 15 Missouri specific figures, right?

16 A. In a very detailed analysis, yes, sir.

17 Q. And the Commission could set for SBC Missouri 18 a crossover point that would apply statewide, correct, in 19 all of SBC?

A. In all of SBC's exchanges, yes. You'd just be
left with the problem of how to apply crossover in non-SBC
exchanges potentially.

Q. Which may or may not ever become somethingthat is of practical importance, right?

25 A. I'm not sure if it's important right now. I

1 know CenturyTel is requesting.

2 Q. If they do it for SBC Missouri and CenturyTel, 3 there's nobody else out there that's requesting? 4 If that's the basis for -- as you're assuming, Α. if that's the basis for determining the crossover point, 5 then I would agree. 6 7 Q. Let's turn to the market definition issue. First, is there any change in your recommendation on the use 8 of exchanges? 9 10 No, sir. Α. 11 You cite to the price cap statute for the Q. 12 reference to a definition of exchange and claim that that's how Missouri defines the market, right? 13 14 That's guidance the Legislature's given the Α. 15 Commission in determining the existence of competition in 16 the markets of incumbent local exchange carriers regulated pursuant to price cap statute, yes, sir. 17 18 Q. And you agree, I take it, that there's no 19 legal authority linking the price cap statute to the definition of the market for unbundled local switching 20 purposes, right? 21 22 Α. I will agree. 23 Q. And the purpose of this proceeding is to 24 implement the FCC's TRO, correct? 25 Α. That's correct.
Q. And specifically the Commission's been
 delegated authority to determine whether there is impairment
 if CLECs don't have access to unbundled local switching in
 the mass market, right?

5 A. Yeah. That's a fair representation.

6 Q. Would you agree that the real question is 7 whether the use of exchanges is consistent with what the FCC 8 has directed, as opposed to how the State of Missouri might 9 happen to define exchanges for purposes of the price cap 10 statute?

11 A. That's -- could you restate that question one 12 more time, Mr. Lane? I want to make sure I understand every 13 part of it.

14 Would you agree that it's more -- excuse me. Ο. 15 Would you agree that the real question is whether the use of 16 exchanges is consistent with the requirements of the TRO, rather than whether it's consistent with how the Legislature 17 18 defines exchanges for purposes of the price cap statute? 19 I would agree that's the fundamental issue in Α. 20 this case.

Q. And if the Commission were to determine that the use of exchanges is inconsistent with the TRO, then you would not recommend use of exchanges simply on the basis that it's consistent with how exchanges are defined in the price cap statute?

1 Α. Repeat your question one more time. 2 Q. Yeah. If the Commission were to find that the 3 use of exchanges is not consistent with the requirements of the TRO, then you would no longer recommend that exchanges 4 be used simply because it's consistent with how the market 5 6 is defined in the price cap statute? 7 Α. That's correct. 8 Now, the FCC has imposed some limits on the Q. 9 State in setting the market for unbundled local switching analysis purposes, right? 10 11 Α. Yes, sir. And on the upper end, it can't be as large as 12 Ο. the whole state, right? 13 14 Α. Yes. And on the lower end, it can't be so small as 15 Q. to the point it doesn't reflect scale and scope economies 16 for competitors entering utilizing their own switch, 17 18 correct? 19 Α. That's correct. 20 And when we're looking at a competitor Ο. 21 utilizing its own switch to provide local service, what do 22 we mean by scale economies and what do we mean by scope 23 economies? 24 Α. Scale economies are essentially, as many of 25 the other witnesses have defined them, that your per unit

costs go down as you add more users to your specific switch or whatever piece of equipment we're talking about. And scope economies are the fact basically that your per unit decrease as you provide more services over the fixed facilities.

Q. And with regard to scope economies, is that
something that we'd say that we should consider residential
plus business customers, because those are two different
areas, but they reflect scope economies?

A. To the extent that there are existing
 customers in the residential and business markets.

Q. And for scale economies, we're talking about the number of customers, meaning as we expand the number -expand the scope of the geographic area that you're going to serve with the switch, you can add additional customers that would cause the average unit cost to decrease?

A. How about as you add additional customers to
the switch, it would cause the average unit cost to
decrease, is your question?

20 Q. Okay. That's fair.

21 A. Okay.

Q. We set aside for the minute the three urban exchanges of St. Louis, Springfield and Kansas City and look at the remaining exchanges in the state. Most of those exchanges are single wire center exchanges, correct?

1 A. That's my understanding.

2 Q. 95-plus percent would be single wire center 3 exchanges, right?

A. It may be higher than that outside of the5 metropolitan areas. We're not looking at the MSAs.

Q. And would you agree that in those areas that looking at a single exchange for purposes of defining the market wouldn't be consistent with the TRO, because it doesn't allow consideration of the full scale and scope economies from a competitor utilizing its own switch to

11 provide service?

12 A. Not necessarily.

13 Q. You're aware generally of the size of the 14 exchanges outside of the metro area, correct?

15 A. That's correct.

16 Q. And is it fair to say that the majority of the 17 exchanges outside of the St. Louis area would be less than 18 10 -- maybe less than 10,000 lines?

A. I believe that's a pretty good representation.
Q. At least a number of them would be less than
10,000 lines, right?

22 A. Yes, they would.

23 Q. The switch capacity that's available for most 24 of the switches can be upwards of 50,000 to 200,000 lines 25 per switch, can it not?

1 Potentially, and I think there are also Α. 2 smaller switches available, too. 3 And --Q. 4 And they're scalable also to the size of the Α. 5 demand. 6 And so if a CLEC were contemplating entering a Q. 7 single wire center exchange -- strike that. 8 If a CLEC were contemplating entering the 9 market outside of an urban area, would they typically try to 10 serve several exchanges so as to achieve appropriate scale 11 and scope economies with their switch? 12 I think as the FCC noted, Mr. Lane, in Α. 13 Footnote 36, the physical location of a switch is not necessarily relevant to defining a geographic market. So I 14 15 think they can serve multiple exchanges throughout the 16 state, as long as they can get transport to those exchanges 17 and collocation in those exchanges. So I don't know that 18 there's necessarily a geographic market that you can define 19 by where the CLECs are serving, because the location of the 20 switch, the switch could be in Illinois serving exchanges in Missouri. 21 22 Q. And I wasn't focusing on the location of it.

But you'd agree that the first factor that the FCC laid out in determining the geographic market was looking at where the CLECs are using their own switch to provide service to

1 customers, right?

2 A. That's correct.

3 And hypothetically, a CLEC that was looking to Q. provide service outside of the major urban exchanges 4 5 wouldn't decide to place a switch in a single exchange and 6 serve only that exchange; instead the CLEC would look at a 7 group of exchanges and decide whether and where to place its 8 switch? Potentially. But if the switch was located in 9 Α. Illinois, as I said, they could enter just one exchange in 10 Missouri and provide service in that one exchange with their 11 12 existing switch that's already serving another state.

13 Q. Because that switch would be being utilized in 14 Illinois to provide service to a number of others?

15 A. That's one possibility.

16 Q. And then how about in the St. Louis area? Let 17 me -- do you have a copy of Exhibit 27 with you?

18 A. Yes, sir.

19 Q. And you're generally familiar with that,

20 right?

21 A. Yes.

22 Q. Would you agree with me that there's a number 23 of CLECs in the St. Louis area that today utilize their own 24 switch to provide service to customers?

25 A. I would agree with you that Mr. Fleming's

1 Schedule 2, GAF-2, and the data which is reflected in my HC Schedule 2 and 3 represents that. 2 3 And did you also acquire some information from Q. various CLECs operating in the state concerning where they 4 were utilizing their own switch to provide service? 5 Staff has collected such information. 6 Α. 7 Q. And the information that you collected is consistent with that which Mr. Fleming conveyed in his 8 9 testimony? 10 It's not inconsistent with Mr. Fleming. Α. 11 Q. Not inconsistent? 12 Α. Not inconsistent. And so, yes, there's a number of CLECs that 13 Q. are using their own switch to provide service in the 14 15 St. Louis area generally, correct? 16 Α. Generally. 17 Q. And would you agree with me that the CLECs 18 that are providing service in the St. Louis area are serving 19 not only the St. Louis exchange that's shown in tan on 20 Exhibit 27, but also to serve many, if not most, of the exchanges that are depicted on Exhibit 27 that are part of 21 22 the MCA? 23 Α. I would say many. 24 Ο. And so under the first factor that the FCC has 25 said to consider, i.e., where CLECs are utilizing their own

switch to provide service to customers, that would cause one to recommend a larger geographic area than simply the St. Louis exchange. It would also cause one to include at least many, if not all, of the exchanges that are in the MCA, correct?

Not necessarily, because I think that by 6 Α. 7 increasing the scope of the geographic market, you can have 8 pockets within that geographic market where CLECs are not 9 serving or where there may be special circumstances that we're not aware of as to why CLECs aren't serving those 10 11 areas, and by defining the market in a larger manner, you 12 increase the possibility of leaving those customers without 13 competitive alternatives.

14 Q. I'm not sure I track with that, but we're
15 trying to set the geographic market in this phase, right?
16 A. Yes, sir.

Q. And there are areas that are beyond the scope of the St. Louis exchange that are part of the MCA that CLECs are today serving, utilizing a single switch, right? A. And there are also areas where there are not. I will agree with you that there are.

Q. And at least in those areas where they are, one would think that that was -- would be a factor in finding that the market, for purposes of analyzing impairment, ought to be larger than the St. Louis exchange,

1 correct?

2 Α. That's one possible conclusion. 3 And the question would be, how large should it Q. be, right? 4 5 Α. Yes. And the MCA --6 Q. 7 Α. As is it administratively practical, too. And the MCA is a reflection of a market area 8 Q. 9 as determined by the Commission back in 1992 as reflecting various communities of interest, correct? 10 Within the three large metropolitan areas, 11 Α. 12 yes. It would make sense, would it not, when 13 Q. considering the geographic market for the purpose of 14 15 defining impairment to consider the market as being not just 16 the St. Louis exchange, but rather at least as large as the MCA, right? 17 18 For purposes of impairment, I believe you Α. 19 could do that on an exchange basis. Okay. Let's take another example. Is there 20 Ο. an exchange that you're aware of in the MCA where CLECs are 21 22 not serving utilizing their own switch? 23 A. I don't want to reveal any highly confidential 24 information here, so please stop me if we go too far. 25 Q. I just want to know if there is one.

1 A. Within the MCA, yes.

2 Q. Okay. Is there one?

3 A. Yes.

4 Okay. And let's assume that a CLEC has a Ο. switch that's serving all of the St. Louis exchange. Let's 5 6 just pick a -- this won't be highly confidential because I'm 7 not going to pick one where they're not operating, at least 8 intentionally, but let's say Valley Park, to pick one. 9 Α. Okay. 10 We'll just --Q. Just pick Valley Park. 11 Α. 12 Ο. For purposes of this hypothetical, we'll pretend that there's no CLEC out there utilizing its own 13 switch to provide service to Valley Park. 14 15 Α. Okay. 16 But there are CLECs that serve the St. Louis Q. exchange plus Chesterfield, Manchester and Fenton today with 17 18 the single switch, right? 19 Potentially, I'll agree with you, if you want Α. 20 to represent that. And based upon your analysis of the data that 21 Q. 22 you've collected from CLECs in this case, that's true, is it 23 not? 24 Α. I don't have anything inconsistent with that. 25 Q. And so if we were analyzing the market to

determine what the appropriate geographic market is, one could say, well, I'll look at the St. Louis exchange plus Chesterfield, plus Manchester and plus Fenton, right? That would be a legitimate market because that's how CLECs are actually operating today, right?

A. Could you walk through that one more time?7 Could you repeat your question?

8 Q. For purposes of setting a geographic market 9 today, knowing that CLECs are operating in the St. Louis, 10 Chesterfield, Manchester and Fenton exchanges utilizing a 11 single switch, it would be appropriate to say, well, that 12 ought to be a market, right? That's one possibility?

13 A. That's one possibility.

Q. And because Valley Park, in our example, is located contiguous to both Fenton and Manchester, it wouldn't be a stretch to say the CLEC could utilize that same switch to provide service in Valley Park as well, right?

A. I don't know that I would say that, Mr. Lane, because I'm not aware of the circumstances within Valley Park, and I don't know of the specific cost factors that may cause impairment within Valley Park.

23 Q. Okay. But we're not trying to analyze24 impairment at this time.

25 A. Certainly.

Q. We're trying to analyze what the market should
 be, right?

3 A. That's correct.

Q. And isn't geographical proximity to where
CLECs are actually utilizing their own switch to provide
service something that ought to be considered as a factor in
setting the geographic market?

8 A. Something that could be considered. I'll give9 you that.

Q. The same is true with regard to the Kansas City and Springfield metropolitan areas, right? In general, we would say that there are CLECs utilizing their own switch to provide service, not just in the Kansas City metro exchange, but also in exchanges that surround that, correct? A. On a limited basis.

Q. And with regard to Springfield, there are CLECs that are today utilizing their switch to provide service not only within the Springfield exchange but within some or all of the surrounding exchanges, correct?

20 A. On a limited basis.

21 Q. And again, that should be a factor that the 22 Commission should consider in setting --

23 A. That could be.

24 Q. -- an appropriate geographic market?

25 A. Could be a factor that the Commission could

1 consider.

2 Q. And it would be more consistent with the first 3 factor that the FCC has said to consider, i.e., where the CLECs are utilizing their own switch today, than just simply 4 5 looking at the exchanges, right? 6 It's not as administratively practical in my Α. 7 mind, Mr. Lane, as the exchanges on a going-forward basis. 8 Okay. Would you take a look at your Q. Exhibit 2HC? 9 Specific page? 10 Α. 11 Not yet. Q. 12 Α. Okay. 13 The columns that are denominated the number of Q. CLECs collocated in the wire center, the number of CLECs 14 with EELs in the wire center, the number of CLECs with 15 16 ported telephone numbers and the ported telephone numbers 17 are all relevant to determine the market that the CLEC today 18 is using to provide service with their own switch, right? 19 Α. Yes. 20 And would you agree with me in the St. Louis Ο. MSA area that's depicted there, that those four columns all 21 22 indicate substantial use by CLECs of their own switch to 23 provide service to the exchanges in those MSAs? 24 Α. In the St. Louis MSA, was that your question? 25 Q. Yes.

1 Α. You used a plural at the end there. St. Louis 2 MSA only? 3 Q. Yes. 4 I'd say substantially. Α. 5 And if we looked at those exchanges that Ο. comprise the St. Louis MCA, it would be even a higher number 6 7 of those that reflect substantial use by CLECs of their own 8 switch to provide service, correct? 9 A. I would say reflect use. I don't know about 10 substantial use, but there would be a high percentage of 11 usage of CLECs serving their own switch in the MCA than 12 there is throughout the MSA. 13 And the same is true in the Kansas City and Q. 14 Springfield areas, correct? Springfield, it looks like all of your 15 Α. 16 exchanges fall within the MCA currently. So in Springfield, at least with regard to the 17 Q. 18 MCA area, if not the MSA area, it depicts CLECs utilizing 19 their own switch to provide service throughout the MCA, 20 right? 21 In exchanges throughout the MCA, yes. Α. 22 Q. Right. 23 Α. On a limited basis. 24 Ο. Well, that's a characterization there, too, 25 isn't it?

1 Α. That is a characterization. 2 Q. I thought it would be, like, substantial, 3 which was --4 Yeah, limited, substantial. We're going to Α. get in a semantical debate, I'm afraid. 5 6 And for Kansas City as well, same thing? Q. 7 Α. Since you only have one exchange outside of the MCA. 8 9 But for the purposes of the MCA, then, you Q. would agree that it reflects CLECs utilizing their own 10 switches to provide services throughout the exchanges that 11 comprise the MCA, right? 12 13 Α. Yes. 14 MR. LANE: That's all I have. Thanks, Judge. 15 JUDGE MILLS: Thank you. Mr. Magness? 16 MR. MAGNESS: No questions, your Honor. JUDGE MILLS: Mr. Lumley? 17 CROSS-EXAMINATION BY MR. LUMLEY: 18 19 In looking at page 14 of your testimony, Q. you're making the point that defining markets on the 20 exchange level would not preclude the Commission from then 21 22 assembling a group of exchanges into a broader area of 23 making a decision of impairment or non-impairment, right? 24 Α. That's correct. 25 Q. You would agree with me that you can do the

1 same thing on a wire center basis as well? 2 Α. You could. 3 MR. LUMLEY: Thank you. 4 JUDGE MILLS: Ms. Mudge? 5 MS. MUDGE: No questions, your Honor. Thank 6 you. 7 JUDGE MILLS: Questions from the Bench, 8 Commissioner Murray? 9 COMMISSIONER MURRAY: I might have one or two, 10 Judge, but I think Commissioner Gaw said he had questions 11 for Staff. JUDGE MILLS: I believe he does. 12 13 QUESTIONS BY COMMISSIONER MURRAY: 14 Q. Mr. Thomas, if we were to adopt Staff's recommendation for the market -- geographic market 15 16 definition, would that require that in order to find -- to 17 make a finding of non-impairment for the mass market, that 18 the triggers be met in every exchange? 19 Α. If the exchange was the geographic market 20 definition, then that would be my understanding of the trigger analysis. 21 22 Q. And in most instances an exchange is the same as a wire center; is that right? 23 24 Α. Outside of metropolitan areas in most 25 instances, yes. Yes, ma'am.

1 Q. Does that require that there be switches 2 within each of those exchanges? 3 Α. I don't believe so. 4 Ο. But it requires that --5 Α. I think that --6 -- a switch be able to serve each one of those Q. 7 exchanges? 8 And I think there's also the potential Α. analysis portion of the TRO order. But I don't believe SBC 9 has approached that portion, but I think that's also 10 11 something that could be considered in exchanges where CLECs 12 may not be serving. 13 I'm sorry. Would you repeat that? Q. 14 Sure. Sure. The TRO has -- there are Α. 15 basically two analyses you're going to have to perform or 16 could potentially perform after we define the markets. 17 There's the trigger analysis, which relies on where CLECs 18 currently are providing service, to my knowledge, and then 19 there's also the potential analysis, which is where 20 potentially can CLECs serve. And I don't believe SBC's 21 requested the potential stage of the analysis, but that's 22 something that you could potentially look at. 23 Q. And are you talking about the fact that in 24 order to find non-impairment you don't have to find that a

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CLEC is actually serving in every area, but that there is

1 the potential that CLECs serve in every area?

A. That's my understanding of the second phase ofthe prospective future analysis.

Q. And how many generally -- how many -- if you
can generalize this way, how many wire centers can a switch
serve?

7 A. I'm not aware. I'm not an engineer, ma'am. I 8 haven't worked for a CLEC, and it would be difficult for me 9 to speculate on that.

10 Q. What was the primary basis of your suggestion 11 that exchange is the appropriate geographic market 12 definition?

A. Sure. I'll walk you through real quick.
Paragraph 130 of the TRO -- I'll give you a page number,
too -- on page No. 87 and 88, discusses how, when the FCC -and I'll go ahead and just read you a lot of this last
couple of sentences of that paragraph.

In other instances, we will create rules that will vary in their implementation in different areas of the country. Accordingly, in these circumstances, we may delegate authority to state commissions to ensure that the unbundling rules are implemented on the most accurate level possible and will still reserve any administrative practicality.

25

So when we looked at the parties' proposals in

this case, ma'am, you had the exchange level or the wire center level, to a limited basis the LATA proposal, and the MSA approach. The MSA approach, in our mind, was not administratively practical on a statewide basis. I think this is where we differ in a reading with SBC.

6 SBC is asking that the markets only be defined 7 for purposes of their request, and I think that the way 8 Staff has read the TRO, we see -- you need to define the 9 market on a going-forward basis, and it will be used for all 10 of your analysis pursuant to paragraph 495, the last 11 sentence.

12 Ο. I'm sorry. And you're taking that from the 13 language that says "preserving administrative practicality"? Yeah. We wanted to make sure that the rules 14 Α. 15 were practical and easy to administer for the Commission. 16 And then going on to the paragraph 495, the very last sentence, the state commission must use the same market 17 18 definition for all of its analyses and the MSA isn't 19 applicable throughout the state.

20 Q. Could you give me that cite again?

A. Sure. Paragraph 495, and it's on page 316, at least of the copy of the order that I have. It's the last sentence of that paragraph.

Q. But couldn't you interpret that to mean forall of its current analysis? I mean, we're only analyzing

1 one -- well, I guess it depends on whether CenturyTel comes 2 in with Phase 2, but we're only analyzing it for one or two 3 specific carriers right now, are we not?

4 I believe that's SBC's interpretation of that Α. 5 language, ma'am. And I think the Staff interpretation has 6 been, if you define the market now as an exchange, it will 7 be administratively practical throughout the rest of your 8 analysis in the future, because you're given a shortened 9 time frame for future impairment analysis. And I can point 10 you to that rule, too, while we're discussing it. Page 27 of -- I think it's Appendix B where 11 12 the continuing review provisions of the state commission 13 proceedings are done, and on a shortened time frame, and it's 51.319(d), subsection 5, subsection 2. This thing's 14 15 not real -- it's not easy to navigate through, I know.

16 Q. Page 27?

17 A. Yes. Yes.

18 Q. And where is it on that page?

A. The No. 5 at the top, kind of second paragraph down, 5.2, continuing review. You're given a nine-month time frame to complete the initial analysis, but your continuing review is only on a six-month basis. So from an administrative practicality point, we're looking at how can we define the market that we can use on a going-forward basis, no matter where the company's request and exchange

1 level appeared to be reasonable to us.

2 Q. Under the continuing review portion where the 3 FCC says, a state commission shall complete any subsequent review applying these triggers and criteria, which criteria 4 5 do you think they're referencing? 6 I think it's the criteria laid out in the body Α. 7 of the Triennial Review Order, and also in some of the other rules, ma'am. And I think it's the criteria we're 8 9 discussing in the next phase primarily. So you don't think when they talk about 10 Q. 11 triggers and criteria that they're talking about geographic 12 market definition? 13 Well, I think they are talking about Α. geographic market definition as well, and if -- if you --14 15 let me explain how I'm getting there, okay? Because if you 16 were to set the geographic market as only the MSA, and 17 potentially an ILEC could come in and say, we want you to 18 find non-impairment in this specific exchange, and it may 19 not be in one of the MSAs. 20 So you're faced with a problem of, well, for 21 the first phase, for the initial review, we define the 22 market as the MSA, but now you're given a shortened time 23 frame to define the market and apply the trigger analysis. 24 So instead of nine months, you only have six months to do

25 the same kind of review.

1 I think when we saw all of this testimony come 2 in, we thought, well, for practicality's sake, if we define 3 the market as the exchange, we can use exchange on a going-forward basis throughout any analysis. 4 5 Ο. Okay. Were you finished explaining your 6 position? 7 Α. I think there's more to it, but I think that's 8 probably sufficient for right now. 9 COMMISSIONER MURRAY: Thank you. That's all I 10 have, Judge. JUDGE MILLS: Chairman Gaw? 11 12 OUESTIONS BY CHAIRMAN GAW: Thank you. God afternoon, Mr. Thomas. 13 Q. Good afternoon, Chairman Gaw. 14 Α. 15 Q. The rationale for choosing exchanges as the best geographic area, I have references in your testimony to 16 17 rationale for doing that, including references to Missouri 18 statutes and in regards to determining competition. 19 Α. Yes, sir. 20 Tell me how that -- tell me more about how Ο. that fits into the equation in your analysis. 21 22 Α. Okay. And I think for purposes of market, 23 when you look at competition within the market for purposes 24 of relieving the incumbent carriers from the price cap 25 obligation, you look at the exchange. And so we thought it

consistent to look at impairment on an exchange level,
 because if there's no impairment without an exchange, we
 would expect there to at least be the potential for
 effective competition to arise in that exchange.

Q. How is that -- how does that relate to -- give me more specifics. How does that relate to whether or not there is impairment in regard to mass market? Tell me how those two things come together.

9 Okay. Generally, when you found effective Α. competition within an exchange in the past, it's been based 10 on the existence of facilities-based competition in a 11 12 specific exchange. And I think the way the two fit together 13 is, you're examining impairment or non-impairment in whatever geographic market you define on the existence of 14 15 facilities-based competition, specifically CLECs using their 16 own facilities to provision service.

Q. So are you saying that you believe that the Commission in the past has looked at the issue of whether or not competition exists, has looked at whether or not a CLEC was using its own switch?

A. I think that was one of the factors that's gone into your effective competition considerations in the past.

24 Q. And do you have references to that somewhere?25 A. I don't have any specifically on hand,

1 Commissioner. I didn't bring any to the stand with me, but 2 I'm sure we could file something late that would give 3 references to that. 4 Q. Was it a determinative factor in regard to the finding of competition or was it just a factor? 5 6 I believe the existence -- le me say just a Α. 7 factor at this point, Commissioner. 8 If I have a -- if I'm a CLEC and I have a Q. 9 switch located in a particular exchange, is that switch going to have the ability to serve areas outside of the 10 11 exchange? 12 Α. Yes. And is there any -- is there any 13 Q. performance-based reason for that network and the switch as 14 15 to why the area should be limited to just the exchange that 16 the switch is -- the switch is serving? 17 Α. When you say performance-based, do you mean a technical reason? 18 19 O. Yes. 20 A. I don't believe there's a technical reason for it at all. 21 22 Q. When you say that you want to base it on an 23 exchange basis, you're not talking about whether or not the 24 switch is necessarily located within that exchange, correct? 25 Α. That's correct.

1 Q. You're talking about whether or not it is --2 there would be some service in that exchange by a switch 3 owned by a CLEC? 4 Yes, sir. Α. 5 Ο. And if I'm talking about the St. Louis 6 exchange, the boundaries to the St. Louis exchange, are they 7 illustrated on a map that we have? 8 Yes, sir. The tan areas around downtown Α. St. Louis. 9 All right. There is a tan area on the map 10 Q. that's in front of us here, and for the purposes of the 11 12 record, there's a map that has a tan area in St. Louis. 13 It's also Exhibit 27. Α. 14 Ο. That's what I mean. 15 Α. Exhibit 27, too. 16 Okay. Thank you. Q. The tan area that comprises multiple wire 17 Α. 18 centers around the St. Louis City. 19 Q. All right. Now, is that -- when we're talking about MCA, the MCA area, would all of that tan area be in 20 Tier 1, or tell me how the MCA fits in this picture in 21 22 regard to the tan area. 23 Α. Certainly. If you'll give me just a second. 24 Ο. Sure. 25 Α. Make sure I give you a complete answer. I

2 on this, Commissioner -- or Chair. The St. Louis 3 metropolitan exchange is the principal zone and MCA Zones 1 4 and 2. 1 and 2. So if I'm making calls within that 5 Ο. area, from one point in the area to another point in the 6 7 area, is it always -- is it always a local call, regardless of -- regardless of whether or not I do or don't subscribe 8 9 to something? A. I believe it's mandatory in the principal in 10 11 Zones 1 and 2. 12 Q. Is there a difference in the cost to anybody 13 in that region on a monthly basis? I'm not sure. I don't believe so, but once 14 Α. again, I'm not 100 percent sure. I haven't reviewed Bell's 15 16 tariff on that. 17 Q. If we are examining in the next phase of this 18 whether or not impairment exists, does Staff have a position 19 in regard to what factors it will be examining in making 20 recommendations about whether impairment exists? 21 Not at this time, as far as the comprehensive Α. list of the factors. 22

believe -- and I'm sure I'll be corrected if I'm incorrect

1

23 Q. Do you have any idea what you may be looking 24 at, at that stage?

25 A. I think there are a number of factors, and I

1 think some of the factors that Mr. Lane talked about before, 2 as far as trigger analysis goes. 3 Q. Mr. Lane? 4 A. Mr. Lane referenced some with me. Q. Mr. Lane, the attorney for SBC? 5 6 A. Yes, sir. 7 Ω. That Mr. Lane? Was he testifying earlier? 8 No, it was in questions to me. Α. MR. LANE: Whenever I can. 9 THE WITNESS: He was trying to testify 10 earlier, I believe. If you'll look at --11 BY CHAIRMAN GAW: 12 I just wanted to see whether or not that was 13 Q. something that was in the record for our consideration. 14 15 I'm sorry. Go ahead. 16 And I'll give you three. Α. You might want to tell me in your own words 17 Q. 18 what you believe. 19 Sure. And I was just going to start my Α. 20 analysis like that. I'd forgotten that you weren't in the 21 room yet, sir. 22 If you'll look at my HC Schedules 2 and 3, and 23 this is also Exhibit 35 which may be in front of you, 24 because we corrected my schedules. So if we go to 25 Exhibit 35.

1 Q. Okay.

2 Α. And this is HC, so we'll try not to get into 3 too many specifics, hopefully, but Schedule 2-1, Schedule 2, 4 basically, I think some of the factors that the Staff's interested in pursuing -- and once again, this is not an 5 6 exhaustive list. This is just an introductory list of 7 information that we've seen. CLECs collocated in the wire center, CLECs with EELs in the wire center and ported 8 9 telephone numbers. The first three columns with numbers in 10 them --11 Q. Yes. -- on that schedule. I think that's a start 12 Α. 13 in examining the trigger analysis that you're going to have 14 to do in the next phase. 15 Q. Now, is this your exhibit? 16 Α. This is -- this is a modification of Mr. Fleming's GAF-2. We added the exchange name to his 17 18 schedule so that you could see where the wire centers fell. 19 Okay. And what would it be that should be --Ο. you'd be looking at these -- at these issues that are 20 delineated there, at least in the table? 21 22 Α. Yes. 23 Q. Those factors rather? 24 Α. I think that's going to be a -- a pretty large 25 factor in your -- some large factors in your analysis of the

1 triggers, and I think some of the parties might disagree
2 with that, but I think that that's going to be probably the
3 determinant of SBC's case.

4 Q. Well, if the Commission looks at those factors that you're talking about, do you think -- what does Staff 5 see in those factors that lend itself to the argument that 6 7 it is a better examination on the exchange level rather than at the wire center level or in a -- in some other level? 8 9 A. I think we're going to need to go in-camera to talk about that, sir, because it's going to rely on highly 10 11 confidential information. JUDGE MILLS: We can do that if that's where 12 13 you want to go. 14 CHAIRMAN GAW: I didn't know I was headed down 15 that road, but I guess so. 16 JUDGE MILLS: Okay. Let's go off the record. (AN OFF-THE-RECORD DISCUSSION WAS HELD.) 17 (REPORTER'S NOTE: At this point, an in-camera 18 19 session was held, which is contained in Volume 6, pages 879 20 through 891 of the transcript.) 21 22 23 24 25

1 JUDGE MILLS: We'll continue. 2 Chair Gaw? 3 CHAIRMAN GAW: Okay. Thank you. 4 BY CHAIRMAN GAW: Mr. Thomas, now, you were going to discuss 5 Ο. 6 some of the other factors that might be relevant in the 7 second phase of this case. 8 Yes, sir, and I think these are identified Α. 9 in -- would be the triggers analysis starting at page 317 of the TRO, specifically paragraph 498. That's where the 10 triggers discussion starts, and I think you wanted some of 11 12 the factors beyond the factors we discussed in relation to 13 SBC's schedule? 14 Ο. Yes. 15 Α. Okay. The batch hot cut process is one thing 16 that you're going to have to look at in relation to this case, and that's one thing I'm sure you're aware of, but 17 18 that is one thing. 19 Collocation, as we discussed. Competitive LEC 20 to competitive LEC cross-connects, can customers be transferred from one CLEC to another CLEC, or do they have 21 22 to go back to Bell and then to the CLEC, how exactly does 23 that work? 24 Evidence of whether economic is -- entry is 25 economic. And I think this is something Dr. Ankum talked

1 about this morning, potential revenues and cost analysis, and that analysis -- let me read you Footnote 1588, just an 2 3 excerpt of that footnote. While any single cost factor may 4 appear to be a small hinderance, it can only be by 5 considering the cumulative effect of all cost factors that 6 the total potential hinderance entry can be fully evaluated. 7 And that's a broad statement, any cost factor. 8 So I think there are lots of things that fall under that umbrella. 9

Q. Okay. So if you're thinking ahead here in regard to some of those factors and what the Commission will have to look at, what is it, if anything, in regard to those factors that is dependent upon the scope of the geographic area?

15 A. I think --

Q. We've already established that there could be, depending upon how you interpret that trigger mechanism, which I don't think there's unanimity on, but are there other factors where the scope of the geographic area is going to have an impact on the assessment of those -- some of those factors that you mentioned?

A. I think all of those factors that I discussed, because you're going to have to look at them on either an MSA basis, and when you get on the MSA basis, there's still going to be almost an exchange-by-exchange analysis within

1 that MSA or a wire center-by-wire center analysis, as
2 Mr. Fleming's data represents. You may define the market as
3 the MSA, but you still have to look at the granular data
4 within that MSA to look at these factors, because they're
5 going to vary by wire center.

Q. Are they going to vary by -- if they're going
to vary by wire center, why is it that it's more appropriate
to do this by exchange?

9 Sure. If you'll give me a second to get back Α. where I was, I think it's the argument of scale and scope, 10 and I think that the exchange level, what you're going to 11 12 find in the St. Louis metropolitan exchange is that CLECs 13 have entered virtually every wire center from the data that I've seen, if not every wire center. And so CLECs are 14 15 taking advantage of the scale and scope within the 16 metropolitan exchanges.

17 Now, areas outside the exchange are smaller, 18 so there's a little bit of a different take, I think, by the 19 parties on how you can look at those exchanges, but 20 fundamentally a wire center-by-wire center analysis, I think 21 Mr. Lumley said in his opening statement, is going to come 22 up with the same result as an exchange-by-exchange analysis. 23 Q. Everywhere or just in the St. Louis exchange? 24 Α. If you'll give me just a second, I think 25 there's one exception to that, and that would be -- I don't

1 think I'm letting anything HC out here. I think Springfield 2 might be an exception to that. If you look at my schedule, 3 just to refer you to the data so you've got it to look at, 4 Schedule 3-2 HC. That's part of Exhibit 35.

5 Basically, if you look at the schedules, my 6 Schedule 3 -- and the copies didn't come out really well. I 7 apologize for that -- you can see that the measures we've 8 been talking about within the metropolitan exchange and 9 without the metropolitan exchange within the MSA.

Q. So is it your testimony, Mr. Thomas, that with one exception, the geographic area difference in analysis, difference in the analysis between a wire center approach or an exchange approach is the same? There's no difference

14 except for one?

A. I don't want to say no difference, but I think they'll likely be the same result to your examination. And I think Mr. Lumley referenced that in his opening statement, so I don't think I'm alone.

CHAIRMAN GAW: We have another attorney giving
 us information on the record.

21 MR. LUMLEY: Always glad to help.

CHAIRMAN GAW: I'm not sure that that can be used except as an admission against interest. I'm sure no counsel in this room would have ever done that.

25 BY CHAIRMAN GAW:

1 Q. The issue of whether or not this ought to be 2 done in regard -- as an analysis of an MSA versus an 3 exchange, how much difference will there be in regard to our 4 analysis between those two possibles? 5 Α. I think there could be a pretty wide degree of difference, and I think --6 7 Q. How so?

8 A. You're going to be left -- if you define the 9 market as the MSA entirely, the exchanges that I identified 10 before that potentially may not meet the triggers. I think 11 that, depending upon how you interpret the trigger analysis 12 portion, you could be left with no competitive alternative 13 for some of those customers.

14 Whereas, on an exchange-by-exchange basis, I
15 think your result is, you're looking at each individual
16 exchange and you're going to determine if, in fact, there is
17 a competitive alternative within that exchange.
18 And that's the basis, I think, for why we want
19 to use an exchange level, because you can evaluate
20 impairment effectively, and administrate as a practical

21 matter.

Q. If the Commission decided to make these assessments at a wire center or at an exchange level, can the Commission, in your opinion, aggregate wire centers or exchanges in making an analysis in this next phase?

A. I believe that's certainly a possibility. I don't think by defining the market narrowly as an exchange or wire center you preclude any aggregation, as long as it can be shown on a reasonable basis.

5 Q. All right. Now go the other way for me. If 6 we do this on an MSA basis, can we separate an MSA in an 7 analysis in Phase 2?

8 A. I don't believe so. And we may see in recross 9 if I'm incorrect in that, but my understanding is that 10 you're stuck with the MSA as the market and either it's 11 impaired or it's not.

12 Q. Assuming we don't make the initial order 13 tentative?

Α. Yes, assuming that it is -- that it is a 14 15 permanent order. And I think I would like to urge you, 16 Commissioner, to make it a binding order, because if you 17 look at how much testimony you've gotten in this proceeding, 18 you'll get that testimony plus some -- Mr. Magness referred 19 to a proceeding in Florida where there were 54 witnesses. 20 So if you have a tentative market definition, you open the possibility to the same testimony you've already heard and 21 22 then some.

Q. Would the same thing hold true in regard to
doing this by -- if the analysis were on a LATA basis?
A. Yes, I think so. That's where you get into

1 some of the different definitions of the triggers, because I 2 think that Mr. Gillan, who approaches the issue the same way that Mr. Ankum does, they just define the triggers in a 3 different manner and they end up with drastically different 4 5 results, the wire center versus the LATA, because of the way 6 they're defined in the triggers. So I think that it's --7 it's really dependant on how you would define the triggers in the next phase. 8 And Staff has not completed its analysis in 9 Ο. regard to how to define those triggers? 10 We have not. I'm just trying to get you some 11 Α. 12 general ideas here, not to infer that we've completed our 13 analysis. 14 CHAIRMAN GAW: I think that's all I have. 15 Thank you, Judge. 16 THE WITNESS: Thank you. JUDGE MILLS: Commissioner Murray. 17 FURTHER QUESTIONS BY COMMISSIONER MURRAY: 18 19 Mr. Thomas, when you say you've not completed Ο. 20 your trigger analysis, does that have any bearing on your answer to the question about you stated -- and I believe it 21 22 was questions from Commissioner Gaw -- that you didn't 23 think -- you don't think CLECs are providing service using 24 their own switches in the exchanges that you listed? Is 25 that what you said?
1 A. That's correct.

2 Q. But --

3 Or at least to the extent that might be Α. required under the simple reading of the triggers. 4 Okay. But you haven't determined whether or 5 Ο. not that would prevent them from meeting the trigger? 6 7 Α. That's correct. 8 Because it's possible that even if they're not Q. 9 providing service but are capable of providing service with their own switches to those exchanges, they could meet the 10 11 trigger? 12 Α. They certainly could be capable of providing service and thus meeting the triggers in those areas. 13 14 COMMISSIONER MURRAY: Thanks. That's all. 15 JUDGE MILLS: I've got a couple questions. 16 Before we do that, the court reporter's been going for an

hour and a half without a break, so we're going to take a five-minute recess, and I do mean five minutes. We want to get as much done today as we can.

20 We're off the record.

21 (A BREAK WAS TAKEN.)

22 JUDGE MILLS: Let's go back on the record.

23 We're going to backtrack a little bit, do 24 questions from the Bench for Mr. Starkey, and follow that 25 with further cross-examination and then further redirect, if

1 necessary. And I appreciate the parties' indulgence in 2 letting us take witnesses out of order for the Commission's 3 convenience. 4 Commissioner Murray, whenever you're ready. COMMISSIONER MURRAY: Thank you. 5 MICHAEL STARKEY testified as follows: 6 QUESTIONS BY COMMISSIONER MURRAY: 7 8 Q. I was just quickly reviewing Dr. Ankum's 9 testimony so I could ask him some questions. Now I will ask you some without having reviewed your testimony. 10 You can ask me some questions about his 11 Α. 12 testimony. Sorry to keep you waiting for us, but we've 13 Q. been having difficulty getting to the hearing today. 14 Understandable. 15 Α. 16 Q. Are any of Sage's customers served by DS1 loops? 17 A. No, ma'am. 18 19 Q. Are any of Sage's customers served by more than three DS0s? 20 21 A. Yes. Proportionately, how -- can you give me an 22 Q. 23 estimate of what percentage? 24 Α. We break it down in our testimony, or I break 25 it down in my testimony. I think it's in my rebuttal. We

give you a full distribution of Sage's customers by number
 of DSOs to the premise. Just a second.

3 I'll find it for you. It is at pages 57 and 4 58 in the highly confidential section. So I won't give you 5 numbers, but there is both a table on page 57 and then a 6 chart on page 58 which gives you the full distribution. 7 Q. Okay. And what is your suggestion for the

8 cutoff?

9 A. Our suggestion is a little bit different than 10 the suggestions of the other parties in this case. We think 11 the FCC rules allow and we think it makes total sense to 12 look at the type of facility that's serving a given customer 13 to discern the extent to which that customer is either an 14 enterprise customer or a mass market customer.

For example, in the rule that -- the FCC, where the FCC talks about this, they refer to it as the DS1 enterprise market, which in our mind suggests that if a carrier is using a DS-- I'm sorry -- if a customer is being served via a DS1, then they're an enterprise customer. If they're being served via DS0s, then they're a mass market customer.

Q. Is there any dispute that anyone served by aDS1 is an enterprise customer?

A. Not that I'm aware of. In fact, I think theFCC has already somewhat answered that question, sort of

1 taking away from us the ability to do UNE-P on a DS1 basis.
2 It's found that we're not impaired.

Q. Go ahead. Were you finished with your answer? A. I think so. Well, I might just clean it up just a little. There was a presumption that we weren't impaired, and we had an ability to come in and suggest to you that we were, and I don't think -- Sage certainly did not do that in Missouri.

9 Q. On page 26 of your direct testimony, and I'm 10 trying to recall just reading this quickly what significance 11 this has, but your sentence that says, furthermore, CMRS is 12 limited in its availability to only a few telecommunications 13 carriers due to spectrum limitations and does not contribute 14 to a wholesale market in assessing (sic) customer loops.

And my question is, why is it necessary that a competitor assess customer loops in order to contribution to the wholesale market? Access. I'm sorry. I don't know why I'm saying assess. Access?

A. You have to -- it sort of gets back to why we're all here and what the FCC was trying to do and actually what it was directed to do by the USTA court, and that is to determine what it means to be impaired and then to apply those rules to given unbundled network elements, to determine the extent to which CLECs are impaired with or without access to those unbundled network elements.

1 You know, sort of in layman terms, in my mind what that means is when you determine whether an unbundled 2 network element should stay on the national list, whether 3 CLECs should still have access to it, you have to look to 4 5 the extent to which some other opportunity, whether that be a facility, a technology or some other mechanism, would 6 7 allow a CLEC to access its customers or its potential 8 customers absent the use of that unbundled network element. 9 In this case, the unbundled local switching and the way in which it's used in UNE-P is a way for 10 carriers to reach out to customers in central offices where 11 12 they're not collocated, where they don't have a switch and 13 collocation and transport and all the other technological requirements associated with accessing the customer in that 14 15 way.

So when we try to determine are we impaired or not, we look at ways of accessing those customers. And what the FCC says specific to CMRS providers, and what I'm describing here, is the extent to which, one, the spectrum requirements for mobile simply limit the number of carriers that can participate in that particular marketplace, in that wireless marketplace.

23 So it's not a good proxy for purposes of 24 understanding how wireline competition might be impacted 25 with or without a particular unbundled network element.

1 And here I sort of contrast that with saying, 2 CMRS providers have overcome the need to access a loop to 3 some extent because of the wireless nature of their technology. 4 But as the FCC found, because there are 5 6 limited opportunities for that, that doesn't play well into 7 an analysis of whether CLECs who don't have that wireless 8 opportunity are impaired without access to that customer via UNE-P. 9 10 How many wireless carriers can there be in a Q. 11 certain exchange? 12 Α. The original FCC rules provided licenses to two based in a particular cellular frequency. Sub-- well, 13 I'm not going to say subject to check. I understand why 14 15 that's a bad thing. 16 What I would say is, my understanding right now is that with the PCS licenses and the original mobile 17 18 licenses, there could be as many as four to six. 19 And is that not at least a significant Ο. contributor to -- never mind. I can't think of how to 20 phrase that question right now. It may not be relevant to 21 22 this analysis, but it's certainly relevant to some analysis, 23 I know. 24 Okay. On page 28 you're talking about packet 25 switching, and you say a further inquiry is necessary on a

case-by-case basis to determine what services and customers
 are being provided service over a packet switch.

3 If customers are being provided voice over 4 packet switching, is it your position that that service 5 should be counted?

A. I would say to some extent yes, and to some extent no. That's what I really mean by there further analysis is required. It gets to the granular analysis required by the FCC in this entire process. Packet switching is built for data. That's what packets do is they take data, they parse it and then they recombine it at the other end.

13 Voice applications on data, while gaining some popularity because the technology is getting better, is 14 15 still, I think, in my mind at least, not a highly 16 substitutable product for wireline telecommunications. I, 17 for example, wouldn't turn my local telephone service over 18 to a packet switch provider at this point because the voice 19 service available isn't great at this point. You still get 20 some distortion. You still get some packet delay problems, and it's not a great substitute. 21

I think what I would say is, if in the second phase of this proceeding SBC comes forward with a company, a trigger company and says, this company should count as a trigger and, by the way, this company provides packet

switching and provides its services over packet switching, I
think you then have to apply the FCC's -- some of the FCC's
discussion about the extent to which consumers would choose
it in the marketplace. Is it substitutable, for the
economic jargon, to wireline? And if it's not, if the mass
market wouldn't choose it, then I think you have to
disqualify it as a trigger.

8 That's exactly what the FCC did with wireless, 9 by the way. They found it was not highly substitutable 10 enough to be counted as a trigger, so it specifically 11 excluded it.

12 It didn't go that far with packet switching, 13 but I think you have to do the same analysis the FCC did 14 when it rejected wireless. You have to determine is it 15 substitutable enough.

16 Q. You indicate on page 29 that any market 17 definition chosen by the Commission must fall somewhere 18 between the upper and lower boundaries of the spectrum, 19 speaking of the spectrum established by the FCC within which 20 the states can define the geographic market.

21 What is the lower boundary of the spectrum in 22 a wire center?

A. Certainly there are network aggregation points
smaller than a wire center. For example, companies like SBC
generally design their networks based on what are called

distribution areas, and then they group those many times
 into what are called carrier serving areas.

Those are the sort of more granular breakdown of a wire center based upon in one instance the technology used to serve it. Much of that has to do with digital loop carrier technology that we'll talk a lot about in the second phase of this proceeding.

8 But there are segments of wire centers that 9 are easier for CLECs to serve than others, things like 10 integrated digital loop carrier, a difficult technology to 11 overcome for a CLEC in many circumstances. So even if a 12 wire center was considered to be non-impaired such that we 13 had to provide UNE-L there only, absent UNE-P, there would be some sections of that wire center that would be far more 14 15 difficult for us to serve than others even.

16 So I think probably a carrier serving area or 17 a distribution area is probably the smallest you'd want to 18 talk about, because that's really the smallest area where 19 technology plays a role. And then the largest, as I've 20 suggested, is the state -- or it can't be the entire state as dictated by the FCC. So that's sort of your range. 21 22 Q. On page 39, you talk -- at the bottom of the 23 page there on line 18, you say something about where the 24 ILEC engages in price discrimination within the wire center

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and charges business customers higher prices for the same

1 service than residential customers.

2 Why do you call that price discrimination? I 3 mean, it sounds as if you're saying the ILECs are doing 4 something wrong.

5 A. And I don't intend that. I apologize. It's 6 strictly an economic term. It's discriminating between like 7 services amongst different customers. I mean it strictly 8 from an economic sense.

9 Q. And you understand there are reasons for that, 10 right?

Yes, ma'am, I do. But I guess what I was 11 Α. 12 getting at here is, regardless of the reasons why it's like that, it's the impact of that that you really have to 13 discuss here, and it's the fact that those business 14 15 customers are so much more revenue rich, based upon the same 16 cost to serve them, that draws carriers to the enterprise 17 market more so than the mass market with their own 18 facilities.

Q. And I want to approach that with you a little bit more later. In fact, might as well do it right now. If we applied your analysis, wouldn't it lead to even more targeting of the most profitable customers by competitors and consequently less service to residential customers by competitors?

25 A. Let me address that two ways. If our

1 intention -- if I understand the intention of the question, 2 if our intention is to ensure that customers and residential 3 customers particularly have the most competitive alternatives possible, then maintenance of UNE-P in as broad 4 5 a range of the state as possible is the answer, because the 6 data available to you in this case tells you that the vast 7 majority of competition, and by vast I mean in the 99-point-some percentile, of residential and extremely small 8 9 business customers, i.e. the mass market, are today served by UNE-P. 10

11 So to the extent that you find non-impairment 12 in an exchange, you're likely to see that number fall. So 13 regardless of how you define the market, if your intention 14 is to maintain competitive opportunities for small business 15 and residential customers, then a finding that UNE-P should 16 exist everywhere, as it does today, is the best way to reach 17 that objective.

Now to the second part of the question, which I think was, if we define it as a wire center, if we define the market as a wire center, will that lead to more focused entry on high-revenue customers? Did I understand your question correctly?

23 Q. I don't know if that's what I asked you. Go 24 ahead and answer it.

25 A. Okay. That's what I think I heard. I think

1 the answer to that is no, it's not, because regardless of 2 how you as a commission define the marketplace, it's really 3 your finding that comes later, i.e. are CLECs impaired with or without -- are they impaired or not without UNE-P, that's 4 5 going to dictate the way in which carriers have to serve the 6 marketplace either through UNE-P or an expanded geography of 7 UNE-L. Or in Sage's case, where they don't have a switch, they don't have facilities, it might very well be that they 8 9 simply have to retreat from those markets and turn their customers back to SBC. 10

11 But that being said, whenever you collocate in 12 a central office and you're able to reach all of the wires 13 that are in there and you've invested a large amount of money in a collocation facility, transport and everything 14 15 else, regardless of what this Commission decides with UNE-P 16 or UNE-L, you're going to target your highest revenue 17 customers first. It's simply the economic motivation that 18 exists.

And as we said, price -- there's nothing wrong with price discrimination. There are reasons for it. The same is true here. It is just the way the market works, and it is the right way the market works, because it will rationalize a rate structure that perhaps isn't totally rational in some cases.

25 Q. In order for it work correctly, though, don't

we have to go into eventually some rate rebalancing so that
 there is not this forced price discrimination between
 business customers and residential customers?
 A. The ultimate goal is for competition to
 discipline the prices, absolutely. And so to the extent
 that more competition puts pressure on prices substantially

7 above their cost, I think that is the result, and in my mind 8 I think it's the right result.

9 Q. And in order to get true price signals, you 10 have to have services approaching -- supplied at costs that 11 are at prices that approach the cost of providing services 12 at least, don't you?

A. That's certainly the theory of the market, is that the more competitive a market, the more the prices within that market or the price point within that market will approach the underlying cost of providing the service, absolutely.

18 Q. You said you -- I think your answer to my 19 first question was you didn't have any DS1 customers. Is 20 that what you said?

A. My understanding in long discussions with Sage is that they do not provide any DS1 services to their customers.

24 Q. So really is Sage the exception to the rule 25 that competitors come in and target the high-dollar

1 customers?

2 Α. No. That's actually an excellent question. 3 You've got to consider two scenarios, two delivery scenarios for a CLEC. I'm a CLEC and I want to enter Missouri or I 4 want to enter the St. Louis wire center or I want to enter 5 6 Missouri in general, and let's assume that I have two 7 available opportunities to me, UNE-P and UNE-L, which is 8 what exists today. I have both of those opportunities 9 today. With UNE-P, because I can lease capacity from 10 the ILEC on sort of a variable cost basis, when I get a 11 12 customer I lease that capacity and then I sell that service 13 until that customer leaves me and then I no longer lease that capacity. The extent to which I can serve a broad 14 15 marketplace, and marketplace being defined both as geography 16 and product, as long as I can serve a broad geography and a 17 broad product market, I'm going to do it. I can focus my 18 UNE-P based service across a very large area. 19 Now, however, if I'm relegated to a UNE-L

20 strategy and UNE-P is no longer available to me, I must 21 target my marketing and my retention and gaining of 22 customers to where I have facilities, where I've reached out 23 to a central office and collocated my facilities and 24 established transport and all the other things I have to do. 25 That is my market reach at that point. I no

1 longer have access to a wire center where I'm not

2 collocated, like I did before with UNE-P.

3 So I don't think that Sage is the exception to 4 the rule when it comes to people who rely upon UNE-P. You 5 see them providing sort of that broad-based level of 6 competition to residential and small business customers and 7 others more broadly, and I think that's one of the benefits 8 of UNE-P.

9 It's what really concerns me about the FCC's 10 order in this respect is that it could become more 11 difficult, given decisions that I think would be incorrect 12 in cases like this, it could be become possible that folks 13 like Sage couldn't provide that broad base of competitive 14 entry and that they would have to sort of retreat and turn 15 their customers back to SBC.

Q. And is that primarily because with UNE-P you can lease the facilities at TELRIC rates, which are significantly less than it would cost you to put your own switch in and provide UNE-L service?

A. To that question I have to say yes and no. Certainly the price point for UNE-P is important. I just wouldn't be being frank with you if I didn't say that it was. It is important.

24 But it's also -- it also encompasses a lot of 25 operational and technical problems. For example, as I think

1 Mr. Gillan said correctly earlier in the week, the ILEC 2 network was never built necessarily to be unbundled. When loops come into a wire center and are connected to a 3 Southwestern Bell switch, for example, for SBC's retail 4 5 services that are integrated, the process of putting a 6 customer into service or taking a customer out of service is 7 really a simple mouse click. It's a software-driven 8 mechanism.

9 So to the extent to which they can accommodate 10 hundreds or thousands of residential customer moves, adds 11 and changes over time is really a matter of -- it's easily 12 scalable and it's relatively inexpensive for them.

13 When you start unbundling that network, you start dismantling those economies. So that whenever a CLEC 14 15 collocates in a central office, that CLEC no longer gets the 16 benefit of that interconnected network that supports SBC. 17 It now has to do everything on a very manual 18 basis. It now has to have an SBC technician go to the 19 frame, find that customer's loop, connect it to their 20 switch -- or I'm sorry -- to their collocation, which 21 ultimately is connected to their switch, and it has to do 22 that every time a customer moves, adds or changes. 23 And ensuring this marketplace is significant. 24 So the extent to which price is important can't be

25 underplayed. However, the extent to which operational

barriers also exist without UNE-P is of equal importance in
 my mind.
 Q. Does Sage have any plan to become facilities

4 based if UNE-P continues to be provided?
5 A. I don't know the answer to that question.
6 Mr. McCausland could probably tell you. I don't know.
7 COMMISSIONER MURRAY: Thanks. That's all I
8 have.

9 JUDGE MILLS: Further questions from the10 Bench, Chairman Gaw?

11 QUESTIONS BY CHAIRMAN GAW:

Q. She stopped unexpectedly. If a CLEC does have its own switch in a wire center in the St. Louis exchange, would that -- would that CLEC be able to serve any customer located within that exchange, if you know?

16 A. I do. Let me answer it this way, and just let 17 me part your question a little. The location of the switch 18 really doesn't matter, okay, as we've heard before. Let's 19 assume, for example, that we have a switch -- just to make 20 this example obvious, let's say someone has a switch out in, let's say, Macon, Missouri, which is sort of in the 21 22 middle --23 Q. Don't say in the middle of nowhere.

A. I was, and then I just remembered that youwere from there. My mistake.

Let's say El Dorado Springs, Missouri, where I grew up, which is the middle of nowhere. Let's say you have a switch out there. That switch could serve customers in St. Louis, it could serve customers in Kansas City or Springfield or really anywhere in Missouri.

6 The issue is, has that carrier established 7 transport and collocation to a given exchange or wire 8 center, and let's use St. Louis as your example. So in my 9 scenario we've got a switch in El Dorado Springs, Missouri, 10 and we have a collocation with transport between that switch 11 and a wire center in St. Louis.

12 Once I've collocated in that wire center --13 and let me make the distinction between wire center and 14 exchange.

15 Q. Please. That's what I'm looking for. 16 If I have collocated in that wire center, I Α. 17 have access to all the loops in that wire center. That is 18 not true by the exchange. An exchange is made up in some 19 circumstances in Missouri -- and we've heard it said I think 20 the only three are Kansas City, Springfield and St. Louis, but those are three pretty important ones -- is made up of 21 22 multiple wire centers.

23 So if we go to -- and I won't divulge any 24 highly confidential information. If we go to Mr. Cecil's, 25 Staff Witness Cecil's rebuttal testimony, Exhibit --

1 Schedule 3-1, and we go to -- let's use Springfield as an 2 example, which is 3-2, we see that there are -- there are a 3 number of wire centers in the exchange. I just want to make sure I understand his exhibit here. 4 5 Well, let me just say it this way: There are a number of wire centers within that exchange. If I wanted 6 7 to serve customers throughout the exchange, I'd have to collocate in each one of those wire centers. 8 9 And that's really the basis for why we think 10 the wire centers are a more applicable building block of a 11 market, because it's really how we have to make entry and 12 exit decisions, are we going to collocate in that wire 13 center or are we not. Now, and go through that -- is that -- are 14 Ο. 15 those considerations relevant when you're using UNE-P? 16 No, they're not. Α. 17 Q. Right. And tell us why. 18 As we described a little bit before, UNE-P Α. 19 allows you to buy access as you need it, sort of a variable 20 cost component. So as a company like Sage comes to Missouri 21 and wants to provide service, anywhere it can gain access to 22 UNE-P, which in this circumstances through its 23 interconnection agreement with Southwestern Bell, it can 24 provide UNE-P. 25 So if it gets a customer in -- if El Dorado

1 Springs, Missouri were an SBC exchange, if it had a customer 2 way out there, it could serve it via UNE-P. It's unlikely 3 that it would ever have a customer base large enough in El Dorado Springs to build a collocation out there. I think 4 there's only 3,500 folks in the entire exchange. So the 5 6 entry and exit decision are very, very different. 7 CHAIRMAN GAW: That's all I have. Thank you, 8 Judge. JUDGE MILLS: Okay. We will do a round of 9 cross-examination based on the questions from the Bench, 10 11 beginning with MCI. 12 MR. LUMLEY: No questions. 13 JUDGE MILLS: AT&T and the CLEC Coalition? 14 MR. MAGNESS: No questions. JUDGE MILLS: Staff? 15 16 MR. WILLIAMS: Just one question, try to clarify. 17 RECROSS-EXAMINATION BY MR. WILLIAMS: 18 19 Mr. Starkey, you referred to a schedule that Q. 20 you said was attached to Mr. Cecil's testimony? Could be that I've stapled incorrectly. Let 21 Α. 22 me look here. I did say that, yes. Am I wrong about that? 23 Q. I believe you were probably referring to 24 Mr. Thomas' rebuttal testimony which has been marked as 25 Exhibit No. 21HC, and the corrected version has been marked

1 as Exhibit 35HC.

2 A. My mistake. It looks like whenever I printed 3 them out I may have stapled them incorrectly. My apologies. I was referring to the exhibit -- well, the Schedule 3 --4 5 MR. WILLIAMS: May I approach? I think we can make this shorter. 6 7 JUDGE MILLS: Yeah. BY MR. WILLIAMS: 8 9 Q. I'm going to hand you a copy of what's been marked as Exhibit 35HC. Does that contain the exhibit you 10 were -- or the schedule you were referring to? 11 12 Α. Yes, it does. MR. WILLIAMS: No further questions. 13 JUDGE MILLS: Thank you. SBC? 14 15 MR. BUB: No, thank you, your Honor. 16 JUDGE MILLS: CenturyTel? MR. DORITY: Despite El Dorado Springs, I'm 17 18 going to pass. JUDGE MILLS: Redirect? 19 20 MS. MUDGE: Thank you, your Honor. REDIRECT EXAMINATION BY MS. MUDGE: 21 22 Q. Mr. Starkey, with respect to questions from 23 Commissioner Murray first dealing on page 26 of your direct 24 testimony, of course, your direct testimony is Exhibit 25 No. 17, I believe you were responding to some questions with

1 respect to your discussion on CMRS, correct?

2 A. Yes.

3 Can you just give us a highlight as to what Q. the real purpose of you including your discussion of CMRS 4 5 was for the purposes of this phase of the proceeding? 6 Sure. It's been our position that it's Α. 7 difficult to determine the market, to define the market if you will, without taking into consideration what you're 8 9 going to be using that definition for.

10 I.E., it's difficult to first define the 11 market, independent of the knowledge of what the data's 12 going to show you about what the market exists. As we say 13 in our testimony, economists don't define markets and then 14 go gather data to sort of say this market exists or it 15 doesn't. They look at the data, and from that data they 16 sort of derive what is the natural marketplace.

17 So I think one of the reasons that we were 18 including the discussion of CMRS here is to sort of give 19 some flavor about that next part of the analysis, to sort of 20 show that even though there might be, for example, a wireless provider who provides service across a broad 21 22 geographic area, and you might be able to define the market 23 for CMRS more broadly because of that, it wouldn't make 24 sense to do that here, because first the FCC said CMRS is 25 not applicable to our analysis, and secondly, you have to

look at the fact that CLECs can't operate like CMRS
 providers.

They're wireline providers. And they must physically access their customer with a physical facility or a loop, and that requires them to reach out to those customers on a UNE-L basis and collocate and do all the things we talked about.

8 So I think our purpose here, in summation, was 9 generally that we were trying to flavor it with some of 10 what's to come in the next part of the analysis. 11 Q. And if I take you back to page 25 of your

12 direct testimony.

13 A. Okay.

This first Q and A beginning on line 11, this 14 Ο. 15 is where you explain why you would be talking about CMRS 16 because, in fact, the FCC discussed intermodal carriers, 17 correct, and one of them was CMRS; is that right? 18 That's right, and specifically excluded them Α. 19 from the analysis as potential triggers. 20 Now, Commissioner Murray was also kind enough Ο. to ask you about packet switching and your discussion on 21 22 page 28 of your direct. Do you have that? 23 Α. Yes.

Q. Again, I just would like a high level toensure why we know why your discussion of packet switching

is included in this phase of the proceeding and in your
 testimony.

3 Again, I think my answer would be the same. Α. It's to provide flavor to the Commission about what they're 4 5 going to be using this definition they reach in this portion 6 of the proceeding, how they're going to be using that 7 definition and why it might be important to understand what 8 triggers might look like whenever they make that decision, 9 and again, specifically to support the notion that because the wire center is the building block by which CLECs enter 10 11 or exit, that's the appropriate place to begin the analysis 12 of what's the appropriate market.

Q. Now, with respect to questions from Commissioner Murray as to whether or not Sage was an exception to the rule as to not going after the high-dollar customer, so to speak, and instead providing service to the mass market customers, do you recall the series of questions and discussion you had with her?

19 A. Yes.

20 Q. First of all, let me ask you, is Sage the only 21 UNE-P carrier that you're aware of in the state of Missouri 22 that is providing service to mass market customers? 23 A. No, not at all. There are several.

Q. And are there other carriers and CLECs inspecific in the state of Missouri that are providing service

1 to mass market customers and residential customers using 2 UNE-P yet they have their own switches?

3 There's a combination of both of those, and Α. there's an interesting component of that second piece, which 4 5 is there are carriers in Missouri, and I would say it's the 6 majority of carriers who provide both mass market and 7 enterprise services, they generally provide enterprise services over their switch, but when it comes to the mass 8 9 market, even though they own a switch, they use UNE-P because of the operational issues and technical issues that 10 11 we talk about earlier.

12 It's not strictly an economic question, though 13 that's important. There are operational/technical issues as 14 well.

Q. And simply because Sage is a UNE-P carrier that is providing service exclusively to the mass market customers, and by that my definition is residential and very small businesses we've put into testimony, does that make Sage's information or position in this case any less or more important?

A. More, I guess, from my perspective, for a piece of the case at least. One of the things we've said in our testimony, and I think is absolutely true, is the fact that I think Sage provides this Commission good data. One of the things that's always difficult to get in cases like

1 this is good data.

2 And when you ask the question, what's the mass 3 market look like, I think Sage, because they only provide mass market, they don't even market DS1 services, should --4 5 their customer base should give you a good flavor for what 6 the mass market looks like. And that's why we provided --7 and I think we called them the quintessential mass market provider. Might be a little strong. 8 9 But certainly the data we gave you where we give the distribution of their customer base should give you 10 11 good information about what the mass market looks like in a 12 more general sense. 13 Okay. My last question deals with questions Q. and a discussion you had with Chairman Gaw, and he was 14 15 basically trying to get some specifics on if a CLEC has a 16 switch in a wire center in St. Louis exchange, would they be 17 able to serve a customer within other parts of that 18 exchange. Do you recall that discussion? 19 Α. Yes. 20 And let me ask you sort of to make sure that Ο. 21 we have the big picture as opposed to the single picture for 22 Phase 1. Is, in your perspective, in your opinion, the 23 notion that just because a switch, there is a switch where a 24 carrier could provide service to a customer, is that 25 determinative for a trigger analysis?

A. This is the crux of the issue. This is where the rubber really meets the road in this entire case in my mind, and it's why the definition of the market is so important.

5 Let's consider two scenarios. Let's say you chose the MSA as the marketplace, and then after all the 6 7 data came in you found out that there were three wire 8 centers -- and I'm making these numbers up obviously --9 there were three wire centers where you believe the triggers 10 might have been met, but in that MSA, that MSA contains something like 40 wire centers or 50 or 60 wire centers. 11 12 Then you as the Commission have to answer the question, is three enough? Should it be four? Should it be five? Is 13 14 there a population percentage that makes sense or not? 15 One side of the -- one side I think is going 16 to tell you three's not enough, and the other side's going 17 to tell you three's more than enough. 18 From our perspective, it's an impossible 19 question to answer. It's an impossible question to answer

20 sort of without a lot of guess work involved in terms of 21 what the market -- how the marketplace will react.

22 So what we've said is, don't put yourself in 23 that position. All right. We know that this analysis is 24 based on wire center analysis. It's those three wire 25 centers in my scenario that we first determined whether

1 impairment existed or not.

Why not define the market as the wire center, and then if you need to build a number of wire centers together to get to a market that looks the same, versus a market that looks different with respect to impairment, then you can do that. You've given yourself the flexibility and the freedom to do that.

8 I'm afraid, and I don't -- in saying that, I 9 understand the purposes of saying a wider geographic area. 10 I don't disagree with Mr. Gillan when he says, if you took 11 away St. Louis, Missouri would be a lot less attractive. 12 The entire MSA or LATA of Missouri would be a lot less attractive to UNE-P providers. I don't disagree with that. 13 I'm afraid, though, that the way the FCC has 14 15 written the rules for this impairment analysis, you don't 16 want to get to that issue is three enough. I just think it 17 makes far more sense to do it more granular as the FCC 18 suggested and build exchanges up based upon their common 19 characteristics relative to impairment.

20 Q. And let me just make that we're on the same 21 page. The Exhibit 35, which is -- are the revised schedules 22 from Mr. Thomas --

A. Is that the one I just messed up?
Q. Yes. I want to bring that to your attention
one more time.

1 Α. All right. 2 Q. As well as even SBC's analysis in 3 Mr. Fleming's testimony, what level of granularity are those 4 provided to this Commission, on what basis? 5 Α. They're provided at the wire center level by both SBC and Staff. 6 7 MS. MUDGE: Thank you very much, your Honor. 8 JUDGE MILLS: Thank you. Mr. Starkey, you're 9 excused. 10 Let's see how far we can get with Dr. Ankum 11 before five o'clock. We'll bring him back up for questions 12 from the Bench and further cross-examination and redirect if 13 necessary. 14 Commissioner Murray. AUGUST ANKUM testified as follows: 15 16 QUESTIONS BY COMMISSIONER MURRAY: Good afternoon, Dr. Ankum. Thank you for 17 Q. sticking around for us. 18 19 You're welcome. My pleasure. Α. 20 On page -- I've got the copy of your testimony Ο. where the pages weren't numbered, and I did not go through 21 22 and renote all of the testimony you filed that did have 23 numbers. So this may be difficult. 24 Above your Section 2 -- let me just ask you 25 this: You talk about residential and small business

1 customers should be treated as being in separate markets and 2 that IDLC should be treated as being in a separate 3 submarket. Where do you find the rationale for such 4 separation in the TRO?

5 A. Well, actually, I'm -- I don't think that I 6 specifically say that the Commission here should define 7 separate markets for each one of those categories you just 8 identified. I think the gist of my discussion is to alert 9 the Commission to the difference -- different problems and 10 different -- the different potentialities associated with 11 these categories.

12 For example, the difference between the 13 residential and the business customer is critically important when we begin to look at impairment. And again, 14 15 I'd like to call to your attention paragraph 84 in which the 16 FCC defines impairment, and the essence of impairment has to 17 do with the concept of economic profitability, can you enter 18 a market and serve certain types of customers profitably. 19 In that discussion, which I believe you're 20 alluding to here, what I tried to bring before the Commission is the difference between the residential 21 22 customer and the business customer and the differential in 23 the revenues associated with those two types of customers. 24 And the reason that I think that that is so 25 important is that when we get to that next phase of counting

1 triggers, I think it's going to be very important that when 2 we look at the companies that SBC is going to be identifying 3 for this Commission as potential trigger companies, that we very carefully examine what type of customer is the trigger 4 company serving here? Is that company truly serving the 5 6 mass market -- that should include both the residential 7 customer and the small business customer -- or is that 8 customer base for that trigger company exclusively the 9 business group or the business customer that has a higher 10 revenue? I'm going to try to cut you off there. Try to 11 Q. 12 keep your answers short, if you would, because we are trying to get finished before five. 13 14 Α. We have a common interest. 15 Q. Once a company has a switch in place, is there 16 any difference between serving a business customer and a residential customer? 17 18 From a technical perspective, no; but from an Α. 19 economic perspective, yes. 20 Are we supposed to do an economic analysis or Ο. 21 just an operational analysis for impairment? 22 Α. In the trigger phase, I think one has to -- I 23 think the trigger phase is going to be a proxy for -- a 24 proxy for the impairment analysis, and impairment again is 25 defined in paragraph 84 in terms of economic profitability.

1 Can CLECs without access to the ILEC's UNEs, can the CLEC 2 enter the market and serve customers, mass market customers 3 without local circuit switching? 4 Do you think that requires --Ο. 5 Α. And that's an economic question. -- an economic analysis? 6 Q. 7 Α. Excuse me. Do you think that requires an economic 8 Q. 9 analysis and not just an operational impairment analysis? 10 Α. In the first instance, we're going to be 11 looking at triggers, and what I'm cautioning the Commission 12 for is that when we're counting triggers, that we keep in 13 mind that the impairment question we're answering is an economic question. 14 15 Now, there's operational sides to that that we 16 should not lose track of as well, but primarily the question 17 is can you do it profitably? If the answer there is not, 18 then clearly one is impaired. Now, there's also going to be 19 as part of the trigger case one should consider certain 20 operational issues. They're not irrelevant. I would say that the economic question comes first and foremost. 21 22 Q. Is it more profitable to serve a business 23 customer than a residential customer? 24 Α. It's generally more profitable to serve a 25 business customer since they generate more revenues and the

1 cost, generally speaking, would be the same.

2 Q. Would you provide a couple of examples of 3 economic barriers to entry within an MSA where the CLEC has 4 a switch within the MSA that can reach all of the customers 5 within the MSA?

A. Again, the issue of impairment is one of profitability, and that has two sides to it, revenue and cost. When you look across the MSA, you see that there's huge variations there, and they vary on the basis of wire center.

Each wire center has associated with it a very specific cost of serving that wire center, and those costs stem from the unbundled network element rates that are deaveraged across wire centers. It stems from the cost of collocation, even though the collocation tariffs may not be deaveraged in all cases. It's the rate of utilization you can make of a collocation arrangement.

18 Q. Excuse me. Let me interrupt you there and ask 19 you, if you have a switch within the MSA, do they have to 20 collocate within every wire center?

A. You have to either collocate or you have to use the EEL extended enhanced link configuration, but then --

24 Q. Is the enhanced link configuration also 25 variable as is the collocation cost?

1 Α. Whenever you use the EEL, you're adding 2 transport cost to your overall cost of operation. 3 Does MCI serve any MSAs with its own switches? Q. 4 I think M-- I don't know if MCI has switches Α. in Missouri. I presume they do. And to the extent they do, 5 6 they probably serve customers. 7 Q. Okay. Do you know if they're able to target and serve specific markets within those MSAs? 8 9 Α. I would say yes. Profitability and efficiently, using currently 10 Q. available technologies? 11 The question of profitability, I don't know. 12 Α. I have not examined MCI's profitability. But I think -- I 13 might get a chuckle out of the crowd since the company's 14 15 still in bankruptcy or perhaps just came out of bankruptcy. 16 So the question of profitability is a tricky one. I don't know whether they can serve customers in Missouri 17 profitably. I have not looked at that. 18 19 Do you know if they can target business Ο. 20 customers? 21 Technically, surely. Α. 22 Q. And on page whatever of your testimony -- and 23 by the way, I've got to ask you a question. I didn't read 24 the second group of testimony that was labeled direct 25 Phase 1, December 18, 2003, because I had already read and

1 marked direct Phase 1, December 18, 2003.

2 Are they indeed the same testimony but just with page numbers on one and no page numbers on the first? 3 4 Α. Yes. 5 Ο. In answer to a question on whatever page it 6 was, what is the relationship between the switch location 7 and the market definition for purposes of an impairment 8 analysis, you quote from the FCC, and you say, because we 9 measure alternative switch -- that quote says, because we 10 measure alternative switching in a given market, not 11 switches located within that market, the physical location 12 of the switch is not necessarily relevant to defining the 13 geographic market. For example, a switch located in 14 Rhode Island could satisfy the switching trigger in 15 Massachusetts if it is serving customers in the relevant 16 market in Massachusetts. Do you recall --17 18 Α. Yes. 19 Q. -- quoting that? 20 MR. LUMLEY: Page 19. COMMISSIONER MURRAY: Page 19. Thank you. 21 22 BY COMMISSIONER MURRAY: 23 Q. Now, I can see how that would argue that a 24 switch can satisfy the trigger even if it's outside the 25 geographic area, but I don't see how it follows that a

1 switch that is within the geographic area cannot satisfy the 2 trigger unless and until it's actually serving all of the 3 customers within the geographic area.

4 It does not necessarily need to serve all the Α. 5 customers, but I would say that switch clearly needs to be used. To be counted as a trigger, I would say that you need 6 7 to make a demonstration that the switch is being used to swerve the mass market customers in that -- in that market 8 9 as that market is defined, because ultimately impairment is evaluated in terms of the ability of a CLEC to do emulate, 10 11 so to speak, the trigger company.

Basically what the FCC has set up is a situation that I don't think is all that different from gym class in high school where you have to climb ropes, and if three other kids are climbing the ropes and the fourth kid says, I don't want to do it, then I think the gym teacher can say, well, three others are doing it, so you can do it, too.

And I think that's what FCC has basically given to the state commissions is they count triggers. Are the others doing it? And if you find that others are doing it, and the it being serving mass market customers, then I think the Commission can rest assured if three companies do it, then the fourth company can do it as well.

25 Of course, we have to be very careful that we

1 look at the first three companies, what are they doing? If 2 you find that some kids are using a stepladder, then you 3 can't reasonably assume that the others have to climb 4 without the stepladder.

5 Q. Is it your position that those CLECs have to 6 be actually serving customers using their own switches and 7 not merely capable of serving customers with their switches 8 that are in place?

9 A. I believe that there has to be -- and again, I 10 think there has been a lot of discussion here about what are 11 the technical capabilities, and again, the technical issues 12 are not irrelevant, but I think there's illusion here that 13 we can place a switch in China and we can serve probably the 14 vast majority of customers in Jefferson City.

15 So the technical question I think engineers 16 can overcome. The question is really, can we do it 17 profitably? And the only time it's been demonstrated things 18 are being done profitability is if you see that the market 19 is actually making the decision that it can be done 20 profitably.

And how do you know that? Well, if there are three companies doing it in a market, and not just one month but if they're doing it and there's a demonstration that they will continue to do so, then I think that the market has spoken. The market has spoken that you can place your

1 own switch and you can serve the mass market profitably. So 2 I think the actual serving is important. 3 Is SBC or CenturyTel trying to get us to Q. 4 include a switch that's in China serving any of the MSAs in Missouri? 5 6 No. I was simply using that as an Α. 7 illustration that the -- that the technical question of can 8 we serve all customers is not really where we should focus I think. 9 10 Q. Thank you. Please don't go any further than 11 that. 12 Α. I'm sorry. How does the -- let's see. Your testimony on, 13 Q. it would be page 20, the -- you speak again about lawful 14 15 price discrimination can be enforced between the two market 16 segments. I think I know what your answer is to that one. 17 Α. Yes. The same as Mr. Starkey's, I believe. 18 Page 21, 22, I believe, you say cable Q. 19 telephony is at most an alternative to the ILEC local voice 20 service for the specific customer locations served by cable company's facilities which typically do not reach all of the 21 22 ILEC's mass market customer locations. 23 If they do reach all of the mass market 24 residential customers, wouldn't that fact, combined with the 25 actual switching to small business customers already being

1 done, be enough to constitute an alternative for our 2 purposes?

3 Α. No, definitely not. I think this is perhaps where my example again of the gym class comes into play. 4 5 The question is when you're looking at taking UNE-P off the 6 table, can a CLEC, if you take UNE-P off the table, can 7 they -- can they enter the market by using their own switch? 8 Now, when you look at a cable company, the 9 cable company's providing service over its cable facilities, and typically the cable facilities are franchised and are 10 11 pre-existing facilities.

Now, let's say that you have a company like AT&T or MCI that does have a switch, but it's not really -but it's serving the mass market through UNE-P. Let's say that you take away UNE-P from those IXCs. Do they have cable facilities that they can then use at that point to serve mass market customers? And the answer is no.

In other words, the cable company does not represent a mode of entry that can be emulated, and because it cannot be emulated, the presence of the cable company in the market signifies nothing about the ability of a CLEC to enter the market. It's a meaningless trigger. It's not a trigger. The presence doesn't signify anything, the presence of the cable company.

25 COMMISSIONER MURRAY: I'm going to have to

quit. I can't cover all my questions, so I'm just going to have to just leave it at that. Thank you. JUDGE MILLS: Do you have more questions for tomorrow? COMMISSIONER MURRAY: No. JUDGE MILLS: Is there cross-examination based on the questions from the Bench? Anyone? Redirect? (No response.) JUDGE MILLS: Okay. Dr. Ankum, you're loose. THE WITNESS: Thank you very much. JUDGE MILLS: You may be excused. We'll continue in the morning beginning at 8:30 with Staff Witness Thomas. We're off the record. WHEREUPON, the hearing of case was recessed until February 4, 2004. 

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