|    | Page 1962  |
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| 1  | STATE OF MISSOURI                                      |
| 2  | PUBLIC SERVICE COMMISSION                              |
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| 6  | TRANSCRIPT OF PROCEEDINGS                              |
| 7  | Evidentiary Hearing                                    |
| 8  | October 11, 2012                                       |
| 9  | Jefferson City, Missouri                               |
|    | Volume 30  |
| 10 |  |
| 11 |  |
| 12 | In the Matter of Union Electric )                      |
|    | Company d/b/a Ameren Missouri's )                      |
| 13 | Tariffs to Increase Its Annual ) File No. ER-2012-0166 |
|    | Revenues for Electric Service )                        |
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| 17 | MORRIS L. WOODRUFF, Presiding,                         |
|    | CHIEF REGULATORY LAW JUDGE.                            |
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| 19 | TERRY M. JARRETT,                                      |
|    | ROBERT S. KENNEY,                                      |
| 20 | STEPHEN M. STOLL,                                      |
|    | COMMISSIONERS.   |
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| 22 |  |
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## TRANSCRIPT OF PROCEEDINGS 10/11/2012

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## TRANSCRIPT OF PROCEEDINGS 10/11/2012

Page 1965 LEWIS R. MILLS, JR., Public Counsel 1 Office of the Public Counsel 2 P.O. Box 2230 200 Madison Street, Suite 650 Jefferson City, MO 65102-2230 3 4 (573)751-4857 FOR: Office of the Public Counsel 5 6 and the Public. 7 8 KEVIN A. THOMPSON, Chief Staff Counsel 9 JENNIFER HERNANDEZ, Senior Counsel SARAH KLIETHERMES, Senior Counsel 10 MEGHAN McCLOWRY, Legal Counsel 11 AMY MOORE, Legal Counsel 12 13 Missouri Public Service Commission P.O. Box 360 14 15 200 Madison Street Jefferson City, MO 65102 16 17 (573)751-3234 18 FOR: Staff of the Missouri Public 19 Service Commission. 20 21 REPORTED BY: 22 23 KELLENE K. FEDDERSEN, CSR, RPR, CCR 24 MIDWEST LITIGATION SERVICES 25

Page 1966 PROCEEDINGS 1 2 (WHEREUPON, the hearing began at 8:29 a.m.) 3 JUDGE WOODRUFF: Welcome back for another day of the Ameren rate case hearing, and today we're going 4 5 to be taking up David Murray's testimony on ROE. And, Mr. Murray, if you want to go ahead and take the stand and 6 7 I'll swear you in. 8 (Witness sworn.) 9 JUDGE WOODRUFF: You may inquire. 10 MR. THOMPSON: Thank you, Judge. DAVID MURRAY testified as follows: 11 DIRECT EXAMINATION BY MR. THOMPSON: 12 13 Q. Please state your name and spell your last 14 name for the reporter, if you would. 15 My name is David Murray. My last name is Α. 16 spelled M-u-r-r-a-y. 17 ο. Mr. Murray, how are you employed? 18 I am employed as utility regulatory manager Α. with the Financial Analysis Unit. 19 20 And are you the same David Murray that Q. 21 prepared or caused to be prepared certain contributions to 22 the Staff cost of service revenue requirement report that 23 has been designated Exhibit 201 and Exhibit 202HC, 24 rebuttal testimony designated as Exhibit 216 and 25 Exhibit 217HC, and surrebuttal testimony designated

Page 1967 Exhibit 229 and Exhibit 230HC? 1 2 Α. Yes. 3 ο. Do you have any corrections to that 4 testimony? 5 Α. I do. I have some corrections to the multistage DCF analysis that I discovered recently working 6 7 on the Kansas City Power & Light case. 8 Q. And which piece of testimony would those 9 corrections be to? 10 This is actually in the appendices. It's Α. Appendix 2, Support for Staff Cost of Capital 11 12 Recommendations, and --13 Q. Is this the appendix to the Staff revenue 14 requirement cost of service report? 15 Α. Yes. 16 Q. Okay. Proceed. Schedule 13-2, 13-3 and 13-4 for Wisconsin 17 Α. Energy for the first stage of the growth years 1 through 18 5, I had indicated a growth rate of 8.06 percent. If you 19 look at Schedule 13-1, the growth rate is 6.73 percent for 20 21 Wisconsin Energy for years 1 through 5 is the correct growth rate. So once I make those corrections to those 22 Schedules 13-2 through 13-4, that affects the overall 23 24 indicated cost of equity for Wisconsin Energy and then, as a result, the overall average. And I could go through the 25

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| 1  | details of each of those figures or else just provide the  |
| 2  | overall result.  |
| 3  | MR. THOMPSON: What would you prefer,                       |
| 4  | Judge?   |
| 5  | JUDGE WOODRUFF: Unless the parties want                    |
| 6  | otherwise, I think the overall result would be sufficient. |
| 7  | BY MR. THOMPSON:   |
| 8  | Q. What's the overall result, Mr. Murray?                  |
| 9  | A. Schedule 13-2 with the correction, the                  |
| 10 | overall cost of equity indication would be 8.20 percent    |
| 11 | rather than 8.23 percent. For Schedule 13-3, the new       |
| 12 | revised indication would be 8.57 percent rather than       |
| 13 | 8.61 percent, and for 13.4, the overall cost of equity     |
| 14 | indication would be 8.80 percent rather than the           |
| 15 | 8.84 percent in my original schedules.                     |
| 16 | Q. Okay. Do you have any other changes or                  |
| 17 | corrections?   |
| 18 | A. No, I do not.   |
| 19 | Q. All right. With those corrections in mind,              |
| 20 | if I asked you the same questions today, would your        |
| 21 | answers be the same?                                       |
| 22 | A. They would.   |
| 23 | Q. And to the best of your knowledge and                   |
| 24 | belief, is the information contained in those items of     |
| 25 | testimony true and correct?                                |

Page 1969 Α. Yes. 1 2 MR. THOMPSON: At this time, Staff would 3 offer Exhibit 201, Exhibit 202, Exhibit 216, Exhibit 217, Exhibit 229 and Exhibit 230. 4 5 JUDGE WOODRUFF: Okay. Exhibits 201, 202, which is the cost of service report, are being offered in 6 7 their entirety at this point; is that correct, 8 Mr. Thompson? MR. THOMPSON: That is correct. 9 10 JUDGE WOODRUFF: And 216, 217, 229 and 230 are also being offered. Any objections to their receipt? 11 12 (No response.) 13 JUDGE WOODRUFF: Hearing none, they will be 14 received. (STAFF EXHIBIT NOS. 201, 202, 216, 217, 229 15 AND 230 WERE RECEIVED INTO EVIDENCE.) 16 17 MR. THOMPSON: Thank you, Judge. At this time I tender Mr. Murray for cross-examination. 18 19 JUDGE WOODRUFF: For cross-examination, then, we'll begin with Sierra Club. 20 21 MR. ROBERTSON: No questions. 22 JUDGE WOODRUFF: AARP? 23 MR. COFFMAN: No questions, your Honor. JUDGE WOODRUFF: MIEC? 24 25 MS. ILES: No questions.

Page 1970 1 JUDGE WOODRUFF: Public Counsel. 2 MS. BAKER: Thank you. 3 CROSS-EXAMINATION BY MS. BAKER: 4 Q. Good morning, Mr. Murray. 5 Α. Good morning. 6 You were here for the testimony that was Q. 7 held, I think it was last Friday, correct? Yes, I was. 8 Α. 9 ο. All right. Would you agree that fluctuations in the economy are a normal part of the 10 business arena? 11 12 Α. Yes. 13 Q. And this fluctuation is a part of doing business, isn't it? 14 15 Α. Yes. 16 You've determined that a reasonable return Q. 17 on equity for Ameren Missouri is between 8.00 percent and 18 9.00 percent; is that correct? 19 A. That's correct. 20 And this determination is based on your Q. 21 expert analysis of market-driven data using traditional 22 analytical tools? 23 Α. Yes. 24 Q. And I assume that you agree that a 25 reasonable return on equity for Ameren is one that is,

Page 1971 1 one, adequate to attract capital at reasonable terms, 2 thereby enabling Ameren Missouri to provide safe and 3 reliable electric service; is two, sufficient to ensure Ameren Missouri's financial integrity; and three, is 4 5 commensurate with returns on investments in enterprises having corresponding risks? 6 7 Α. Yes. 8 Q. Therefore, in your opinion, at a return of 9 equity range of anywhere between 8.00 percent and 10 9.00 percent, Ameren is adequately able to attract capital 11 at reasonable terms, enabling it to provide safe and 12 reliable electric service? 13 Α. Yes. 14 0. And anywhere within this range Ameren's 15 financial integrity is ensured? 16 Α. Yes. 17 ο. And given your research, a return on equity anywhere between 8.00 percent and 9.00 percent is 18 19 commensurate with the returns of similar enterprises like 20 Ameren who have similar risks? 21 Α. If I could qualify that, it would be commensurate with the cost of equity of similar 22 enterprises with similar risk. It may not be actually 23 commensurate with the earned returns of similar 24 enterprises with similar risk. There's a key distinction 25

Page 1972 between the cost of equity and return on equity. 1 2 Okay. So Ameren would receive a reasonable Q. 3 return on equity anywhere between 8.00 percent and 9.00 percent? 4 5 Α. Yes. During the local public hearings there's 6 Q. 7 been a lot of customer concern over the affordability of rates, hasn't there? 8 9 Α. I understand that to be the case. 10 And you would agree that the goal for the Q. 11 Commission is to set rates that are just and reasonable? 12 Α. Yes. 13 Q. And you would agree that part of 14 determining a reasonable rate is to make rates as 15 affordable as possible without causing detriment to the 16 utility? I agree. 17 Α. 18 Staff has produced a reconciliation of the Q. 19 positions for the various issues in this case, including 20 return on equity; is that correct? 21 Α. Yes. 22 MS. BAKER: I'm going to offer an exhibit. 23 JUDGE WOODRUFF: All right. Public Counsel's next exhibit is 409. 24 25 (OPC EXHIBIT NO. 409 WAS MARKED FOR

Page 1973 1 IDENTIFICATION.) 2 BY MS. BAKER: 3 Ο. Are you familiar with what's been given and marked as Exhibit 409? 4 5 Α. I have not looked at this specific document. I'm familiar with the form. 6 7 Q. Okay. The format of the document. 8 Α. 9 0. And it is common for Staff to do a reconciliation of the various issues in this case? 10 Yes. 11 Α. 12 Q. And have you reviewed this particular one 13 right now? 14 Briefly, yes, I did. Α. 15 All right. And looking at this particular Q. exhibit, you can see that Staff's reconciliation is based 16 17 on an Ameren revenue requirement at true-up of 345,256,729? 18 19 Α. Yes. 20 All right. And according to Staff's Q. 21 reconciliation, Exhibit 409, Staff's recommendation of a 22 return on equity at 9.00 percent, looking at line 3, would lower the company's revenue requirement by \$83.2 million? 23 24 Approximately, yes. Α. 25 So the calculation of the impact of MIEC's Q.

Page 1974 1 position of a 9.2 percent return on equity in Staff's 2 reconciliation, same line, is \$70.4 million, 3 approximately? Α. I don't know if they used 9.2 or if they 4 5 used 9.3 percent, but if they used -- whatever number they use, that's what shows. I think MIEC's -- MIEC's 6 7 recommendation is 9.3 percent. 8 Q. But this reflects MIEC's position in the 9 case --10 I believe so. Α. 11 Q. -- on this? 12 Α. I was not involved with the specific creation of this document. 13 14 Q. All right. And is it correct -- is it correct that -- do you know whether it's correct that 15 16 whenever the reconciliation was prepared to present the 17 impact of OPC's position, it was put at the lower end of Staff's reasonable range or 8.00 percent? 18 19 It's my understanding that OPC's supporting Α. 8 percent, so that would be, I think, a safe assumption. 20 21 Okay. And so according to this document, a Q. recommendation of a return on equity at 8.00 percent would 22 23 lower the company's revenue requirement or save the 24 customers approximately \$147.3 million? 25 Α. Yes.

Page 1975 1 0. So basically, when you compare OPC's 2 position to the company's requested revenue requirement, 3 approximately 43 percent of the company's revenue requirement is this one issue, return on equity? 4 5 Α. Yes. 6 At the higher end of Staff's range of ο. 7 9.00 percent as recommended by Staff, Ameren would receive 8 a return, a reasonable return on equity and customers 9 would save \$83.2 million per year? 10 Α. Yes. MS. BAKER: Move for admission of this 11 12 exhibit. 13 JUDGE WOODRUFF: 409 has been offered. Any objections to its receipt? 14 15 MR. BYRNE: I do object, your Honor. First of all, the witness said he was not involved in preparing 16 17 it and really hadn't seen it before. I'm not sure this is the reconciliation at all. I know -- I know the Staff and 18 the company have been working together on the 19 reconciliation, but I don't think this witness has any 20 21 knowledge of whether this is the reconciliation or not, and frankly, I suspect it might not be, you know. 22 MS. BAKER: Your Honor, this is the 23 reconciliation that's been filed in the case as of 24 September 29th by Staff. 25

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| 1  | JUDGE WOODRUFF: All right. I'll overrule                   |
| 2  | the objection. The document will be received.              |
| 3  | (OPC EXHIBIT NO. 409 WAS RECEIVED INTO                     |
| 4  | EVIDENCE.)   |
| 5  | BY MS. BAKER:  |
| 6  | Q. And one last question. So merely by moving              |
| 7  | to the lower end of your range of 8.00 percent instead of  |
| 8  | the higher end of Staff's range as you recommend, Ameren   |
| 9  | would still receive a return on equity that is, one,       |
| 10 | adequate to attract capital at reasonable terms, thereby   |
| 11 | enabling Ameren Missouri to provide safe and reliable      |
| 12 | service, that is, two, sufficient to ensure Ameren         |
| 13 | Missouri's financial integrity, and three, commensurate    |
| 14 | with returns on investments in enterprises having          |
| 15 | corresponding risks, and customers would be spared having  |
| 16 | to pay an additional \$64 million from Staff's high range; |
| 17 | is that correct?   |
| 18 | A. I'd agree with the one caveat again that                |
| 19 | the cost of equity is different than the return on equity. |
| 20 | 8 percent is is closer to my estimated cost of equity,     |
| 21 | which I believe is commensurate with other utilities,      |
| 22 | specifically regulated electric utilities in the           |
| 23 | comparable group as to what the cost is to attract         |
| 24 | capital. Whether or not they earn that 8 percent cost of   |
| 25 | equity is part of the part of the uncertainties of the     |

Page 1977 business environment. 1 2 Q. And that is a normal part of any rate case, 3 though; is that correct? And business practices in rate cases, yes. 4 Α. 5 That's correct. 6 And again, moving to a recommended return Q. 7 on equity at 8.00 percent would save the customers 8 \$147.3 million? Α. 9 Yes. 10 MS. BAKER: No further questions. JUDGE WOODRUFF: For Ameren? 11 12 MR. BYRNE: Thank you. CROSS-EXAMINATION BY MR. BYRNE: 13 14 Q. Good morning, Mr. Murray. 15 Α. Good morning. 16 Do you have the Staff report with you? Q. Α. 17 Yes, I do. 18 And do you have a copy of your prefiled Q. testimony with you? 19 20 I do. Α. 21 And do you have a transcript of your Q. 22 deposition that I took on August 29th of this year? I do. 23 Α. Let me start by asking you about some of 24 Q. the questions Ms. Baker was asking you. My understanding 25

Page 1978 1 from your answers was you didn't prepare this 2 reconciliation; is that correct? 3 Α. That's correct. 4 Q. I mean, do you have any knowledge about 5 whether the numbers listed on the -- for the return on equity, the dollar value of the return on equity, whether 6 7 those numbers are exactly right or not? I do not know if they're exactly right. 8 Α. 9 ο. Okay. Do you know to what degree -- do you know they're even approximately right? 10 I believe they're approximately right. 11 Α. Т 12 believe John Cassidy was involved with the company in 13 preparing this, and I sure hope he wouldn't file something in EFIS that is not at least approximately right. 14 15 Sure. I understand that. But you don't Q. 16 have any independent basis to know whether these numbers 17 are right or wrong, do you? 18 Α. I have not independently verified these 19 numbers. 20 Okay. Now, my understanding is you're Q. 21 recommending that the Commission authorize a return on 22 equity for Ameren Missouri in this case with a range of 23 8 percent to 9 percent; is that correct? 2.4 Α. Yes. 25 And your specific recommendation is Q.

Page 1979 1 9 percent, which is the high end of your range; is that 2 correct? 3 Α. That is correct. 4 Q. And my understanding is that you -- well, 5 at least at the time of your deposition, you couldn't recall a situation where you ever recommended the high end 6 7 of your range; is that correct? 8 Α. I believe that's correct, yes. 9 And you still do not recall a situation 0. previous to this where you recommended the high end of 10 11 your range? 12 Α. I still do not recall. 13 Q. Okay. And you touched a little bit about 14 this with Ms. Baker, but my understanding is that your recommendation -- your recommended return on equity of 15 16 9 percent is not what, in your opinion, is the company's 17 actual cost of equity; is that true? That is true. 18 Α. 19 Q. Okay. And my understanding is that you 20 believe that the company's cost of equity is quite a bit 21 lower than 9 percent; is that true? That is true. 22 Α. 23 And in particular, you even believe, based Q. 24 on the results of your analyses, that it is not improbable 25 that the company's actual cost of equity could be below

Page 1980 1 8 percent or in the 7s percent; is that correct? 2 Α. That is correct. 3 ο. Okay. But then isn't it true that the way 4 you got to your recommendation is that you made a 5 subjective decision to move your recommendation above the results of your cost of equity analysis; is that correct? 6 7 Α. Subjective based on recognition of the 8 Commission's report and orders in the past, yes. It was recognition of the environment and the Commission's views 9 10 on an acceptable allowed return on equity. 11 I mean, would it be fair to say that you Q. 12 moved your return on equity up to the range of 8 to 9 percent and the specific point of 9 percent because you 13 14 didn't think that the Commission would accept the very low 15 recommendation that your cost of equity analysis would 16 suggest is the true cost of equity? 17 Α. I didn't believe they would use that as the allowed ROE. Maybe they would have accepted evidence that 18 the cost of equity is lower, but that they ultimately 19 would not allow an ROE that low. 20 21 Didn't you say in your deposition that your Q. 22 recommendation is trying to convince the Commission to 23 approve an ROE in the single digits? I believe that's correct. 24 Α. 25 Isn't it true, Mr. Murray, that even you Q.

Page 1981 1 don't expect the Commission to adopt your recommendation 2 in this case? 3 Α. I believe that's correct. 4 Q. Isn't it true, Mr. Murray, that if the 5 Commission adopts your recommendation in this case, Ameren Missouri's authorized return on equity will be about 6 7 120 basis points below the national average? I believe there's been a variety of allowed 8 Δ 9 ROE numbers put up on easels and discussed at the beginning of the hearing. I believe in the first quarter 10 2012 it was in the low 10, and I think when you exclude 11 12 some companies it might have even been in the high 9s. When you included 2012, I think there was some allowed ROE 13 averages that were about 10.2. 14 There's been lots of numbers thrown out 15 there about allowed ROE. So I would say about 100 basis 16 17 points if you use 2012 data, but there was a lot of 18 allowed ROE information dissected earlier in this hearing. 19 I guess it just depends on what period? Q. 20 Α. Exactly. 21 Isn't it true that your 9 percent Q. 22 recommendation would be among the lowest non-penalty 23 authorized returns on equity authorized by any commission 24 in the United States in the last 30 years? 25 If it was the allowed ROE, yes. I don't Α.

Page 1982 know that it's the lowest estimated cost of equity. 1 2 Let me ask you this: Mr. Hevert had a Q. 3 sentence in his rebuttal testimony -- you don't happen to 4 have Mr. Hevert's testimony with you? 5 Α. I believe I do. Can you refer me to the 6 page? 7 I'm on page 28 of his rebuttal. Q. Yes. 8 Α. Yes. 9 And on line 6 he has a sentence that says, 0. 10 as a point of reference, of the 546 electric utility rate 11 case decisions reported by RRA from January 1992 through 12 June 30th, 2012, there was only one ROE authorization of 13 9 percent or lower. In fact, the average ROE awarded --14 award for electric utilities during that time period was 10.86 percent. 15 16 And I guess my question is, do you have any 17 cites -- he has a footnote that cites the one instance in 2009 where one utility got below 9 percent. Do you have 18 19 any reason to disagree with his representation of the 546 20 electric utility rate case decisions since 1992? 21 No, I have no reason to disagree. Α. 22 0. And, Mr. Murray, in your deposition you 23 agreed with me, I believe, that as a general rule water 24 utilities are less risky than integrated electric 25 utilities; is that correct?

Page 1983 Α. Yes. 1 2 Q. Okay. And we discussed that Staff witness 3 Matt Barnes filed testimony in January of this year in a Missouri American Water Company case, which was Case 4 5 No. WR-2011-0337. Do you recall that discussion? 6 Α. Yes, I do. 7 And I don't know if you remember. I can Q. 8 show you his testimony if you'd like, but Mr. Barnes 9 recommended a return on equity for Missouri American Water Company in that case of 8.95 percent to 9.95 percent; is 10 that correct? 11 12 Α. Was that the updated? 13 Q. Yeah. Let me show you the testimony if I could. 14 15 MR. BYRNE: May I approach the witness, 16 your Honor? JUDGE WOODRUFF: You may. 17 BY MR. BYRNE: 18 19 Q. I've handed you Mr. Barnes' rebuttal 20 testimony on behalf of Staff in Case No. WR-2011-0337, and 21 I believe he updated his recommendation on page 4. 22 I see that, and your statement is correct. Α. 23 Q. Okay. And that's almost 100 basis points 24 higher than your range is for Ameren Missouri; is that 25 correct?

Page 1984 It is. Α. 1 2 And that was, I believe, less than six Q. 3 months before you filed your recommendation in the Staff 4 Report in our case; is that correct? 5 Α. That's correct. And I believe in your deposition you agreed 6 Q. 7 that it was fair to characterize your recommendation as 8 inconsistent with Staff witness Barnes' recommended ROE 9 range for a water utility that's 95 basis points higher; 10 is that correct? I did. 11 Α. 12 ο. Okay. My understanding is that you don't 13 estimate the cost of capital for utilities in the same way 14 that most other ROE witnesses do in rate cases; is that 15 correct? 16 I don't agree. Α. 17 ο. Okay. And let me ask you this. In your opinion -- it's my understanding that your opinion is, to 18 19 the extent that they are attempting to set the ROE equal 20 to the cost of equity, the commissions around the country 21 and the experts on whose testimony they've been relying 22 have been getting it wrong. Is that a fair statement? I believe the Commission truly believes 23 Α. that it's trying -- it's listening to the various parties' 24 cost of equity estimates, that the cost of equity 25

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| 1  | estimates from several rate of return witnesses, and I'm   |
| 2  | not going to say all rate of return witnesses because I do |
| 3  | think there are some that actually use fairly rational     |
| 4  | assumptions, but for the most part they're biased high     |
| 5  | when you compare them to the what capital market           |
| 6  | specialists use to estimate a fair price to pay for        |
| 7  | utility stock.   |
| 8  | Q. I mean, isn't it true that you believe that             |
| 9  | ROEs across the country have been set higher than the cost |
| 10 | of equity?   |
| 11 | A. I do.   |
| 12 | Q. And I think in your deposition you said                 |
| 13 | that your recommendations are more radical than what some  |
| 14 | people would like to see in the world of utility           |
| 15 | ratemaking; is that correct?                               |
| 16 | A. I didn't say that in this case. I think                 |
| 17 | you're probably referring to something from a couple cases |
| 18 | ago. At that time I believe there was some some            |
| 19 | discussion about just from the Commission and others       |
| 20 | about the recommendations being low, at least judged by a  |
| 21 | review of allowed ROEs, and as I've had more time to       |
| 22 | analyze and evaluate what is done in the capital markets,  |
| 23 | that my cost of equity estimates are very much in the      |
| 24 | mainstream if not biased high.                             |
| 25 | Q. Let me do you have your deposition with                 |

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| 1  | you?  |
| 2  | A. Yes, I do.   |
| 3  | Q. Let me show you what I'm talking about.                |
| 4  | Turn to page 138. And it's a long answer, but the part I  |
| 5  | was looking at is the second sentence which starts on     |
| 6  | line 2 and it says, I think the term was some people may  |
| 7  | consider my recommendations to be a little more radical   |
| 8  | than what they would like to see. Is that                 |
| 9  | A. I have an electronic version. I'm trying               |
| 10 | to see if I can   |
| 11 | MR. BYRNE: May I approach?                                |
| 12 | JUDGE WOODRUFF: You may.                                  |
| 13 | BY MR. BYRNE:   |
| 14 | Q. I have a non-electric version so we can be             |
| 15 | on the same page.   |
| 16 | A. That would be helpful.                                 |
| 17 | Q. I was on page 138, line 2, and the sentence            |
| 18 | there says again, I think the term was some people may    |
| 19 | consider my recommendations to be a little more radical   |
| 20 | than what they would like to see.                         |
| 21 | A. Yeah. I think that was in context of                   |
| 22 | discussing the deposition a couple cases ago. We were     |
| 23 | kind of having a back and forth about that term I used a  |
| 24 | couple cases ago, and I was explaining some of the things |
| 25 | that I've been able to educate myself on since then.      |

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Page 1987 1 0. Okay. 2 Α. But you're correct, that statement on that 3 one sentence does indicate that. Okay. And I'd like to take a look at each 4 Q. 5 of your analyses that you did. My understanding is that you did four analyses; is that correct? And what the 6 7 one -- let me list them and see if I missed any. You did 8 a constant growth DCF; is that correct? 9 Α. Yes. 10 And you did a multistage DCF; is that Q. 11 correct? 12 Α. Yes. 13 Q. And you did a capital asset pricing model, 14 or CAPM; is that correct? 15 Α. Yes. 16 Q. And then you had your rule of thumb; is 17 that correct? 18 Α. That's correct. 19 And were there any I missed? Was that all Q. 20 of them? 21 Those are the primary analyses, yes. Α. 22 Q. Okay. And my understanding is you gave 23 primary weight -- well, your recommendation is not exactly 24 tied to any of your analyses, but you gave primary weight in the multistage DCF for trying to figure out the cost of 25

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| 1  | equity; is that fair to say?                               |
| 2  | A. That is fair.   |
| 3  | Q. Let's take a look at the constant growth                |
| 4  | analysis first. And first let me ask you this. When        |
| 5  | Mr. Barnes developed his recommendation of 8.95 percent to |
| 6  | 9.95 percent for Missouri American Water Company last      |
| 7  | January, my understanding is he relied exclusively on the  |
| 8  | constant growth DCF; is that correct?                      |
| 9  | A. That's my understanding.                                |
| 10 | Q. But my understanding is you do not consider             |
| 11 | the constant growth DCF analysis to be an accurate and     |
| 12 | reliable measure of the cost of equity; is that correct?   |
| 13 | A. I've actually used different variants for               |
| 14 | the electric versus water versus gas. You know, I believe  |
| 15 | we discussed that during the deposition. I understand      |
| 16 | that. But the actually, I believe in the Missouri          |
| 17 | American case that I sponsored testimony in prior to       |
| 18 | Mr. Barnes, I relied on a $$ on both the multistage and    |
| 19 | the constant growth DCF in natural gas distribution rate   |
| 20 | cases because of the fairly steady state nature of the     |
| 21 | construction in the natural gas industry. We still have    |
| 22 | relied on a constant growth DCF. So it depends on the      |
| 23 | situation. At least in my opinion it does.                 |
| 24 | Q. Take a look at page 85 of your deposition,              |
| 25 | Mr. Murray, and I'm on line 20, and it's well, I'll        |

Page 1989 1 read the whole question and answer, and you can tell me if 2 I read it right. Are you there yet? 3 Α. I'm almost there. I'm there. 4 Q. Okay. The question says, let me ask you 5 this: Did you give your constant growth DCF analysis any weight at all in forming your recommendation? 6 7 Answer: Since I recommend a 9, I would 8 say -- and if I had just accepted my multistage analysis 9 fully, you know, the 9 percent is closer to the constant growth DCF. Did I -- do I consider the constant growth 10 11 DCF an accurate and reliable measure of the cost of 12 equity? No. 13 Did I read that correctly? 14 Yes, but I'd like to clarify that. That's Α. 15 in context of --16 Q. That's all I'm asking you. 17 Α. I understand. 18 You can clarify it on redirect --Q. 19 I understand. Α. 20 -- if your lawyer asks you the right Q. 21 question. 22 Okay. And my understanding is that for the 23 constant growth model your results showed a 9.1 percent to 9.6 percent return on equity; is that correct? 24 25 That is correct. Α.

Page 1990 1 **Q**. And to get that result or those results, 2 you need a number of inputs for each of the companies in 3 your proxy group; is that correct? Α. That's correct. 4 5 And my understanding is the inputs that you Q. would use in the constant growth DCF analysis were the 6 7 stock price, the dividend for the next 12 months and the 8 anticipated growth rate; is that correct? 9 Α. That's correct. 10 **Q**. And I'd like to focus on the growth 11 component of that equation. My understanding is that when 12 you did your analysis, you looked at the five-year EPS 13 growth projections for your proxy group companies from the 14 two market analyst services that you had access to, which 15 were Reuters and ValueLine; is that correct? 16 That is correct. Α. 17 ο. And the average five-year projected EPS growth rate from Reuters was 5.2 percent; is that correct? 18 19 I think it's on maybe Schedule 9.4 of your --20 Α. Thank you. That is correct. 21 And the average five-year projected EPS Q. 22 growth rate from ValueLine was 5.6 percent; is that 23 correct? That is correct. 2.4 Α. 25 And aren't these types of EPS projections Q.

Page 1991 1 what are commonly used for the growth component of the 2 constant growth DCF analysis? 3 Α. No. 4 Q. I mean, I guess the reason I'm suggesting 5 that is in the Staff Report, I think you referred to this as -- using these equity growth estimates as easy and 6 7 popular in utility ratemaking. And I'm looking at 8 page 28, lines 15 and 16 of the Staff's Report. Is 9 that -- is that what you said in the Staff Report? 10 MR. THOMPSON: What was that reference, Tom? 11 12 MR. BYRNE: Page 28, lines 15 and 16. BY MR. BYRNE: 13 14 Q. It says, and I quote, although use of equity analyst five-year EPS growth forecasts as a 15 16 constant growth rate is easy and popular in utility 17 ratemaking. 18 Α. I agree that's true for utility ratemaking. 19 Q. Okay. But instead of using those growth 20 rates, you used a range of 5 to 5.5 percent; is that 21 correct? 22 Yes. Α. 23 Q. And where did the range of 5 to 5.5 percent come from? 24 25 That is giving weight to the projected Α.

|    | Page 1992   |
|----|---|
| 1  | growth rates, the types of analysis that a lot of rate of |
| 2  | return witnesses will put out there as a growth rate that |
| 3  | could continue in perpetuity, which, you know, I provided |
| 4  | the results showing what what that would be if you        |
| 5  | accepted that notion, but at the same time indicated that |
| 6  | I do not accept that notion.                              |
| 7  | Q. I mean, is it fair to say that the 5 to                |
| 8  | 5.5 percent growth rate was based on your judgment?       |
| 9  | A. Yes, based on the data that I reviewed in              |
| 10 | that schedule.  |
| 11 | Q. Would it be fair to say that instead of                |
| 12 | taking the easy and popular route of using 5.2 to         |
| 13 | 5.6 percent, I guess you took the difficult and less      |
| 14 | popular route of picking a lower growth rate of 5 to      |
| 15 | 5.5 percent? Would that be fair to say?                   |
| 16 | A. I used the logical and rational route, but             |
| 17 | yes, that is those figures are pulled right from the      |
| 18 | Internet without any supporting analysis to justify that  |
| 19 | that's used as a perpetual growth rate.                   |
| 20 | Q. Isn't it true that if you would have used              |
| 21 | the easy and popular route of the EPS estimates from      |
| 22 | the from the analysts, you would have gotten a range of   |
| 23 | 9.3 percent to 9.7 percent for your ROE from the constant |
| 24 | growth analysis?  |
| 25 | A. You're referring to the 5.2 to 5.6 plus the            |

Page 1993 4.1 percent dividend yield? 1 2 Q. Yes. 3 Α. That's -- that arithmetic adds up, that's 4 correct. 5 Let's discuss your multistage DCF analysis Q. for a minute. And again, my understanding is your 6 7 multistage DCF, like those performed by Mr. Hevert and 8 Mr. Gorman, consists of three stages; is that correct? 9 Α. That's correct. 10 And the first stage is the first five 0. 11 years; is that correct? 12 Α. That is correct. 13 Q. And the second stage is from year six to 14 ten; is that correct? 15 That is correct. Α. 16 Q. And the third stage is from year 11 until I 17 guess theoretically infinity; is that correct? That is correct. 18 Α. 19 Q. And the results of your multistage analysis 20 are ROEs from 7.8 percent to 8.6 percent; is that correct? 21 Α. That's approximately correct, yes. 22 0. Okay. And would you agree with me that the 23 growth rate that is selected for use in Stage 3 of the 24 multistage DCF analysis has a significant impact on the 25 result of that analysis?

Page 1994 1 Α. Absolutely. 2 And what growth rate did you use for your Q. 3 Stage 3? Α. I used a range of 3 to 4, midpoint 4 5 3.5 percent. 6 Okay. And my understanding from your Q. 7 deposition was that you had three bases for selecting the 8 3 to 4 percent. Let me run through them and see if I have 9 them right. One was Staff's study of a group of 10 comparable utility companies over the period from 1968 to 1999; is that correct? 11 12 Α. Yes. And the second one was a consideration of 13 Q. information from the 2003 Mergent Public Utility and 14 15 Transportation Manual; is that correct? 16 That's correct. Α. 17 Q. And finally, the third basis for the 3 to 18 4 percent is your knowledge and experience; is that 19 correct? 20 Α. Yes. 21 Okay. I'd like to talk about each one of Q. 22 these separately. First let's take -- consider the 23 Mergent's Public Utility and Transportation Manual, and 24 that was published in 2003; is that correct? 25 Α. Yes.

Page 1995 1 **Q**. Okay. And as I understand it, this is an 2 index of electric utility data that covers a period from 3 1947 through 2000; is that correct? I believe it actually extends to 2002-2003, 4 Α. 5 but -- but it doesn't extend any further past that, that's 6 correct. 7 So it's -- the most recent data is about Q. 8 ten years old in that database? 9 Α. Yes. 10 Okay. And my understanding is that you had Q. 11 a problem with that database, and the problem was that 12 even though you tried very hard to do so, you could not independently replicate and verify the data in that 13 14 report; is that correct? That is correct. 15 Α. 16 Q. Okay. And as I understand it, you spent 17 many hours over the course of about a month trying to replicate and verify the data; is that correct? 18 19 Yes. My own analysis, calling the sources Α. and trying to contact the people that -- say the old 20 21 horses that might be aware of what happened as far as the compilation of that data. Yes, I tried. 22 23 ο. But in the end you were unsuccessful in replicating or verifying that data; is that correct? 24 25 Α. Exact data, that's correct, yes.

Page 1996 1 **Q**. Okay. Let's look at the separate study 2 that you did. My understanding is that your separate 3 study consisted of looking at ValueLine data for the central region utilities for the period from 1968 through 4 5 1999; is that correct? 6 Α. That's correct. 7 So again, the most recent data is, I guess, Q. 8 13 years old in that database; is that correct? 9 Α. That's correct. 10 And isn't it true that you started the Q. 11 database in 1968 because you didn't have any data from 12 before that year? 13 Α. Yes. Our files did not go back any farther 14 than 1968. 15 And then within that database you selected Q. certain central region electric utility companies for your 16 17 analysis; is that correct? 18 Α. Yes. 19 Q. Okay. And my understanding is that you did 20 not apply rigid selection criteria in selecting these 21 companies; is that true? 22 Yes. Yes. Α. 23 Q. Okay. And what -- once you selected the 24 companies, what information did you get for them? 25 We went through and pulled all the earnings Α.

|    | Page 1997  |
|----|--|
| 1  | per share, dividends per share and book value per share    |
| 2  | data for that electric utility index proxy group. I'll     |
| 3  | characterize it as a customized index of electric utility  |
| 4  | companies in the central region, and we evaluated the      |
| 5  | ten-year compound growth rates and dividends per share,    |
| 6  | earnings per share, book value per share on a rolling      |
| 7  | basis from 1968 to 1999, and felt that that was a very     |
| 8  | logical period considering that was the last large         |
| 9  | construction cycle for the electric utility industry.      |
| 10 | So and, of course, we had to normalize                     |
| 11 | some of the dividends per share, earnings per share and    |
| 12 | book value per share data because of various stock splits  |
| 13 | and, you know, other nuances that can occur because        |
| 14 | companies do not stay in necessarily a constant state, and |
| 15 | so you have to analyze that data to make sure that you do  |
| 16 | make the appropriate adjustments.                          |
| 17 | And at the end of the day what we found,                   |
| 18 | which is a theory that has been questioned quite           |
| 19 | frequently, is whether or not dividends per share, book    |
| 20 | value per share and earnings per share will grow at the    |
| 21 | same rate over the long term, and that data showed that    |
| 22 | that is to be the case, that they're very close.           |
| 23 | And that's why, you know, evaluating growth                |
| 24 | rates over a very long period of time will provide a       |
| 25 | reality check, if you will, as to what is a potential      |

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Page 1998 long-term perpetual growth rate for an electric utility 1 2 proxy group. 3 Ο. Okay. Just so I understand, it's my -- to 4 summarize, you had central region electric utility data 5 from 1968 to 1999, right? Yes. Actually, let me clarify. We had 6 Α. 7 data past 1999, but due to the restructuring of the 8 electric utility markets, the Enron bankruptcy and what 9 have you, you had a lot of companies that went into 10 non-regulated electric utility activities, which distorted 11 company-specific data quite tremendously. 12 And so -- but I do want to make sure that I make 13 it clear that I did look at the data past 1999. It's just that because of that disruption, it was not a real good 14 proxy for regulated electric utility growth over a long 15 period of time. 16 17 ο. I mean, you didn't use any of the data after 1999 in your calculations; is that fair to say? 18 19 I felt like it would distort the data. Α. 20 And then you took a rolling ten-year Q. 21 compound growth average for earnings, dividends and book 22 value; is that correct? 23 That is correct. Α. 24 Q. And that resulted, as I understand it, in a 25 3.62 percent average growth rate; is that correct?

Page 1999 Α. The average of all three was 3.52 percent. 1 2 The average of -- if you want to look at Schedule 15 3 provides all the details. Where am I -- how come I have 3.62 percent? 4 Q. That's -- I don't know. Maybe you can find 5 Α. out the discrepancy. 6 7 It may have been a typo. The average is Q. 8 3.52? Yes. I'm looking at Schedule 15 at the 9 Α. 10 very bottom. 11 Okay. Great. And then I guess -- so Q. 12 that's one basis -- or that's the second basis for your 3 13 to 4 percent growth rate; is that correct? 14 Α. Yes. 15 And on the third basis is your knowledge Q. 16 and experience; is that correct? 17 Α. Yes. Research and knowledge and experience over the years, yes. 18 19 Mr. Murray, isn't this analysis that you Q. 20 did in this case for your multistage exactly the same 21 analysis that the Commission rejected in Ameren Missouri's last rate case? 22 23 This specific schedule, I supplemented Α. testimony to explain why this makes sense. 24 25 I mean, didn't you use the 2003 Mergent's Q.

Page 2000 1 Public Utility and Transportation Manual, isn't the one 2 you used in this case the same one you used in the last 3 case? This data is specifically the same, yes. 4 Α. 5 Q. And isn't the ValueLine database from 1968 through 1999 exactly the same database you studied last 6 7 time --It is. 8 Δ 9 -- and the Commission rejected your 0. recommendation? 10 It is. 11 Α. MR. BYRNE: May I approach the witness? 12 13 JUDGE WOODRUFF: You may. 14 BY MR. BYRNE: 15 Mr. Murray, I'm handing you a copy of the Q. Commission's Report and Order in our last electric rate 16 17 case, which was Case No. ER-2011-0028. 18 Α. Did you intend to hand out a few copies? I have several copies here. 19 20 I'm sorry. That's a mistake. But if you Q. 21 could just look at one of the copies. 22 Α. Yes. 23 Q. And specifically I'm looking at page 68. MR. THOMPSON: Do you have one for me? 24 25 MR. BYRNE: Apparently Mr. Murray does.

Page 2001

BY MR. BYRNE: 1 2 And I was wondering if you could read for Q. 3 me, they're short paragraphs, but paragraphs 14, 15 and 4 16. 5 Α. Out loud or to myself? ο. Out loud. 6 7 Α. Okay. Paragraph 14. In developing his recommendation for Staff, Murray gave primary weight to 8 his multistage DCF analysis. Murray's multistage DCF 9 10 analysis results in a low recommended return on equity because the third stage of his analysis relies on a low 11 12 long-term growth estimate of 3 to 4 percent with a 13 midpoint of 3.5 percent to derive an estimated cost of equity ranging from 8.4 percent to 9.15 percent with a 14 midpoint of 8.775 percent. 15 16 Paragraph 15. Murray initially based his 17 long-term growth rate on a 2003 study published in Mergent Public Utility and Transportation Manual. Because Murray 18 could not replicate Mergent's data, he decided to perform 19 his own study to estimate long-term growth rates based on 20 21 historical growth rates for a set of electric utilities during the period from 1968 and 1999. The study showed an 22 average annual growth rate of 3.59 percent. 23 24 Paragraph 16. Murray admittedly did not 25 use rigid -- excuse me. This is in quotes -- rigid

|    | Page 2002  |
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| 1  | selection criteria, end quote, in determining which        |
| 2  | utilities to include in his study, and it appears that the |
| 3  | selection of data to study was based more on the ready     |
| 4  | availability of that information to Staff than to any      |
| 5  | rational basis for that selection.                         |
| 6  | Q. Thank you. Would it be fair to say that                 |
| 7  | your use of 3 to 4 percent long-term growth rate in        |
| 8  | Stage 3 of the multistage growth analysis is inconsistent  |
| 9  | with what most rate of return witnesses have done and with |
| 10 | what this Commission has done when it's adopted the        |
| 11 | multistage analysis in the past? Is that true?             |
| 12 | A. I can only speak for this Commission.                   |
| 13 | Q. That's what I said, this Commission.                    |
| 14 | A. I'm sorry.  |
| 15 | Q. Isn't it inconsistent with what this                    |
| 16 | Commission has done in the past and what most rate of      |
| 17 | return witnesses have done, I guess, in proceedings before |
| 18 | this Commission?   |
| 19 | A. I believe the Commission has given                      |
| 20 | deference to the notion that electric utility companies    |
| 21 | can grow in perpetuity at a GDP growth rate, and although  |
| 22 | witnesses may differ on what that long-term GDP growth     |
| 23 | rate could be, the Commission has accepted that theory     |
| 24 | proposed by other rate of return witnesses that have       |
| 25 | sponsored testimony in the state of Missouri.              |

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|    | Page 2003  |
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| 1  | Q. Okay. Let's talk about your CAPM, which is              |
| 2  | the capital asset pricing model analysis. My               |
| 3  | understanding is that the capital asset pricing model uses |
| 4  | a risk-free rate as part of its equation; is that correct? |
| 5  | A. That is correct.  |
| 6  | Q. And in your analysis, the risk-free rate                |
| 7  | you used was a 30-year U.S. Treasury bond rate of, I       |
| 8  | believe it was 3.13 percent; is that correct?              |
| 9  | A. That is correct.  |
| 10 | Q. And my understanding is that these 30-year              |
| 11 | U.S. Treasury bond rates are at historic lows, lower than  |
| 12 | they have been since at least the 1940s or 1950s; is that  |
| 13 | correct?   |
| 14 | A. That is correct.  |
| 15 | Q. And so isn't it true that your CAPM                     |
| 16 | analysis produced low rates attributable in large part to  |
| 17 | the historic low Treasury bond rates?                      |
| 18 | A. That coupled with the use of historical                 |
| 19 | earned return spreads between equities and bonds produce a |
| 20 | lower result using the CAPM.                               |
| 21 | Q. And with regard to your results, my                     |
| 22 | understanding is that your CAPM results based on an        |
| 23 | arithmetic average was 7.06 percent; is that correct?      |
| 24 | A. That is correct.  |
| 25 | Q. And your result based on a geometric                    |

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Page 2004 1 average was 5.96 percent; is that correct? 2 Α. That is correct. 3 ο. And my understanding is that you did not 4 give these results any weight in your recommendation; is 5 that correct? 6 Α. No. My recommendation does not go down to 7 those cost of equity indications. 8 Q. And my understanding is that specifically 9 that you would agree that 5.96 percent is below what would be in the realm of reason for regulated utilities; is that 10 correct? 11 12 Α. Yes. 13 Q. Okay. But 7.06 percent in your opinion is 14 not ridiculously unreasonable for a cost of equity for a 15 regulated electric utility; is that correct? 16 Α. For cost of equity, that is correct. 17 ο. Okay. Let's talk about your, I guess, fourth study, which is your rule of thumb. Can you tell 18 me basically how the rule of thumb works? 19 Yes. The rule of thumb is basically a 20 Α. 21 reasonableness check that is supported by curriculum from the Chartered Financial Analyst program that's based on 22 experience in U.S. corporate markets that indicates that 23 24 if you use the bond yield of the company that you are analyzing, that that bond yield will capture the business 25

Page 2005 risk, financial risk, all the specific risk of the 1 2 company. 3 So the only thing left when adding a risk premium to that bond yield for purposes of the cost of 4 5 equity is the residual risk of being the investor that only has the right to the income and cash flow after the 6 7 bondholders are paid. 8 This is based on general corporate 9 experience. It's -- like I said, it's something that is 10 generated and discussed by individuals outside the ratemaking realm. It is taught to individuals that 11 12 participate in the capital markets, and it -- it is a way to kind of bring you -- bring things down to a sense of 13 commonsense, a reality as to what could you possibly have 14 15 for a cost of equity. 16 If you have bond yields of, say, 4 percent 17 because the business risk and the financial risk of the company are already contemplated in that bond yield of 18 4 percent, historical U.S. capital market experience has 19 shown that 3 to 4 percent risk premium over that bond 20 21 yield for that specific company is a fair approximation of the cost of equity, just like applying it to a high yield 22 below investment grade company that may have a 10 percent 23 bond yield, if you apply a 3 to 4 percent risk premium to 24 that bond yield, you would have a 13 to 14 percent cost of 25

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| 1  | equity. With safe investments it's about a 4 percent bond  |
| 2  | yield. You apply a 3 to 4 percent risk premium, it         |
| 3  | results in a 7 to 8 percent cost of equity.                |
| 4  | These are numbers that are not produced by                 |
| 5  | me. Those are numbers that are provided in the             |
| 6  | CFA curriculum and taught to individuals that are going to |
| 7  | be experts and are working on becoming experts in the      |
| 8  | capital markets and advising individuals on what is an     |
| 9  | appropriate stock and what is an appropriate price to pay  |
| 10 | for stock.   |
| 11 | Q. And my understanding is, you use 3 to                   |
| 12 | 4 percent as your risk premium, right?                     |
| 13 | A. It's straight from the textbook, yes.                   |
| 14 | Q. And so it doesn't have anything to do with              |
| 15 | spec anything specifically related to Ameren Missouri,     |
| 16 | it's just out of the textbook, right?                      |
| 17 | A. General corporate experience in the U.S.                |
| 18 | markets.   |
| 19 | Q. Okay. And if you use 3 percent, my                      |
| 20 | understanding is your results for your rule of thumb are   |
| 21 | 7.92 percent to 8.52 percent; is that correct?             |
| 22 | A. Yes. And I want to make sure                            |
| 23 | Q. That's all I'm asking is, is that correct?              |
| 24 | A. That's correct.   |
| 25 | Q. Okay. And at 4 percent, your results are                |

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Page 2007 1 8.92 to 9.52; is that correct? 2 MR. THOMPSON: What was that figure? 3 BY MR. BYRNE: 8.92 to 9.52, which is I quess 100 basis 4 Q. 5 points higher; is that correct? 6 I'm looking at my corrections in my Α. 7 surrebuttal testimony, just to ensure --8 Q. Sure. 9 Α. -- that I have -- because I did make a mistake in my Staff Report. 10 11 If it helps, that range that I cited is Q. 12 just 100 basis points higher, which you would think would 13 result from going from 3 to 4 percent. 14 Α. I understand. I just want to make sure I got my correction correct. 15 16 Q. Fair enough. 17 Α. Yes, on page 27 of my surrebuttal testimony, lines 1 --18 19 So that range was right, the 4 percent Q. 20 results in a range of 8.92 to 9.52 percent for an ROE? 21 Α. Yes. Yes. That is correct. 22 Q. Okay. Now, at your deposition you cited a 23 book for support for the rule of thumb, and I think the book was called Analysis of Equity Investments Valuation, 24 25 or colon Valuation, that was published in August of 2002;

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Page 2008 1 is that correct? 2 Α. That is correct. 3 Q. And my understanding is that the rule of thumb was mentioned on a single page in that text; is that 4 5 correct? 6 Α. That is correct. 7 MR. BYRNE: Okay. Your Honor, I'd like to 8 mark an exhibit, if I could. 9 JUDGE WOODRUFF: All right. Ameren's next number would be 77. 10 (AMEREN EXHIBIT NO. 77 WAS MARKED FOR 11 12 IDENTIFICATION.) Can you identify this document, Mr. Murray? 13 Q. 14 Yes. It's a response I provided to a data Α. 15 request that you issued on September 6, 2012, and the attachment are photocopies of the title of the -- the 16 17 inside cover with the title of the book and the authors. Second page is the copyright information. Felt like that 18 19 was the safe thing to do. 20 Q. Sure. 21 Α. And then the third page is page 54, which provides the, basically the reality check on bond yield 22 plus risk premium approach. 23 24 Q. And focusing on the question in the data 25 request, it says provide the page of the textbook

Page 2009 1 discussed -- that discusses the rule of thumb which you 2 discussed at your deposition on August 29th, 2012. Please 3 provide all other sources that endorse the use of the rule of thumb. Did I correctly read the question there? 4 5 Yes, you did. Α. And so my understanding, then, is the text 6 Q. 7 that you cited, the single page of Analysis of Equity 8 Investments: Valuation is the only source that you're 9 aware of that endorse the rule of thumb; is that correct? 10 That's the only source that I could think Α. of that I'm intimately familiar with. 11 I --12 Okay. That's the answer. Q. 13 Α. I understand. 14 And my understanding is that you are not Ο. aware of any public service commissions that have adopted 15 16 the rule of thumb as a method of determining a utility's 17 cost of equity; is that correct? That's correct. 18 Α. 19 Q. And you are not aware of any other analyst 20 who supports the use of the rule of thumb to determine a 21 return on equity other than you and Ms. Atkinson, who 22 works for you; is that correct? 23 Within this Commission. I have not --Α. 24 Well, you're not aware of any? Q. Α. 25 I'm not aware of any.

Page 2010 1 0. That's all I'm asking. 2 Α. I've not done an exhaustive study. 3 Let's take a look at the page where the Q. rule of thumb is discussed, and I was -- can you tell me 4 5 where it references the rule of thumb? There's nothing that indicates specifically 6 Α. 7 the rule of thumb. That's a title that I gave to kind of 8 testing the accuracy. It's not based on, you know, what 9 can be very confusing and convoluted analysis. It's just a very simplified method for corporations to estimate 10 their cost of equity. On that page, on page 44 --11 12 Q. 54. Page 54. 13 Α. Excuse me. Page 54. I think you just start basically on the fifth line down, says having an 14 alternative to the CAPM, which is a model we used, and the 15 arbitrage pricing theory is useful. For companies with 16 17 publicly traded debt, the bond yield plus risk premium method provides a quick estimate of the cost of equity. 18 19 The estimate is bond yield, risk premium, 20 cost of equity equals the yield to maturity, which is the 21 current yield, not the embedded cost of debt that is used quite frequently in utility rate cases. So if a company 22 23 issues a bond at a yield to maturity of 4 percent, that is the appropriate baseline, and then you add the risk 24 25 premium.

Page 2011 1 0. Okay. And it's got 3 to 4 percent in here 2 as the risk premium. 3 Α. You go down to the bottle, it says, in U.S. markets the typical risk premium added is 3 to 4 percent 4 5 based on experience. 6 And let me ask you this: This book's ten Q. 7 years old; isn't that correct? I think it's still used in the CFA 8 Α. 9 curriculum, it is ten years old, that is correct. 10 And is this discussion -- my understanding Q. 11 is this discussion is not discussing regulated utilities 12 at all; is that correct? It's -- I mean, it could include regulated 13 Α. utilities. It's the broader U.S. capital markets, the 14 corporate -- I think it says it right in there, doesn't 15 it? In U.S. markets, the typical risk premium. 16 17 ο. So this is looking at all companies in U.S. markets as opposed to being focused on public utility 18 19 returns; is that fair to say? 20 Probably riskier companies and S&P 500, Α. 21 I'll just take that as a proxy. 22 0. Isn't it true in your testimony you have 23 referenced some valuation analyses done by financial 24 analysts for purposes other than the establishment of 25 utility rates; isn't that true?

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| 1  | A. I have quite frequently, yes.                           |
| 2  | Q. And, for example, didn't you reference a                |
| 3  | good will impairment analysis done on Ameren Corporation's |
| 4  | assets by Duff & Phelps, which I think is on page 45 of    |
| 5  | the Staff Report? And I know the numbers are highly        |
| 6  | confidential, but the existence of it is not.              |
| 7  | A. Yes, I see that.  |
| 8  | Q. Okay. And again, isn't that a financial                 |
| 9  | analysis done for purposes other than the establishment of |
| 10 | utility rates?   |
| 11 | A. It is.  |
| 12 | Q. Are there any other examples where you                  |
| 13 | referred to financial analyses done for purposes other     |
| 14 | than the establishment of utility rates to support your    |
| 15 | return on equity recommendation in this case?              |
| 16 | A. I believe there is. It may take if you                  |
| 17 | want me to go through it, I will.                          |
| 18 | Q. That's okay. But there are other                        |
| 19 | A. Yes.  |
| 20 | Q examples, instances where you used                       |
| 21 | financial analyses done for purposes other than            |
| 22 | establishment of utility rates to support your             |
| 23 | recommendation in this case; is that correct?              |
| 24 | A. Yes.  |
| 25 | Q. And do you still have the Commission's                  |

Page 2013 1 order from our last rate case? 2 Α. I do. 3 ο. On page 69, could you read paragraph 19 and then the first two sentences of paragraph 20? 4 5 Α. Paragraph 19. In an effort to support his low recommended return on equity, Murray points to various 6 7 valuation analyses regarding Ameren Missouri done by financial analysts for purposes other than the 8 9 establishment of rates. Murray reports that, in general, experts in the field of asset valuation consistently apply 10 a much lower cost of equity to cash flows generated from 11 12 regulated utility operations as compared to the estimates 13 of cost of equity from rate of return witnesses in the utility ratemaking process. Murray's clear implication is 14 15 that, aside from him, all other rate of return witnesses are getting it wrong. 16 17 Paragraph 20. Murray's reliance on valuation analyses to support the reasonableness of his 18 19 return on equity recommendation is misplaced. Murray acknowledged that he has no experience in asset valuation. 20 21 MR. BYRNE: Okay. Thank you, Mr. Murray. I don't have any further questions. 22 23 THE WITNESS: Thank you. 2.4 JUDGE WOODRUFF: All right. Did you wish to offer 77? 25

Page 2014 MR. BYRNE: Yes, I would offer Exhibit 77. 1 2 JUDGE WOODRUFF: 77 has been offered. Any 3 objections to its receipt? 4 (No response.) 5 JUDGE WOODRUFF: Hearing none, it will be 6 received. 7 (AMEREN EXHIBIT NO. 77 WAS RECEIVED INTO EVIDENCE.) 8 9 JUDGE WOODRUFF: We'll come up to questions from the Bench. Commissioner Jarrett? 10 COMMISSIONER JARRETT: Good morning, 11 12 Mr. Murray. 13 THE WITNESS: Good morning, Commissioner. 14 COMMISSIONER JARRETT: I don't have any questions. Thank you. 15 16 THE WITNESS: Thank you very much. 17 JUDGE WOODRUFF: Commissioner Kenney in St. Louis. 18 19 QUESTIONS BY COMMISSIONER KENNEY: 20 Good morning, Mr. Murray. Q. 21 Α. Good morning, Commissioner Kenney. 22 Q. I just have a few questions, and they're 23 similar to the questions that I asked last Friday. Do you 24 consider Mr. Hevert and Mr. Gorman to be experts in their 25 field?

Page 2015 I do. Α. 1 2 Do you have an opinion about whether a Q. 3 higher ROE would guarantee that Ameren would be able to attract capital at a lower price as a general proposition? 4 5 And let me just clarify. You're indicating Α. Ameren the holding company? 6 7 Well, if we -- yeah. Whoever would be Q. 8 issuing bonds or issuing equity, if we give them a higher 9 ROE, does that allow them or guarantee them that they will be able to attract capital at more favorable rates? 10 11 Α. I believe the cost of equity is a 12 self-adjusting mechanism. If you authorize a higher ROE, 13 it's possible that investors will consider that to imply that you're going to be more favorable to utility 14 15 companies, that you may mitigate the risk profile of utility companies. 16 17 The mere fact of authorizing a higher ROE, a higher dollar rate increase does not change necessarily 18 the risk profile of the company. I mean, as you 19 discussed, I believe, earlier in the hearing, there are 20 21 various rate mechanisms that are intended to try to stabilize revenues, stabilize cash flows and what have 22 23 you. 24 So even if let's say the revenue 25 requirement is what -- or the ROE is 8 percent as

Page 2016 supported by Public Counsel as opposed to 10.5 percent as 1 2 supported by the company, ultimately it's the volatility 3 of those cash flows that are going to determine what the ongoing required return is, because my point is the stock 4 5 price would self adjust. 6 If you authorize a 10 and a half and 7 investors expected something less, the stock price for Ameren will increase and from that point forward, because 8 9 of stock prices increases due to unexpected -- due to an unexpected the rate increase that's not built into the 10 11 price they're willing to pay right now, from that point 12 forward they will realize a normalized return because the 13 investors that already own the stock actually realize that unanticipated higher ROE. And vice versa, the same 14 applies to a lower allowed ROE. 15 16 So I don't think that in and of itself 17 causes that. It is a headline number. I mean, that's talked about quite frequently. And then I think you also 18 need to be aware, then, that Ameren is not -- you know, 19 20 has other operations, and its merchant generation 21 operations have been a real concern on behalf of investors. I know that the merchant generation operations 22 carry about \$800 million of debt, and they have basically 23 24 zero to negative equity value assigned to those merchant generation operations. 25

Page 2017 So there are other factors that can be a 1 2 drag on Ameren's stock price that you're not going to be 3 able to resolve. I quess that's up to Ameren to resolve, and the markets more importantly. I think they have 4 issues with the market prices in the wholesale power 5 6 markets. 7 So Ameren Missouri's ROE in and of itself Q. 8 isn't going to -- or by itself will not change Ameren's 9 risk profile and it's one factor among many, in other 10 words? 11 Α. It's one factor among many. I think that 12 investors, even though the ROE itself would not 13 necessarily impact the volatility of cash flows, investors may take your higher or lower allowed ROE as a sign that 14 15 you're going to either be tougher or more supportive for utilities in trying to incentivize their investments. 16 17 ο. Is it possible -- let me back up. What's 18 the low range of your recommendation again? 19 It's 8 percent. Α. 20 And what's the high range of Ameren's? Q. 21 Α. It's 11 percent. 22 Q. So 300 basis points. Is there any way to 23 quantify what impact a 100 or a 200 or a 300 basis points 24 change in the ROE would do to the risk profile of the 25 company, if anything?

|    | Page 2018  |
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| 1  | A. I think there's a way to approximate the                |
| 2  | impact on credit metrics for purposes of evaluating credit |
| 3  | quality. I think earlier last Friday when I heard the      |
| 4  | other witnesses discussing this, that those benchmarks     |
| 5  | cannot be breached even down to a 5 percent return on      |
| 6  | equity allowed ROE, may not be breached at a very high     |
| 7  | allowed ROE.   |
| 8  | So I think that, you know, as of right now,                |
| 9  | Ameren Missouri is earning an ROE after I mean, this is    |
| 10 | based on financial reporting, GAAP reporting, reports to   |
| 11 | the investors. I know there's been some discussion about   |
| 12 | other internal reports. But their earned ROE is in the     |
| 13 | 7 percent range, and that seems to support cash flow       |
| 14 | metrics in the in the benchmark for a triple B plus        |
| 15 | rating from S&P, and right now they're at triple B minus,  |
| 16 | but that has to do with their affiliation with Ameren and  |
| 17 | their other operations.                                    |
| 18 | Q. Finally, I want to ask you about                        |
| 19 | constructing a proxy group. Do you have an opinion         |
| 20 | regarding constructing a proxy group that would be         |
| 21 | comprised of similar non-utilities of similar risk and the |
| 22 | value of creating such a proxy group?                      |
| 23 | A. It actually has been done, I think, in the              |
| 24 | past Missouri American cases. I don't remember if          |
| 25 | Ms. Pauline Ahern has done so recently. But I do recall    |

|    | Page 2019  |
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| 1  | witnesses from her consulting firm, AUS Consultants,       |
| 2  | developing a non-regulated proxy group to evaluate the     |
| 3  | earned returns, not the cost of equity but the earned      |
| 4  | returns of those of that proxy group of companies.         |
| 5  | It is you know, it is difficult to                         |
| 6  | determine whether or not the risk profile is really ideal  |
| 7  | for a utility, a regulated utility because obviously there |
| 8  | are significant differences when you have the ability to   |
| 9  | raise prices during an economic environment that's         |
| 10 | depressed or you have the ability to propose other         |
| 11 | ratemaking mechanisms. I mean, that's not something        |
| 12 | that's going to be in the competitive markets.             |
| 13 | But I understand the appeal because what                   |
| 14 | you're trying to do is emulate what the what would         |
| 15 | happen if a utility was subject to competition. And so I   |
| 16 | think one of the big debates that has occurred over the    |
| 17 | years is whether or not earned returns have been higher    |
| 18 | than the cost of equity, not only for utilities but for    |
| 19 | the markets as a whole, and I think that that is something |
| 20 | that has been a debate even nationally as to are the       |
| 21 | valuation levels of the broader markets too high, you      |
| 22 | know, do are the already expected returns of investors     |
| 23 | higher than, you know, than their excuse me. Do they       |
| 24 | expect returns to be higher than what the required return  |
| 25 | is? I think that's what a lot of my testimony gets into.   |

Page 2020 But back to the issue of using a comparable 1 2 group of unregulated entities, I think you do -- there can 3 be value to that. There's going to be a lot of dispute, a lot of disagreement as to -- as to how to go about doing 4 5 that, because I think I heard some of the other witnesses talk about some of the ValueLine safety rank, timeliness 6 7 rank, earnings predictability, betas. You're subjecting 8 -- there's going to be a lot more judgment. There's going 9 to be more judgment than I think on selecting the 10 appropriate proxy group. At one time banks used to be considered to 11 12 be a pretty close proxy to a regulated utility company because it's a -- it's a yield investment. 13 They pay relatively decent dividends and are not a high growth 14 15 investment. But the paradigm changed there after 2008 and 2009. So I don't know that that would be appropriate. 16 17 So it -- it is something that I think especially from a, I'd say a lawyer's perspective, Hope 18 19 and Bluefield talk about comparable returns, and they 20 don't -- they couldn't even talk about the cost of equity 21 at the time because these models weren't around at the time. So I understand the appeal of that, but it would --22 it would be difficult to have some, as with most issues in 23 24 cost of capital, to have -- try to get to some at least mutually agreeable proxy group. 25

|    | Page 2021  |
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| 1  | Q. So there's something interesting that you               |
| 2  | said that the other two witnesses didn't say. You could    |
| 3  | or that someone had constructed such a proxy group for the |
| 4  | purposes of assessing earned returns. So as opposed to     |
| 5  | constructing such a proxy group to approximate an          |
| 6  | authorized ROE, you might construct a proxy group to       |
| 7  | assess what the actual earned returns of similar           |
| 8  | enterprises of similar risk have been?                     |
| 9  | A. Yes. In my experience, the comparable                   |
| 10 | earnings approach that has been introduced at times in the |
| 11 | past, it's not they're not doing a cost of capital         |
| 12 | analysis. They're actually looking at what the book ROEs   |
| 13 | are for that proxy group over you would need to use a      |
| 14 | fairly lengthy period of time because an ROE of, say,      |
| 15 | 6 percent or 20 percent, you know, one year to the next is |
| 16 | not indicative of the cost of equity.                      |
| 17 | So I think but I do think that, you                        |
| 18 | know, there is there is the philosophy that maybe you      |
| 19 | should test whether or not the earned returns, you know,   |
| 20 | should be higher than the cost of equity.                  |
| 21 | Q. That's very helpful.                                    |
| 22 | COMMISSIONER KENNEY: I don't have any                      |
| 23 | other questions. Thanks for your time.                     |
| 24 | THE WITNESS: Thank you.                                    |
| 25 | JUDGE WOODRUFF: Commissioner Stoll?                        |

## TRANSCRIPT OF PROCEEDINGS 10/11/2012

Page 2022 COMMISSIONER STOLL: I have no questions, 1 2 your Honor. Thank you for your testimony. 3 THE WITNESS: Thank you, sir. JUDGE WOODRUFF: All right. Recross based 4 5 on questions from the Bench, beginning with Sierra Club? 6 MR. ROBERTSON: No questions. 7 JUDGE WOODRUFF: AARP? 8 MR. COFFMAN: No questions. JUDGE WOODRUFF: MIEC? 9 10 MS. ILES: No questions. JUDGE WOODRUFF: Public Counsel? 11 12 RECROSS-EXAMINATION BY MS. BAKER: 13 0. I just wanted to verify one thing that 14 Commissioner Kenney asked you about. Whenever we were 15 talking about the impact of the low range of your 16 recommended, you made a statement that the earned ROE for 17 Ameren was about 7 percent at this time, and that was supportive for a triple B? 18 19 Yes. They've been earning 7 percent and Α. 20 they've not been downgraded by the rating agencies. 21 And they have a current triple B minus, and Q. 22 that's due to a non-regulated affiliate? 23 Yes. The S&P assigns weight to --Α. actually, I'll call it a top-down approach, I guess is the 24 best way to characterize it, where they look at Ameren and 25

|    | Page 2023  |
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| 1  | then they look at Ameren's consolidated financials and     |
| 2  | business risk. And so they start with the portfolio, the   |
| 3  | corporate profile of Ameren and then and then come down    |
| 4  | to Ameren Missouri and assess its business risk.           |
| 5  | Actually for purposes of evaluating the                    |
| 6  | financial metrics when they assign a credit rating, they   |
| 7  | look at Ameren's financial metrics, not Ameren Missouri's, |
| 8  | where actually Moody's and Moody's have more experience    |
| 9  | with it than Fitch because they're mover prominent, but    |
| 10 | Moody's is more of a bottom up approach where they do give |
| 11 | weight to Ameren Missouri's subsidiary specific            |
| 12 | financials.  |
| 13 | MS. BAKER: Thank you. No further                           |
| 14 | questions.   |
| 15 | JUDGE WOODRUFF: For Ameren?                                |
| 16 | MR. BYRNE: Just a couple.                                  |
| 17 | RECROSS-EXAMINATION BY MR. BYRNE:                          |
| 18 | Q. Mr. Murray, Commissioner Kenney was asking              |
| 19 | you a question about the impact of the ROE decision on     |
| 20 | this case on the company's cost of capital, whether it     |
| 21 | would impact it, and I think I think you said, well,       |
| 22 | whatever ROE is authorized by the Commission, the stock    |
| 23 | price will just adjust to that. Do you remember that       |
| 24 | A. Yes.  |
| 25 | Q line of questions and answers?                           |

Page 2024 1 And so I quess my question is: If the 2 Commission authorized a 2 percent return on equity, you 3 know, something just off the charts, or 1 percent, is it 4 your testimony that that would be okay because the stock 5 would just adjust to it and it really wouldn't impact the cost of capital over the long run? 6 7 Α. No, that wasn't my testimony. 8 Q. Isn't it true, Mr. Murray, that if the 9 Commission adopted your recommendation, there will be 10 downward pressure on Ameren's stock price? And I can --11 do you still have your deposition? 12 Α. There will be downward pressure, but I will assure you from my testimony that --13 14 0. I mean, that's all -- that was the answer to my question. 15 16 Α. I know. Okay. Thank you. 17 ο. Isn't it true that holding -- all else being equal, the adoption of your ROE would put downward 18 pressure on Ameren Missouri's credit metrics? 19 I don't know that it will because of the 20 Α. 21 earned returns being at 7 percent, which is below the allowed 9. 22 23 Do you still have your deposition there? Q. 24 Α. Sure. Look at page 53, line 20, and I -- well, 25 Q.

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| 1  | really I'm starting on line 6 and going to the bottom of   |
| 2  | the page. You're talking about if the ROE that you         |
| 3  | recommend is adopted, and then the question on line 20     |
| 4  | says: Sure. I understand. Holding all else equal, but      |
| 5  | then that would that lower cash flow then put downward     |
| 6  | pressure on the credit metrics? And you say answer, there  |
| 7  | would yes. Yes, it would put downward pressure on the      |
| 8  | credit metrics.  |
| 9  | A. I think the key was hold all else equal                 |
| 10 | because  |
| 11 | Q. Sure.   |
| 12 | A there are ratemaking mechanisms.                         |
| 13 | Q. That wasn't my question.                                |
| 14 | Okay. Commissioner in response to one                      |
| 15 | of Commissioner Kenney's questions, you said that the      |
| 16 | return on equity could go as low as 5 percent and it still |
| 17 | would not breach the credit wouldn't change the credit     |
| 18 | rating, I guess, of Ameren Missouri; is that correct?      |
| 19 | A. I said it wouldn't there was as far                     |
| 20 | as the benchmarks. I did not say that it wouldn't          |
| 21 | necessarily change the credit rating. I'm saying it would  |
| 22 | not breach a benchmark, because there's a wide latitude on |
| 23 | those benchmarks.  |
| 24 | Q. And you also said that Ameren Missouri has              |
| 25 | actual earned returns on a financial reporting basis in    |

Page 2026 1 the 7 percent range; is that correct? 2 Α. And it's according to GAAP, financial 3 reporting, not the regulatory reporting, yes, that is correct. I just want to make sure that's clear. 4 5 And that 7 percent GAAP earned return is Q. based on the 10.2 percent authorized return that the 6 7 company currently has; is that correct? 8 Α. Yes. 9 And I mean, would it be fair to say that 0. the Commission lowers the authorized return that will have 10 11 an impact on the earned returns for the company? 12 Α. After hearing some of the discussion that occurred earlier in this hearing, I do not know that that 13 14 would be the case. 15 So you don't know if the Commission lowers Q. 16 our authorized return, whether it will impact our actual 17 earned returns; is that correct? 18 Whether or not you can achieve that allowed Α. return, I think that's a subject of debate. 19 20 Well, that wasn't my question. My question Q. 21 was, if the Commission lowers our authorized return, 22 you're not sure whether it will have an impact on our 23 earned returns; is that correct? I'm not sure. 2.4 Α. 25 Okay. Fair enough. Commissioner Kenney Q.

Page 2027 1 was asking you about the possibility of creating a proxy 2 group out of non-regulated enterprises. Do you recall 3 that --Α. Yes. 4 5 Q. -- question? 6 And I guess you listed some -- you said 7 that would be challenging; is that fair to say? 8 Α. Yes. 9 ο. And you were listing some of the 10 differences between regulated utilities and unregulated 11 companies. Do you recall that? 12 Α. I do. 13 Q. Isn't another significant difference 14 between a regulated utility and a non-regulated company is 15 that the regulated utility has an obligation to serve all of the customers in their service territory? 16 17 Α. It is. 18 And so if the cost of capital for an Q. unregulated enterprise goes up, isn't it true that the 19 20 unregulated enterprise could just stop investing or stop 21 providing service; isn't that true? If it chooses to, it could. 22 Α. 23 Q. But a regulated utility really doesn't have 24 that option, do they? 25 I'm not a lawyer, but I don't think you Α.

Page 2028 have that option. 1 2 MR. BYRNE: Okay. Thank you, Mr. Murray. 3 That's all I have. JUDGE WOODRUFF: Redirect. 4 5 REDIRECT EXAMINATION BY MR. THOMPSON: 6 Mr. Murray, do you recall Mr. Byrne asked Q. 7 you whether or not you conduct your analyses the same way 8 as other experts? 9 Α. Yes. 10 And then you disagreed and he cut off your Q. 11 explanation. What is your explanation? 12 Α. I use the same methodologies as other experts, specifically a DCF analyses, whether it's 13 constant growth, multistage. Multistage has been used 14 15 much more frequently in electric utility rate cases before this Commission in the last three, four years. I think a 16 17 lot of that has to do with the recognition that they were -- they are in a building cycle for environmental 18 issues, aging infrastructure, what have you. 19 20 But the -- the multistage analysis and the 21 CAPM and the constant growth DCF and the bond yield risk premium, those are all methodologies that are used by rate 22 of return witnesses and also capital market specialists in 23 estimating the cost of equity, also in determining what's 24 a fair price to pay for a stock and what have you. 25

Page 2029 1 The main difference that we have, that I 2 have even, and this is no secret obviously even with the 3 consumer witnesses that have sponsored testimony, is I have -- I have found no practical, empirical, rational 4 5 evidence that investors use GDP growth rates as a perpetual growth rate to estimate the value of an electric 6 7 utility stock. 8 If they have -- if they were using such a 9 high growth rate, the stock prices at a cost of equity 10 about 8 percent, which is what investment analysts use to determine the price they're willing to pay for electric 11 12 utility stock, their stock prices would be undervalued by 20 to \$30. I mean, they'd be trading at 60 -- they could 13 justify a, I think I calculated for Ameren \$55. It's 14 trading amount \$30. 15 16 So rational -- rational inputs provide 17 rational stock price estimates in this current capital market environment, and the -- the evidence, in my 18 opinion, is overwhelming. 19 20 I actually even pulled out Missouri 21 regulated electric utilities in one of my schedules from 1968 to 1999, Empire, Union Electric, Kansas City Power & 22 Light, St. Joe Light & Power, and the achieved growth of 23 24 those utilities over that period of time, which was a period of time where we had a lot of load growth, and I 25

Page 2030 think in the plant in service accounting issue that was 1 2 discussed earlier, there has been discussion about, you 3 know, we're not going to have that growth pattern anymore. So in my opinion, if that was the growth 4 5 period for electric utilities, use of that average compound growth rate over that long of a period of time 6 7 during the growth stage because of the higher demand in utility -- in electric utility usage should be considered 8 to be a high end estimate, and that's within my 3 to 9 4 percent growth rate. 10 So the fundamental difference I have with 11 12 the cost of equity witnesses that support this GDP estimate of anywhere from 5 to 5.75 percent is -- it's 13 just based on pure theory. I have looked at practical 14 15 investment analysis from the folks on Wall Street that advise investors that do not use growth rates anywhere 16 17 close to that. They're at least half of that. They're closer to the rate of inflation. And I've actually looked 18 at internal analysis at Ameren that indicates they do the 19 20 same thing. It's a matter of double speak, in my opinion. 21 So the reason why we differ is because, quite frankly, I believe I'm reporting on the cost of 22 equity. Now, whether or not the Commission wants to allow 23 24 an ROE that's higher than the cost of equity, I think that that's obviously been going on throughout the country, and 25

Page 2031 I think -- you know, I think that that's where we should 1 be focusing our attention as to what is reasonable over 2 3 the cost of equity. Obviously FERC has incentive allowed ROEs. 4 5 I don't think anybody would say that the cost of equity to a FERC regulated utility is 12.58 percent or whatever the 6 7 most recent allowed ROE is there. I don't know that there's any problem legally if FERC can do it. I'm not a 8 9 lawyer, but if FERC can offer incentivized ROEs, then I'm not sure why this Commission can't do it. 10 11 My point is, is let's get down to the 12 common sense of this. Instead of saying that the 13 5 percent growth rates can be continued in perpetuity when they never have happened and the stock prices that --14 15 that -- when investment advice is given to investors and institutional investors are not using those growth rates 16 17 is just -- it's not supported. It's just not supported. 18 I have asked for even one example of an investor that uses a perpetual growth rate of GDF to 19 estimate the fair price to pay for electric utility stock. 20 21 I've gone as far as saying I've never seen that in my testimony, and I have yet to have a rate of return witness 22 provide an example of where it is done. 23 24 And so I think that that information, and believe you me, I've gone through a tremendous amount of 25

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| 1  | information to try to make sure I'm not misleading this    |
| 2  | Commission about the cost of equity, and I do not believe  |
| 3  | I'm misleading this Commission about the cost of equity.   |
| 4  | It's quite logical in the current low                      |
| 5  | interest rate environment of 3 to 4 percent debt yields    |
| 6  | that a utility stock, which is a close alternative to a    |
| 7  | bond investment, that's been the case for 30 years, that   |
| 8  | the risk premium over a bond investment is not going to be |
| 9  | that high.   |
| 10 | And so that's the reason why, you know,                    |
| 11 | even though we use the same models, multistage DCF and     |
| 12 | CAPM and the risk premium, it is my use of what I consider |
| 13 | to be rational estimates supported by empirical historical |
| 14 | evidence that causes reliable cost of equity estimates.    |
| 15 | Q. Do you have your deposition up there?                   |
| 16 | A. Yes.  |
| 17 | Q. Mr. Byrne asked you about a question and                |
| 18 | answer on page 85, around line 17 to 21, whether or not    |
| 19 | you consider the constant growth DCF an accurate and       |
| 20 | reliable measure of the cost of equity, and you responded  |
| 21 | no but wanted to explain that. He cut you off. What is     |
| 22 | your explanation?  |
| 23 | A. My explanation is the DCF, the constant                 |
| 24 | growth DCF needs to be analyzed in context of each and     |
| 25 | every case, and specifically in each and every segment of  |

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| 1  | the utility industry, electric, gas and water. I know      |
| 2  | that Mr. Barnes used a constant growth DCF for the water   |
| 3  | industry in his last case. I respect his position, but I   |
| 4  | can't remember what the growth rate was. It might have     |
| 5  | been 6 to 7 percent constant growth in perpetuity. I       |
| 6  | think you really have to think about whether not that      |
| 7  | makes sense. 6 to 7 percent in perpetuity is over even     |
| 8  | the GDP growth rate.                                       |
| 9  | So, I mean, while water the water                          |
| 10 | industry does have the need for additional capital         |
| 11 | investment due to aging infrastructure, which may be some  |
| 12 | of the same issues that Ameren Missouri is facing at this  |
| 13 | point in time, not necessarily due to growth of load       |
| 14 | growth, but I think you have to evaluate whether or not    |
| 15 | the industry is going through various stages in its        |
| 16 | capital investment cycle, maybe even its load growth cycle |
| 17 | and what have you in determining whether or not the        |
| 18 | constant growth model is appropriate.                      |
| 19 | In my analysis in the previous Missouri                    |
| 20 | American case I decided that 7, 8 percent growth is not    |
| 21 | reflective of what could happen in perpetuity, and that's  |
| 22 | why I say that, using the constant growth DCF, you know,   |
| 23 | by using our earnings per share forecast, which as I       |
| 24 | pointed out in my testimony, I've never seen an investment |
| 25 | analyst that provides these five-year earnings per share   |

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| 1  | forecasts. I've never seen them use that as a perpetual  |
| 2  | growth rate in their own analysis when they recommend to   |
| 3  | potential investors what they think is a good price to pay   |
| 4  | for a stock. I think that that is information that should  |
| 5  | be convincing enough.  |
| 6  | But my points is, is that these growth   |
| 7  | the use of the constant growth and earnings per share  |
| 8  | forecast needs to be taken in you know, taken in   |
| 9  | consideration as to whether or not those earning per share   |
| 10   | forecasts really represent what the long-term potential  |
| 11   | is, which like I said, most rational investors wouldn't  |
| 12   | use much over inflation for a perpetual growth rate.   |
|  |  |
| 13   | Q. Take a look at Schedule 9-4 in the appendix   |
| 13<br>14   | Q. Take a look at Schedule 9-4 in the appendix to the Staff Report. Are you there?   |
|  |  |
| 14   | to the Staff Report. Are you there?  |
| 14<br>15   | to the Staff Report. Are you there?<br>A. Yes.   |
| 14<br>15<br>16                                     | to the Staff Report. Are you there?<br>A. Yes.<br>Q. And you'll recall Mr. Byrne asked you some  |
| 14<br>15<br>16<br>17                               | <pre>to the Staff Report. Are you there?     A. Yes.     Q. And you'll recall Mr. Byrne asked you some questions about the figures at the bottom of column 4 and</pre>   |
| 14<br>15<br>16<br>17<br>18                         | <pre>to the Staff Report. Are you there?<br/>A. Yes.<br/>Q. And you'll recall Mr. Byrne asked you some<br/>questions about the figures at the bottom of column 4 and<br/>column 5. Do you recall those questions?</pre>  |
| 14<br>15<br>16<br>17<br>18<br>19                   | <pre>to the Staff Report. Are you there?     A. Yes.     Q. And you'll recall Mr. Byrne asked you some questions about the figures at the bottom of column 4 and column 5. Do you recall those questions?     A. Yes, I do.</pre>  |
| 14<br>15<br>16<br>17<br>18<br>19<br>20             | <pre>to the Staff Report. Are you there?     A. Yes.     Q. And you'll recall Mr. Byrne asked you some questions about the figures at the bottom of column 4 and column 5. Do you recall those questions?     A. Yes, I do.     Q. Do you consider those figures to be</pre>   |
| 14<br>15<br>16<br>17<br>18<br>19<br>20<br>21       | <pre>to the Staff Report. Are you there?     A. Yes.     Q. And you'll recall Mr. Byrne asked you some questions about the figures at the bottom of column 4 and column 5. Do you recall those questions?     A. Yes, I do.     Q. Do you consider those figures to be appropriate growth rates to use in your analysis?</pre>   |
| 14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>22 | <ul> <li>to the Staff Report. Are you there?</li> <li>A. Yes.</li> <li>Q. And you'll recall Mr. Byrne asked you some questions about the figures at the bottom of column 4 and column 5. Do you recall those questions?</li> <li>A. Yes, I do.</li> <li>Q. Do you consider those figures to be appropriate growth rates to use in your analysis?</li> <li>A. No. I just provided this constant growth</li> </ul> |

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Page 2035 percent perpetual growth rate is at all rational, and it's 1 2 not supported. And that's why I relied primarily on my 3 multistage DCF analysis which uses much more reasonable growth rates for perpetuity. 4 5 Q. Okay. Are you aware of any evidence showing that Ameren Missouri's value is likely to grow at 6 7 the rate of 5.2 percent to 5.6 percent annually in 8 perpetuity? No. And actually, I mean, I've 9 Α. discovered -- it's in my testimony as well -- that Ameren 10 11 itself does not believe -- and this may be highly 12 confidential. I don't know if I can say the specific number, but they don't expect that same growth. 13 Their growth would be lower. 14 15 Okay. Speaking of Ameren estimates of Q. 16 growth, are you familiar with the integrated resource 17 planning process here at the Commission? 18 Α. Generally. 19 Q. Are you aware that Ameren and other 20 electric utilities periodically file reports with the 21 Commission in which they estimate their expected growth? 22 Α. Yes. I understand that's part of the 23 process. 24 Q. Now, those numbers are also highly 25 confidential. Are you familiar with the specific numbers

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Page 2036
    that Ameren Missouri has most recently filed with the
 1
 2
    Commission?
 3
                    MR. BYRNE: I'm going to object on the
     grounds it's outside the scope of any cross-examination
 4
 5
    from the Commissioners or from the parties.
                    MR. THOMPSON: Been a lot of talk about
 6
 7
    growth.
                   JUDGE WOODRUFF: I'll overrule the
 8
     objection.
 9
10
    BY MR. THOMPSON:
11
                   Are you familiar with the specific number
             Q.
12
    that Ameren Missouri has most recently filed with the
13
    Commission?
14
             Α.
                   I'm sorry. I don't know the specific
15
    number.
16
                    MR. THOMPSON: Could we go in-camera for
17
    one question?
18
                    JUDGE WOODRUFF: We can.
19
                    (REPORTER'S NOTE: At this point, an
    in-camera session was held, which is contained in
20
21
    Volume 31, page 2037 of the transcript.)
22
23
2.4
25
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|  | Page 2038   |
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| 1  | JUDGE WOODRUFF: We're back in the regular   |
| 2  | session.  |
| 3  | BY MR. THOMPSON:  |
| 4  | Q. You responded to a question let's take a   |
| 5  | look at the Report and Order that you were handed from  |
| 6  | Case ER-2011-0028, page 68. And at the bottom of  |
| 7  | paragraph 16 it states that you lacked any rational basis   |
| 8  | for your selection of utilities to include in a study. Do   |
| 9  | you see that?   |
| 10   | A. Yes.   |
| 11   | Q. Tell me, Mr. Murray, did you have a  |
| 12   | rational basis in the selection of the utilities for your   |
|  |   |
| 13   | study?  |
| 13<br>14   | A. Yes.   |
|  | -   |
| 14   | A. Yes.   |
| 14<br>15   | A. Yes.<br>Q. What was that basis?  |
| 14<br>15<br>16                                     | <ul> <li>A. Yes.</li> <li>Q. What was that basis?</li> <li>A. The obviously I believe it's generally</li> </ul>   |
| 14<br>15<br>16<br>17                               | <ul> <li>A. Yes.</li> <li>Q. What was that basis?</li> <li>A. The obviously I believe it's generally</li> <li>recognized that the construction cycle for utilities in</li> </ul>  |
| 14<br>15<br>16<br>17<br>18                         | <ul> <li>A. Yes.</li> <li>Q. What was that basis?</li> <li>A. The obviously I believe it's generally</li> <li>recognized that the construction cycle for utilities in</li> <li>this current environment started approximately around</li> </ul>   |
| 14<br>15<br>16<br>17<br>18<br>19                   | <ul> <li>A. Yes.</li> <li>Q. What was that basis?</li> <li>A. The obviously I believe it's generally recognized that the construction cycle for utilities in this current environment started approximately around 2005, and I know that the current construction cycle is</li> </ul>   |
| 14<br>15<br>16<br>17<br>18<br>19<br>20             | <ul> <li>A. Yes.</li> <li>Q. What was that basis?</li> <li>A. The obviously I believe it's generally recognized that the construction cycle for utilities in this current environment started approximately around 2005, and I know that the current construction cycle is driven less by load growth and more by environmental</li> </ul>  |
| 14<br>15<br>16<br>17<br>18<br>19<br>20<br>21       | <ul> <li>A. Yes.</li> <li>Q. What was that basis?</li> <li>A. The obviously I believe it's generally recognized that the construction cycle for utilities in this current environment started approximately around 2005, and I know that the current construction cycle is driven less by load growth and more by environmental issues and aging infrastructure and things of that nature,</li> </ul>                                   |
| 14<br>15<br>16<br>17<br>18<br>19<br>20<br>21<br>21 | <ul> <li>A. Yes.</li> <li>Q. What was that basis?</li> <li>A. The obviously I believe it's generally recognized that the construction cycle for utilities in this current environment started approximately around 2005, and I know that the current construction cycle is driven less by load growth and more by environmental issues and aging infrastructure and things of that nature, energy efficiency, what have you.</li> </ul> |

|    | Page 2039  |
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| 1  | driven by expected demand growth, which one would think    |
| 2  | intuitively that that's obviously going to allow for a     |
| 3  | greater earnings growth because you are adding customers   |
| 4  | due to an expansion of the economy, expansion of           |
| 5  | commercial, industrial and residential customers, that     |
| 6  | and the usage by those customers, that if you looked at    |
| 7  | that period of time, which it's generally understood that  |
| 8  | the last construction cycle, major construction cycle      |
| 9  | started in the early '70s and went into the '80s and then  |
| 10 | there was very little construction for the electric        |
| 11 | utility industry from the 1990s up until 2005. That, you   |
| 12 | know, using that period in my opinion would provide a high |
| 13 | estimate of potential growth for regulated electric        |
| 14 | utilities going forward considering that the construction  |
| 15 | is being driven by something other than load growth.       |
| 16 | I mean, as it was pointed out earlier in                   |
| 17 | the plant in service accounting issue, this the only       |
| 18 | way that this additional construction can be paid for is   |
| 19 | by increasing rates on current customers because you don't |
| 20 | have that growth. So that would put an upper that          |
| 21 | would put a constraint on how high that growth could be.   |
| 22 | So the idea was that this is going to                      |
| 23 | actually be even though this is labeled as a               |
| 24 | unreasonably low growth rate, the idea is this would be    |
| 25 | actually an upward limit on potential growth going forward |

|    | Page 2040  |
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| 1  | for the electric utility industry because, you know, we    |
| 2  | may have a different situation to what could possibly      |
| 3  | drive growth, because at this point the only thing I know  |
| 4  | of that can drive growth for utilities is to increase rate |
| 5  | base, and then, you know, the only way to increase         |
| 6  | earnings is to increase the rates on existing customers.   |
| 7  | And if the customer base is staying stagnant, there's only |
| 8  | so far you can go with that, at least in my opinion,       |
| 9  | before you're going to get a lot pushback.                 |
| 10 | So the point being is that I consider that                 |
| 11 | to be a very conservative time period to look at to see    |
| 12 | actually what would probably be an upper limit of          |
| 13 | potential growth going forward. At that time we had very   |
| 14 | robust economic growth, a very healthy stock market.       |
| 15 | We're in a different time period. I mean, we are in a low  |
| 16 | interest rate period because we have low growth because    |
| 17 | there's concerns about whether or not we're going to       |
| 18 | recover any time soon. I mean, 2015 I think is how far     |
| 19 | the fed has communicated that it intends to keep interest  |
| 20 | rates low, and I think many people thought that 2012 we    |
| 21 | would start to recover. It just hasn't happened. And I     |
| 22 | think the folks in Japan probably thought that would       |
| 23 | that they would recover in a short amount of time, but     |
| 24 | it's been almost 25 years of low interest rate, low growth |
| 25 | environment. And I don't know what's going to happen.      |

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1 I'm not an economist.

| 2  | But the point being is that I believe this                 |
|----|--|
| 3  | sets the upper limit. I know it doesn't result in a        |
| 4  | recommended ROE indication of, say, 9 and a half which may |
| 5  | be more palatable to the Commission, but it does provide a |
| 6  | very rational cost of equity estimate that's supported by  |
| 7  | the tremendous amount of evidence I provided from          |
| 8  | investment brokers such as Goldman Sachs, and and          |
| 9  | actually I have a fairly extensive discussion from an      |
| 10 | individual that used to be an equity analyst for Morgan    |
| 11 | Stanley and what have you, that the commissions have       |
| 12 | difficult issues to deal with, but I think obviously the   |
| 13 | when you think about the concerns expressed by the         |
| 14 | company, how they can go around go over to rate of         |
| 15 | return and say we're expecting high growth, it just        |
| 16 | doesn't it's not consistent.                               |
| 17 | So but anyway, so that's the rationale for                 |
| 18 | that period of time. I mean, unfortunately past 1999 you   |
| 19 | just have way too much disruption in the companies because |
| 20 | they were restructuring and going into non-regulated       |
| 21 | operations, and the Enron collapse just caused tremendous  |
| 22 | disruption in growth rates. You had quite a few negative   |
| 23 | growth rates in the 2000 to 2005 time period. And that's   |
| 24 | why you know, that's why we couldn't rely on historical    |
| 25 | growth rates to the extent we used to. Obviously we have   |

Page 2042 our own example of a company that veered into the 1 2 non-regulated operations and caused tremendous amounts of 3 problems. 4 Q. Mr. Murray, you'll recall that Mr. Byrne 5 asked you some questions about your rule of thumb 6 analysis? 7 Α. Yes. 8 Q. And a component of that rule of thumb 9 analysis is the use of a risk premium of 3 to 4 percent. 10 Do you recall that? 11 Α. Yes. 12 ο. And I think you explained to Mr. Byrne that that risk premium covers all companies of all sorts? 13 14 Α. Yes. It's the entire U.S -- excuse me -the U.S. corporate markets. 15 16 Q. If you were to use a risk premium 17 reflective only of regulated electric utilities, would it be less than 3 to 4 percent? 18 19 It would definitely be towards the Α. 20 3 percent. There's indications from some other analysis 21 that I've looked at that it could even be below 3 percent, because as I pointed out, this is not controversial in 22 what I consider the mainstream financial world as far as 23 24 capital market specialist investment advisors and have 25 you. Utility stocks are bond surrogates. They're

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| 1  | alternatives to bond investments. The risk premium to      |
| 2  | invest in a utility stock is should be on the low end      |
| 3  | of that, and actually the expected growth for electric     |
| 4  | utility stocks as far as capital gains is more or less     |
| 5  | likely in the 2 to 3 percent range. It's always been a     |
| 6  | dividend yield, a dividend yield investment.               |
| 7  | I mean, that's why I mean, if you just                     |
| 8  | think about it from a commonsense standpoint, that's why   |
| 9  | investors put that in their asset class in their portfolio |
| 10 | because they want yield investing. They want yield         |
| 11 | investments to counterbalance maybe some of the growth     |
| 12 | opportunities. And so I think that that's something that   |
| 13 | really should be thought about as to what's reasonable.    |
| 14 | Q. Okay. Now, take a look at that report                   |
| 15 | wait a minute.   |
| 16 | Mr. Byrne asked you some questions                         |
| 17 | concerning your reliance on analyses other than ratemaking |
| 18 | analyses to support your recommendation. Do you recall     |
| 19 | that?  |
| 20 | A. Yes.  |
| 21 | Q. And I think he pointed you to the Report                |
| 22 | and Order from a prior case for a paragraph where you were |
| 23 | criticized by the Commission for doing that?               |
| 24 | A. Yes.  |
| 25 | Q. Okay. And would you agree with me that                  |

Page 2044 1 analyses similar to the ones you did in this case, that 2 those are done by equity advisors for the purposes of 3 advising clients? MR. BYRNE: I'm going to object on the 4 5 grounds it's leading. 6 BY MR. THOMPSON: 7 Okay. Tell me then, what are some of the Q. 8 reasons that analyses such as yours are done other than 9 for ratemaking purposes? 10 Well, the analyses that are done for Α. purposes of estimating fair price to pay for a utility 11 12 stock is -- is actually the algebraic reformulation of the 13 models that we use where you're determining the -- I say you're -- the investment advisors, the brokers, the equity 14 15 analysts are solving for the V term, which is the price, the intrinsic price that the utility stock seems to be 16 17 worth. 18 And in order to estimate the intrinsic value of the stock and as to whether or not that stock 19 might be a buy, a sell or a hold, utility equity analysts 20 21 use a discount rate to discount the cash flows to the equity investors. That equity discount rate that is used 22 to discount those cash flows is the very same thing we're 23 24 trying to solve for with our -- when we rework the algebra, now we're solving for R, which is the return on 25

Page 2045 equity. It's the same -- it's the same formula. 1 It's 2 just reworked based on some algebra. 3 And so when you're attempting to solve for what the cost of equity is that is embodied in stock 4 5 prices, why you would not want to look at the information that is used by the very investment analysts that are 6 7 supposed to be influencing and I believe are influencing 8 the stock prices investors are willing to pay, why you 9 would not want to consider that in determining whether or not somebody's in the ballpark I'm just not -- I'm 10 perplexed as to why somebody would dismiss that, but -- I 11 12 mean, because that is getting to the very thing as to we're trying to get into the investors' minds, and what 13 better way to get into the investors' minds than to look 14 15 at their analysis and look at what their recommendations 16 are. 17 I can assure you I don't know of many retail investors that are going out and doing a dividend 18 growth analysis and plugging in a dividend yield and 19 20 adding GDP growth. I've never seen it. I don't know of 21 any retail investor -- I know I wouldn't do it. I'll just say that. But I'm not aware of a situation where that's 22 23 done. 24 So while you -- considering these equity analysts are the very same analysts that provide the 25

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| 1  | earnings per share growth forecasts that rate of return    |
| 2  | witnesses plug into the constant growth DCF, you know,     |
| 3  | considering the fact that they don't use those estimates   |
| 4  | in the very same way that rate of return witnesses want to |
| 5  | use them in the utility ratemaking setting should be       |
| 6  | something that should be, I think, very alarming as to     |
| 7  | whether or not we are actually providing a reliable cost   |
| 8  | of equity estimate.  |
| 9  | Like I said, once again, it does not                       |
| 10 | necessarily mean that the allowed ROE has to be set at the |
| 11 | cost of equity.  |
| 12 | Q. Mr. Murray, what is asset valuation?                    |
| 13 | A. Asset valuation is just it could mean a                 |
| 14 | variety of things. I mean, direct asset valuation is       |
| 15 | looking at the actual regulated utility assets, whether    |
| 16 | it's a you can look at specific segments of the            |
| 17 | regulated electric utility, such as a generation asset or, |
| 18 | you know, some transmission asset and what have you and    |
| 19 | evaluate the value of that asset based on the projected    |
| 20 | cash flows and the discount rate, which is the cost of     |
| 21 | equity and the cost of debt.                               |
| 22 | And more indirectly an asset valuation                     |
| 23 | approach is just to look at the stock and look at the sum  |
| 24 | of the parts, which in Ameren's case it would be looking   |
| 25 | at Ameren Illinois, Ameren Missouri and the GenCo          |

Page 2047 operations, and using the discount rate to estimate the 1 2 value of each of those assets, and it's the cost of 3 equity, the discount rate that is viewed to value those assets, that's the very thing that the rate of return 4 5 licenses are trying to -- are trying to estimate in our 6 analysis. 7 Are you aware of any reason that an analyst Q. 8 would use these methods differently in either asset 9 valuation or equity advising? 10 The cost of equity would be a blended rate Α. 11 for looking at the stock. Just like I say, for instance, 12 with Ameren, you may have a higher cost of equity for the 13 merchant generation and a lower cost of equity for the regulated utility operation. So the overall cost of 14 15 equity for Ameren may be, say, 100 basis points higher than what would be appropriate for the regulated utility 16 17 operations. 18 When you're looking at the individual assets, then you can look at the appropriate cost of 19 20 capital for that specific asset class as far as the risk 21 and the cash flows from that asset. MR. THOMPSON: Thank you very much. I have 22 23 no further questions. 24 JUDGE WOODRUFF: All right. Then, 25 Mr. Murray, you can step down.

Page 2048 1 THE WITNESS: Thank you. 2 JUDGE WOODRUFF: And that concludes return 3 on common equity issue. We'll take a break before we go on to class cost of service, and we'll resume at 10:45. 4 5 (A BREAK WAS TAKEN.) JUDGE WOODRUFF: Let's come to order, 6 7 please. All right. We're ready to move into the class 8 cost of service, revenue allocation and rate design issue, 9 and there was actually a couple different stipulations filed yesterday. Who'd like to explain, take 10 11 responsibility for explaining where we're at on this? 12 MR. WOODSMALL: I'll give it a go, your 13 Honor. There were two stipulations, but basically one just adds to the first one. There is a settlement on 14 15 class cost of service that settles that issue. I believe 16 all parties have indicated either support or 17 non-opposition. Shortly after that was filed, Staff wanted to add some provisions regarding some tariff 18 issues, and I believe everybody that has indicated a 19 20 position has either supported or not opposed that at this 21 point. So given those stipulations, I'm at your --22 23 how you want to proceed. We can either put witnesses up 24 for Commission questions. Mr. Brubaker I think is here and can give a brief explanation of that and take 25

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Page 2049 Commission questions on why we believe the settlement is 1 2 reasonable, however you want to proceed. 3 JUDGE WOODRUFF: I suppose the first thing to do would be to do mini openings on the remaining issues 4 5 or on the stipulation if the parties want to address that in their mini openings. Any objection to proceeding that 6 7 way? 8 MR. MILLS: Judge, I believe the only 9 remaining issue is the question of customer charges for residential customers and SGS customers. 10 JUDGE WOODRUFF: Okay. Well, then we'll do 11 12 a mini openings on that, and I think it would be helpful 13 to have Mr. Brubaker come forward to give a brief explanation of what has been settled then. So let's go 14 15 ahead and start with the mini openings on whatever issues remain, and we'll begin with Ameren. 16 17 MR. MITTEN: May it please the Commission? 18 As a result of the nonunanimous stipulation on rate design that were reached yesterday which Ameren 19 20 Missouri has indicated it will not oppose, only one rate 21 design issue remains to be presented and decided by the Commission in this case. That issue is Ameren Missouri's 22 23 proposal to increase the customer charges for the residential and small general services rate classes. 24 25 Currently the monthly customer charge for

Page 2050 the residential rate class is \$8. Ameren proposes to 1 2 increase that to \$12 per month. Currently the monthly 3 customer charge for single phase customers in the small general services class is \$9.74. Ameren proposes to raise 4 5 that to \$14.61. And currently the monthly customer charge for three phase customers in the small general services 6 7 class is \$19.49, and Ameren is proposing to raise that to \$29.24. 8 9 Because each of the proposed changes allocates more of the overall revenue requirement to a 10 11 fixed monthly charge, less of the revenue requirement will 12 be left to be collected through volumetric rates. Thus, 13 if the customer charge increases that Ameren proposed are adopted, the volumetric rates will be less than otherwise 14 would be the case. 15 16 The Public Counsel and AARP/Consumers 17 Council of Missouri each oppose any increases in the monthly customer charges, and I suspect both parties will 18 argue in their opening statements, as Public Counsel has 19 done in its testimony, that the proposed increase in the 20 21 residential customer charge will be a hardship to Ameren Missouri's customers. 22 23 That's an argument with a lot of emotional 24 appeal. I attended several public hearings and read the

Page 2051 I know that the customers who testified in those hearings 1 2 are not happy about any increase in their monthly electric 3 bills. But in considering this issue, please look 4 5 past a simple appeal to your emotions. Instead, I ask the Commission to carefully examine the facts, the uncontested 6 7 facts that are presented by Ameren Missouri's witnesses Wilbon Cooper and William Davis as to the actual effect 8 9 that the proposed increase in the monthly customer charge will have on the company's customers. 10 11 For example, Mr. Davis has performed a 12 detailed analysis of billing and usage data for Ameren Missouri's residential customers, and based on that 13 analysis, he determined that total energy cost for 14 15 approximately half of the company's customers actually will decrease if the monthly customer charge is increased 16 17 to \$12. The impact of a change in the monthly customer charge on an individual customer will depend on that 18 customer's usage patterns, but Mr. Davis' analysis shows 19 that most customers will actually benefit from the 20 21 company's proposed change. Mr. Davis further determined that almost 22 60 percent of Ameren Missouri's LIHEAP customers will be 23 24 better off with a monthly customer charge of \$12 than they are under the current \$8 a month charge. 25

Page 2052 Those findings are contrary to what I guess 1 2 you would call conventional wisdom which suggests that low 3 income customers are low usage customers. Actual usage data suggests otherwise. 4 5 And for those customers who do see an overall increase in their energy costs as a result of 6 7 increasing the customer charges, most customers will see an annual increase of between 5 and \$25, and no customer 8 9 will see an annual increase of more than \$48, and the \$48 annual impact would apply to small -- the small number of 10 customers who have virtually no usage but who still pay 11 12 for electric service. 13 But there's another potential benefit that customers will realize if a greater percentage of Ameren 14 15 Missouri's revenue requirement is shifted from volumetric rates to monthly customer charge. During periods of high 16 17 energy usage, such as the extremely hot summers we've experienced the past two years, higher usage will not 18 raise overall energy costs as much if volumetric rates are 19 20 kept lower. 21 Beyond the findings I just mentioned, it is 22 also important for the Commission to view Ameren

23 Missouri's request to increase its monthly residential

24 customer charge in context, and Mr. Davis has filed

25 testimony that allows you to do just that. Ameren's

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| 1  | current \$8 customer charge is lower than the monthly       |
| 2  | customer charge of any other investor-owned utility in      |
| 3  | Missouri. And if you allow the company to increase the      |
| 4  | charge to \$12, that customer charge will still be lower    |
| 5  | than that in effect for the Empire District Electric        |
| 6  | Company.  |
| 7  | Mr. Davis also testifies about a recent                     |
| 8  | survey of the monthly customer charges in effect for 38 of  |
| 9  | Missouri's electric cooperatives. The results of that       |
| 10 | survey showed that the average monthly residential charge   |
| 11 | for the coops was \$22.70, with the lowest monthly charge   |
| 12 | in the group at \$11.79 and the highest at \$34.            |
| 13 | Based on the testimony I just described,                    |
| 14 | Ameren Missouri's proposal to increase its monthly          |
| 15 | customer charge to \$12 is in line with other               |
| 16 | investor-owned utilities, and it's well below the average   |
| 17 | monthly customer charge of Missouri's electric              |
| 18 | cooperatives whose customers at least indirectly set their  |
| 19 | own utility rates.  |
| 20 | Staff also opposes increasing the monthly                   |
| 21 | residential charge to \$12, although Staff does support an  |
| 22 | increase to \$9 per month. The reason for Staff's           |
| 23 | opposition to an increase to the \$12 level seems to be its |
| 24 | concern that the jump from \$8 to \$12 will cause rate      |
| 25 | shock. But Mr. Davis also provides testimony that shows     |

Page 2054 why Staff's position is both inconsistent and unfounded. 1 2 In recent rate cases where the Commission 3 adopted straight fixed variable rate designs for gas companies, the Commission has approved or Staff has 4 5 supported changes in the monthly customer charge that 6 greatly exceed the \$4 per month increase that Ameren 7 Missouri is proposing in this case. For example, in 8 Ameren Missouri's most recent gas case, Case No. 9 GR-2010-0363, Staff proposed to increase the monthly residential customer charge from \$15 to \$30, an annual 10 increase of \$180. And in Missouri Gas Energy's 2007 rate 11 12 case, Case No. GR-2006-0422, the Commission approved a 13 change in the monthly customer charge from \$11.65 to \$24.62, an annual increase of almost \$156. 14 15 Sure if increases in customer charges of the magnitude I just mentioned didn't create rate shock, 16 17 then Ameren Missouri's proposal to increase the customer charge by a maximum of \$48 per year won't cause rate shock 18 either. And remember, the \$48 annual increase won't be 19 experienced by most of Ameren's customers. As I mentioned 20 21 a moment ago, most customers will see an overall increase 22 in annual energy costs as a result of the increase in the customer charge in the 5 to \$25 per year range. 23 24 The proposed increase in the residential and small general service customer charge also is opposed 25

Page 2055 by the Natural Resources Defense Council. Now, you heard 1 2 from the NRDC's witness Pamela Morgan during the first 3 week of hearings in this case, and as the Commission considers Ameren Missouri's proposal, I think it's 4 5 important to reflect on the substance of Ms. Morgan's testimony. 6 7 As you may recall, Ms. Morgan opposes any increase in monthly customer charges because she believes 8 9 those increases will discourage customers from making investments in energy efficiency measures. But 10 cross-examination exposed several defects in her theory. 11 12 First, although she expressed the opinion that increasing 13 the monthly customer charge would disincentivize customers to invest in energy efficiency measures, Mr. Davis' 14 15 rebuttal testimony conclusively shows that's not the case. 16 Moreover, in evaluating Ms. Morgan's 17 testimony, it is important to remember that the Ameren Missouri study that she cited and relied on shows that, on 18 an overall basis, fewer than half of the company's 19 residential and small general services customers expressed 20 21 any interest in investing in energy efficiency measures 22 even if the payback on those measures was one year or less. And for many specific energy efficiency measures, 23 the percentage of customers who said they would be willing 24 to make an investment was in the 30 to 40 percent range. 25

Page 2056 1 It also is clear from Ms. Morgan's 2 testimony that even the maximum \$48 a year impact of the 3 change in the residential customer charge will have no impact on the payback periods of many energy efficiency 4 5 investments, such as energy efficiency refrigerators, central air conditioners or furnaces. 6 7 In fact, Ms. Morgan testified that she is not aware of any studies that support her theory that 8 9 decreasing or eliminating altogether the monthly customer 10 charge would make customers more willing to invest in 11 energy efficiency measures. 12 But even for those customers who choose to invest in energy efficiency measures, the impact of the 13 proposed increase in customer charges will be minimal. 14 As Mr. Davis' surrebuttal testimony shows, increasing the 15 residential customer charge to \$12 will increase the 16 17 payback period for energy efficiency investment by only 12 18 days. 19 Ms. Morgan also testified that she has no evidence to rebut the results of Mr. Davis' analysis of 20 21 the actual impact that increasing the customer charge to \$12 will have on Ameren Missouri's residential customers. 22 23 Finally, Ms. Morgan agreed that increasing 24 the customer charges as Ameren Missouri has proposed will actually increase revenue stability for the company and 25

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Page 2057 rate stability for customers, two of the rate design 1 2 objectives that Ms. Morgan says the Commission should 3 strive accomplish in this case. In short, the overwhelming weight of the 4 5 evidence that will be presented on this issue supports Ameren Missouri's proposal to increase the monthly 6 7 customer charges for its residential and small general 8 services customers. I urge the Commission to carefully 9 consider the testimonies of Ameren's witnesses Mr. Cooper and Mr. Davis and to take the opportunity to ask while 10 they are on the witness stand questions about the data 11 12 they have complied and reviewed and the conclusions they 13 have reached on this issue that support Ameren Missouri's 14 recommendations. 15 Thank you. 16 JUDGE WOODRUFF: Thank you. For Staff. 17 MS. McCLOWRY: Good morning. May it please 18 the Commission? 19 You will hear testimony today on the customer charges for the small general service and 20 21 residential classes. Staff recommends increasing Ameren Missouri's residential customer charge by \$1 from \$8 to 22 \$9. Staff's class cost service study shows that customer 23 24 costs in consideration for rate shock support a \$9 25 customer charge.

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| 1  | As for the small general service class,                    |
| 2  | Staff recommends the customer charge should be increased   |
| 3  | at the same percentage amount as the revenue requirement   |
| 4  | is increased for the SGS class. Thank you.                 |
| 5  | JUDGE WOODRUFF: Thank you. For Public                      |
| 6  | Counsel.   |
| 7  | MR. MILLS: Good morning. May it please                     |
| 8  | the Commission?  |
| 9  | Contrary to what Mr. Mitten led you to                     |
| 10 | expect, I'm going to talk in my opening statement about    |
| 11 | what the evidence in this case shows and only a little bit |
| 12 | about what the what the customer acceptance may be, and    |
| 13 | the evidence in this case does not support a 50 percent    |
| 14 | increase in customer charge for res and SGS customers. In  |
| 15 | fact, it does not support any increase in customer         |
| 16 | charges.   |
| 17 | Only the company's class cost of service                   |
| 18 | study shows that any significant increase in the customer  |
| 19 | charge is warranted, and the company only gets to that     |
| 20 | point by including way too much non-customer-related costs |
| 21 | in its class cost of service study in the customer charge. |
| 22 | Staff's class cost of service study shows                  |
| 23 | that a small increase in the residential customer charge   |
| 24 | could be supported, but even Staff's study doesn't quite   |
| 25 | show that Staff's own recommendation of a \$9 residential  |

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Page 2059 customer charge is supported, and remember the company is 1 2 advocating for a \$12 customer charge, and Staff also 3 includes non-customer-related charges in its calculation of the appropriate customer charges. 4 5 Only Public Counsel accurately calculated what an appropriate residential customer charge should be, 6 7 and that calculation shows that the customer charge should 8 actually go down rather than going up. A cost-based 9 customer charge should be in the range of \$6 to \$7 per month, not the \$8 that it currently is and certainly not 10 the \$9 that Staff proposes and certainly not the \$12 that 11 12 the company proposes. 13 Now, I am going to talk briefly about rate shock and customer acceptance because I think those are 14 15 valid considerations when the Commission's deciding what changes to make, if any, to customer charges in this case. 16 17 And in this case, the Commission is probably looking to hit customers with an increase that will bring the total 18 increase on Ameren Missouri customers to over 40 percent 19 20 in just five years. This is not the case to raise the 21 customer charge even if the evidence supported such a 22 change, which it does not. 23 Thank you. 2.4 JUDGE WOODRUFF: MIEC? 25 MS. VUYLSTEKE: We don't have any opening

|    | Page 2060  |
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| 1  | on this issue. Thank you, your Honor.                      |
| 2  | JUDGE WOODRUFF: Sierra Club?                               |
| 3  | MR. ROBERTSON: May it please the                           |
| 4  | Commission?  |
| 5  | I only just saw the revised version of the                 |
| 6  | Nonunanimous Stipulation & Agreement. I thought I had      |
| 7  | detected an ambiguity in paragraph 2A. I've been assured   |
| 8  | by Mr. Woodsmall and Ms. Mantle that this will not affect  |
| 9  | the issue that we are here to try today concerning the     |
| 10 | residential and SGS charges. With that assurance and that  |
| 11 | understanding, I would not oppose the revised stipulation. |
| 12 | What this issue really comes down to is                    |
| 13 | would these increases in customer charges be negligible as |
| 14 | the company says or negative as we say? What is            |
| 15 | negligible to them to us is a step in the wrong direction, |
| 16 | a step against encouraging energy efficiency. If you look  |
| 17 | at the example of LIHEAP and you go by that, the customers |
| 18 | who suffer most from these charge are those with the       |
| 19 | lowest use, those who are being the most efficient. The    |
| 20 | increase in customer charge will degrade the cost          |
| 21 | effectiveness of Ameren's efficiency programs as           |
| 22 | Mr. Davis' own testimony shows.                            |
| 23 | So we ask the Commission not to increase                   |
| 24 | these charges because of the state policy in favor of      |
| 25 | encouraging energy efficiency. Thank you.                  |

Page 2061 1 JUDGE WOODRUFF: Thank you. AARP? 2 MR. COFFMAN: May it please the Commission? 3 I'm John Coffman, here today on behalf of the Consumers Council of Missouri and also AARP. Both of my clients 4 5 believe very strongly in this issue, and we urge you to 6 retain the current \$8 customer charge. 7 We believe that the Office of Public Counsel's cost testimony is the most persuasive regarding 8 9 what is the customer charge and obviously, like many issues, there are differences. We strenuously object to 10 the utility's proposal to increase this basic component of 11 12 rates by 50 percent. Hopefully that will be far out of line with the final revenue requirement increase issued by 13 the Commission in this case. 14 15 There are many reasons to keep the customer charge at a reasonably low level apart from cost issues, 16 17 and the Commission does have broad discretion in its rate design, ability to craft a rate design that is just and 18 reasonable, and number one in the minds of the folks I'm 19 representing is affordability. The record is replete 20 21 through the many public hearings that folks do not like having to pay a large amount on their bill before they 22 even turn on one light. 23 24 The public hearing testimony is full of folks explaining to the Commission what an impact -- the 25

Page 2062 impact of a rate increase would be on them. Many 1 2 customers explained what they did to conserve, shutting 3 off heat to a particular room, taking whatever conservation measures that they might take, some of them 4 5 drastic, and these are the folks that we are concerned 6 about. 7 Clearly this issue is a matter that for the most part is within the residential class. There will be 8 winners and losers within the residential class, and I 9 suggest to you that the evidence, even the evidence that 10 11 Ameren Missouri is going to put on, suggests that there is 12 a cluster of low income folks who use very little and really try to save and probably are on fixed incomes, and 13 these are the folks that we think will be benefitted if 14 15 the customer charge is not increased in this matter. 16 As we heard from the environmental 17 organizations, the increasing the customer charge is contrary to the goals of energy efficiency. It sends the 18 wrong price signal, and we will be exploring that further. 19 20 But keep in mind who it is that is impacted 21 by this. If, in fact, the utility is correct and there's 22 a \$48 increase on the lowest usage customers and -- and a similar impact to -- benefit to the highest usage 23 24 customers, which of those groups on each end of the usage spectrum would feel that economic impact the greatest? 25

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Page 2063 We will look forward to cross-examining on 1 2 this, and that's all I have. Thank you. 3 JUDGE WOODRUFF: Thank you. MECG? MR. WOODSMALL: No opening statement. 4 5 Thank you. 6 JUDGE WOODRUFF: All right. I believe 7 that's all the parties that are here. Let's move on, then, to our first witness, which I believe would be 8 Mr. Warwick. 9 10 MR. MITTEN: Your Honor, I believe Mr. Warwick's testimony pertains to the issues that were 11 12 the subject of the stipulation, and I believe that the parties have expressed a willingness to stipulate his 13 testimony in without the necessity of him taking the 14 stand. 15 16 MR. MILLS: No. I have questions for 17 Mr. Warwick about the customer charge. MR. MITTEN: Then Mr. Warwick. 18 19 JUDGE WOODRUFF: Good morning, Mr. Warwick. 20 MR. WARWICK: Good morning. 21 JUDGE WOODRUFF: I believe this is the first time you've testified in this proceeding. 22 23 MR. WARWICK: Yes, it is. JUDGE WOODRUFF: Raise your right hand, 24 25 I'll swear you in.

Page 2064 1 (Witness sworn.) 2 (AMEREN EXHIBIT NOS. 33 THROUGH 35 WERE 3 MARKED FOR IDENTIFICATION.) JUDGE WOODRUFF: You may inquire when 4 5 you're ready. 6 WILLIAM M. WARWICK testified as follows: 7 DIRECT EXAMINATION BY MR. MITTEN: 8 Q. Would you please state your name and business address for the record. 9 10 William M. Warwick, One Ameren Plaza, Α. St. Louis, Missouri 63103. 11 12 Q. Mr. Warwick, where are you currently 13 employed and what is your job title? 14 Α. I'm employed at Ameren Missouri as managing supervisor of rate engineering. 15 16 Q. Mr. Warwick, have you prepared direct, 17 rebuttal and surrebuttal testimonies in this case which have been marked respectively as Exhibits 33, 34 and 35? 18 19 Yes, I have. Α. 20 Do you have any changes or corrections to Q. 21 that testimony to make today? 22 No, I do not. Α. 23 Q. If I asked you the questions that are 24 contained in your direct, rebuttal and surrebuttal testimonies today, would your answers be the same as are 25

Page 2065 1 contained there? 2 Α. Yes. 3 Q. And are those answers true and correct to the best of your knowledge and belief? 4 5 Α. Yes, they are. 6 MR. MITTEN: I offer into evidence 7 Exhibit 33, 34 and 35. JUDGE WOODRUFF: All right. 33, 34 and 35 8 have been offered. Any objections to their receipt? 9 10 (No response.) JUDGE WOODRUFF: Hearing none, they will be 11 12 received. (AMEREN EXHIBIT NOS. 33, 34 AND 35 WERE 13 14 RECEIVED INTO EVIDENCE.) MR. MITTEN: Mr. Warwick is available for 15 cross-examination. 16 17 JUDGE WOODRUFF: All right. For cross-examination, we would begin with MECG. 18 19 MR. WOODSMALL: No questions. 20 JUDGE WOODRUFF: AARP? 21 MR. COFFMAN: No questions of this witness. 22 JUDGE WOODRUFF: MIEC? MS. VUYLSTEKE: No questions. 23 JUDGE WOODRUFF: Public Counsel? 24 25 MR. MILLS: Yes, your Honor.

Page 2066 CROSS-EXAMINATION BY MR. MILLS: 1 2 Mr. Warwick, you were the primary author of Q. 3 the company's class cost of service study in this case; is that correct? 4 5 A. That's correct. 6 And the class cost of service -- class cost Q. 7 of service study that you conducted forms the basis of the 8 company's contention that the customer charge should be at 9 about -- for residential customers should be at about \$20; is that correct? 10 I think the company's position is it should 11 Α. 12 be \$12. Well, does your cost of service study show 13 Q. that the actual cost that can be allocated on a customer 14 15 basis should be about \$20? 16 That's correct. Α. 17 MR. MILLS: Okay. I'd like to have an 18 exhibit marked. 19 JUDGE WOODRUFF: Okay. Your next number is 410. 20 21 (OPC EXHIBIT NO. 410 WAS MARKED FOR IDENTIFICATION.) 22 BY MR. MILLS: 23 Mr. Warwick, do you recognize what's been 24 Q. 25 marked as Exhibit 410 as a sheet from one of your work

Page 2067 1 papers that was provided to the parties in support of your 2 class cost of service study? 3 Α. Yes. 4 Q. And does this particular page show the 5 allocations that you made in order to come up with the 6 appropriate costs to be included as customer related that 7 could be the basis for a customer charge? Yes. Not allocation, but classification 8 Α. 9 between customer and demand. 10 Right, classification. And so the Q. 11 classification of the costs in here is what led you to the 12 \$20 level that we discussed a moment ago, correct? Partially. Part of it, the calculation. 13 Α. 14 ο. Now, with respect to just sort of a little 15 background to help the Commissioners understand what this 16 exhibit shows, the numbers on the left, those are FERC 17 account numbers, correct? 18 Yes, they are. Α. 19 Q. The 360 through 373? 20 Α. Yes. 21 And then immediately after that, the words Q. 22 generally describe what the items in those accounts are? 23 That's correct. Α. 24 And then the next column, the percentage Q. 25 column indicates how you -- how you classified the costs

Page 2068 1 in those accounts with respect to customer or demand? 2 Α. That's correct. 3 ο. Okay. And then the demand percentage is 4 simply the complement to the customer component, correct? 5 Α. Yes. 6 So this exhibit shows that with respect to ο. 7 land and land right, structures and substations, you 8 allocated those 100 percent to demand and zero percent to 9 customer, correct? 10 I classified 100 percent demand and zero Α. 11 percent customer. 12 I'm sorry. I will probably keep making Q. 13 that mistake, and you're welcome to keep correcting me. Ι 14 will try to use the proper term. 15 But poles and fixtures in Account 364, is Account 364 distribution poles and fixtures? 16 17 Α. It's -- it would be all poles and fixtures. 18 So a portion of these are going to be Q. 19 transmission poles and fixtures? 20 No. You're correct. They're distribution. Α. 21 And then Account 365, wires and devices, Q. that's also distribution wires and devices? 22 23 That's correct. Α. Same for 366, 367, 368, conduit, cables, 24 0. 25 line transformers?

Page 2069 1 Α. That's correct. 2 Now, services, Account 369 is broken up Q. 3 into two subaccounts, correct? Yes. 4 Α. 5 Q. And OH stands for overhead? Α. Yes. 6 7 URD stands for underground? Q. That's correct. 8 Α. 9 And then meters and customer premises, both 0. 10 of those you allocate -- you classified 100 percent as 11 customer related and zero percent as demand related; is 12 that correct? 13 Α. That's correct. 14 Q. So with respect to Accounts 364 through 368, are those essentially the entire distribution system 15 from the substation, the substation fence to the service 16 17 drop at the customer's location? 18 Α. Yes. 19 And, for example, wires and devices, what Q. 20 exactly would be the kinds of devices included in 21 Account 365? I think wires is fairly self explanatory, 22 but what are those devices? Reclosers, fuses, that kind 23 of thing? 24 Possibly, yes. Α. 25 Okay. Can you think of anything else? Q.

Page 2070 Α. 1 No. 2 Q. Okay. And so you consider for wires and 3 devices 40 percent of the wires that run from a substation to a customer's service drop to be customer related; is 4 5 that what this classification is showing us? 6 Α. That's what it's showing. 7 And some of those wires, the ones, for Q. 8 example, leading directly out of the substation, may 9 ultimately branch off and serve thousands of customers, 10 correct? Yes. 11 Α. 12 ο. And the same with conduit. Conduit is 13 simply the container, if you will, that a wire would run 14 through? 15 Α. Yes. 16 Q. And you've classified two-thirds of those 17 as customer related, correct? 18 Α. That's correct. 19 Q. And for cable and devices, again, 20 two-thirds or more, approximately two-thirds you 21 considered to be customer related? 22 That's correct. Α. 23 Q. Line transformers, a little over half you 24 consider to be customer related, less than half to be 25 demand related?
Page 2071 Α. Yes. 1 2 Now, line transformer, how many customers Q. 3 can each line transformer serve? 4 Α. Numerous. 5 Q. More than one? 6 Α. Yes. 7 In some cases many more than one, correct? Q. 8 Α. It could be one to many more than one, 9 that's correct. 10 JUDGE WOODRUFF: I just want to instruct the witness to speak into the microphone. We're having a 11 12 hard time hearing. THE WITNESS: Okay. How's that? 13 14 MR. MILLS: Judge, with that, I'd like to offer Exhibit 410 into the record. 15 16 JUDGE WOODRUFF: All right. 410 has been 17 offered. Any objections to its receipt? 18 (No response.) 19 JUDGE WOODRUFF: Hearing none, it will be received. 20 21 (OPC EXHIBIT NO. 410 WAS RECEIVED INTO EVIDENCE.) 22 MR. MILLS: Those are all the questions I 23 have for Mr. Warwick. 24 25 JUDGE WOODRUFF: Okay. Then we'd move to

Page 2072 Staff. 1 2 MS. McCLOWRY: No questions. 3 JUDGE WOODRUFF: Okay. And then we'll come up for questions from the Bench. Commissioner Kenney? 4 COMMISSIONER KENNEY: No questions. Thank 5 6 you. 7 JUDGE WOODRUFF: Commissioner Stoll. 8 COMMISSIONER STOLL: I have no questions, 9 your Honor. Thank you. 10 JUDGE WOODRUFF: All right. There were no questions from the Bench, so no need for recross. Any 11 12 redirect? 13 MR. MITTEN: Thank you, your Honor. 14 REDIRECT EXAMINATION BY MR. MITTEN: 15 Mr. Warwick, I'd like to again direct your Q. attention to Exhibit 410. The two columns, customer and 16 17 total demand, what's the difference between customer and total demand? 18 19 This was the zero intercept results that Α. were done according to the NARUC manual to develop the 20 21 minimum customer dollars associated with just delivering service to the customer. And the customer portion would 22 be the zero load portion on that curve that crosses the 23 24 zero intercept, and the remainder would be the demand portion of the cost. 25

Page 2073 1 **Q**. When you say zero load, does that mean that 2 those costs would be incurred regardless of whether you 3 sold a kilowatt of electricity? That's correct. It's the no load minimum 4 Α. 5 amount of cost required to deliver service regardless of 6 use. 7 And would total demand relate to volumetric Q. 8 charges, they would depend on how much electricity you 9 sold? 10 That's right. That's correct. Α. 11 And what basis did you use to assign costs Q. 12 between the customer column and the demand column on Exhibit 410? 13 14 Α. The basis was install cost of -- for 15 instance, 364 was total install cost of the poles. Regression analysis was run to determine a line across the 16 17 Y intercept at zero. 18 And how did you determine what percentage Q. of the costs got assigned to customers and what percentage 19 20 got assigned to demand? 21 Α. By the regression analysis, the line itself. 22 23 And what was the basis of that regression Q. 24 analysis? 25 The installed cost of poles, wires, Α.

Page 2074 devices. 1 2 For example, can you explain why less than Q. 3 a quarter of the costs of poles and fixtures would be assigned to customers while the remainder would be 4 5 assigned to total demand? 6 A. It's the results of the analysis that when 7 you plot the costs and the size of the poles and then do your regression analysis and line, where it crosses, 8 9 theoretically where it crosses the zero intercept is the 10 minimum cost needed for a pole. MR. MITTEN: I don't have any further 11 12 questions. Thank you, Mr. Warwick. JUDGE WOODRUFF: Mr. Warwick, you can step 13 14 down. Next witness would be Wilbon Cooper. (AMEREN EXHIBIT NOS. 36 THROUGH 38 WERE 15 16 MARKED FOR IDENTIFICATION.) 17 JUDGE WOODRUFF: Welcome to the stand, Mr. Cooper. Please raise your right hand. 18 19 (Witness sworn.) 20 JUDGE WOODRUFF: Thank you. You may be 21 seated. You may inquire. WILBON COOPER testified as follows: 22 23 DIRECT EXAMINATION BY MR. MITTEN: 24 Please state your name and business address Q. for the record. 25

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| 1  | A. Wilbon L. Cooper, One Ameren Plaza,                     |
| 2  | 1901 Chouteau, St. Louis, Missouri 63103.                  |
| 3  | Q. Mr. Cooper, where are you employed and what             |
| 4  | is your job title?   |
| 5  | A. I'm employed by Ameren Missouri. I'm                    |
| 6  | manager of rates and tariffs.                              |
| 7  | Q. Mr. Cooper, did you cause to be filed in                |
| 8  | this case direct, rebuttal and surrebuttal testimony which |
| 9  | has been marked respectively as Exhibits 36, 37 and 38?    |
| 10 | A. Yes, I did.   |
| 11 | Q. Do you have any changes or corrections that             |
| 12 | you need to make to that testimony at this time?           |
| 13 | A. Yes, please, in my direct testimony.                    |
| 14 | Q. That would be Exhibit 36?                               |
| 15 | A. That is correct. If you would turn to                   |
| 16 | page 25, please, line 19, the number 10 should be 11, and  |
| 17 | the number 7 should be 9. And I'll repeat that. Page 25,   |
| 18 | line 19, the number 10 should be 11, and the number 7      |
| 19 | should be 9.   |
| 20 | Q. Are there any other changes or corrections              |
| 21 | you need to make to your testimony?                        |
| 22 | A. No.   |
| 23 | Q. With the changes that you've just noted, if             |
| 24 | I asked you the questions that are contained in your       |
| 25 | direct, rebuttal and surrebuttal testimonies today, would  |

Page 2076 1 your answers be the same as are reflected there? 2 Α. Yes, they would be. 3 Q. And are those answers true and correct to the best of your knowledge and belief? 4 5 Α. Yes, they are. 6 MR. MITTEN: Your Honor, I offer into evidence Exhibits 36, 37 and 38. 7 JUDGE WOODRUFF: 36, 37 and 38 have been 8 9 offered. Any objections to their receipt? 10 (No response.) JUDGE WOODRUFF: Hearing none, they will be 11 12 received. (AMEREN EXHIBIT NOS. 36, 37 AND 38 WERE 13 14 RECEIVED INTO EVIDENCE.) 15 MR. MITTEN: I have no further questions for Mr. Cooper. He's available for cross-examination. 16 17 JUDGE WOODRUFF: Thank you. For cross-examination, beginning with MECG. 18 19 MR. WOODSMALL: No questions. JUDGE WOODRUFF: AARP? 20 21 CROSS-EXAMINATION BY MR. COFFMAN: 22 Q. Good morning, Mr. Cooper. 23 Good morning, Mr. Coffman. Α. 24 Mr. Cooper, have you reviewed any of the Q. 25 local public hearing transcripts in this matter?

Page 2077 Α. 1 Yes. 2 0. Did you review testimony from consumers who 3 discussed conservation measures that they've had to take 4 due to increasing electric rates? 5 Α. Yes, I have seen some of that. Do you believe that a 50 percent increase 6 ο. 7 in the customer charge would have an adverse impact on 8 many of these customers? 9 Α. Would you define what you mean by adverse impact, please? 10 11 Well, would their rates go up higher than Q. 12 if the customer charge remains the same? 13 Α. That would depend on their level of usage. 14 ο. So essentially this is a zero sum gain 15 within the revenues collected from the residential class; would that be fair? 16 17 Α. Well, maybe an analogy would be helpful here, Mr. Coffman. If you look at the residential revenue 18 requirement as the air in a balloon, if you reduce the 19 customer charge, you would increase the volumetric charge. 20 21 If you reduce the volumetric charge, you would increase the customer charge, but the air in the balloon would not 22 change or the size of the balloon would not change. 23 24 Q. So theoretically Ameren Missouri's going to 25 collect the same amount of revenue no matter what this

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| 1  | Commission decides on customer charge, correct?            |
| 2  | A. Not necessarily. If the customer charge                 |
| 3  | were to go up at the level that the company has proposed,  |
| 4  | going from \$8 to \$12, the energy charges would go up by  |
| 5  | approximately 11 percent to achieve the overall            |
| 6  | 14.6 percent that we're requesting in this case.           |
| 7  | If we were to experience extremely hot                     |
| 8  | weather, as we did in the summer of 2012 and also the      |
| 9  | summer of 2011, Ameren would actually receive less revenue |
| 10 | than it would otherwise because the extremely hot weather  |
| 11 | would increase our volumetric throughput beyond that which |
| 12 | was utilized to establish the rates in the case on the     |
| 13 | normalized billing units.                                  |
| 14 | Q. But if the Missouri Commission does its job             |
| 15 | correctly, weather will be normalized and there will be an |
| 16 | equal risk of weather being hotter than normal or colder   |
| 17 | than normal on rates, correct?                             |
| 18 | A. That would be correct, and that's why I                 |
| 19 | only used two time frames. I looked at the I'm sorry.      |
| 20 | I mentioned the summer of 2011 and the summer of 2012.     |
| 21 | Q. Would an increase or would an increase                  |
| 22 | in the customer charge affect the risk profile of your     |
| 23 | utility?   |
| 24 | A. Mr. Coffman, I am not a risk expert or rate             |
| 25 | of return expert. You would have to ask one of the rate    |

Page 2079 of return experts that question. 1 2 Is it Ameren Missouri's goal in advocating **Q**. 3 for a 50 percent increase in the customer charge to reduce its risk of variability in revenues? 4 5 Α. No. I think it's a very important rate principle. The Commission even mentioned this in its 6 7 order in the last case, and that is rate stability and revenue stability. An increased customer charge for the 8 customer class that has the most weather sensitive load on 9 our system would support revenue stability and also rate 10 stability, which I think is beneficial to all 11 12 stakeholders. 13 **Q**. When you say revenue stability, aren't you 14 expressing the same concept as less risk in revenue 15 variability? Again, I would repeat my earlier answer. 16 Α. 17 I'm not a risk expert. 18 Q. When you say -- what do you mean when you say revenue stability? 19 Revenue stability again, as you increase 20 Α. 21 the magnitude of the revenues that are included in your fixed charge and decrease that in your volumetric charge, 22 especially for the class that's most weather sensitive on 23 24 your system, your revenues are likely to be more stable than they would be if you were to go the other direction 25

Page 2080 or maintain the status quo. 1 2 So a high customer charge mitigates the **Q**. 3 risk of variability in revenues? Α. It mitigates revenue instability or 4 5 volatility. 6 Okay. Would you restate it again so that I Q. 7 understand what you're saying? It mitigates revenue instability. It makes 8 Α. it more likely that you will achieve a certain level of 9 10 revenue. 11 So in that way, would an increase in the Q. 12 customer charge be analogous to the fuel adjustment clause 13 or other mechanisms that shift the risk of variability 14 from the utility to customers? 15 Α. The fuel adjustment clause, as I understand it, actually adjusts customers' bills based upon the 16 17 customers' actual -- I'm sorry, based upon the company's actual fuel costs versus those baked into rates. That's 18 not the situation with moving a customer charge as we're 19 proposing for the residential class from 8 to 12. 20 21 Have you personally performed any studies Q. 22 of customer usage along the variable of age of customers? 23 No. We typically do not have those Α. 24 demographics for our entire customer base. 25 Have you performed any studies regarding Q.

Page 2081 1 energy usage based on the criteria of household income? 2 Α. The answer would be no. 3 Q. Or energy burden? Would you please define what energy burden 4 Α. 5 is, please? 6 That refers to the percentage of a Q. 7 household income that goes to pay for energy. 8 Α. No. 9 MR. COFFMAN: Okay. That's all I have. 10 JUDGE WOODRUFF: All right. 11 THE WITNESS: Thank you. 12 JUDGE WOODRUFF: Sierra Club? CROSS-EXAMINATION BY MR. ROBERTSON: 13 14 Q. Mr. Cooper, is it your view that the purpose of the customer charge is to recover costs that do 15 16 not vary with energy usage? 17 Α. That is correct. It's to recover costs that -- well, it's somewhat correct. It's to recover 18 costs associated with just making service available to the 19 customer regardless of his or her usage or demand. 20 21 And would you agree that parties can and do Q. 22 differ widely on what costs should be included in the 23 customer charge? Yes. That is evidence in this case. The 24 Α. 25 allocation of common costs across a large body of

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| 1  | customers surely involves some science and some art and    |  |  |
| 2  | some would say artistic science. So yes, as we've seen in  |  |  |
| 3  | this case, the OPC I believe has sponsored a study         |  |  |
| 4  | suggesting that the residential customer charge should be  |  |  |
| 5  | \$6. I believe Staff is a little bit shy of \$9, and our   |  |  |
| 6  | study actually supports a residential monthly customer     |  |  |
| 7  | charge a little bit north of \$20.                         |  |  |
| 8  | Q. You testified in surrebuttal that putting               |  |  |
| 9  | more fixed costs into the customer charge would enhance    |  |  |
| 10 | the price signal to customers regarding the actual cost of |  |  |
| 11 | providing service; is that right?                          |  |  |
| 12 | A. That is correct.  |  |  |
| 13 | Q. Can customers do anything to change the                 |  |  |
| 14 | customer charge?   |  |  |
| 15 | A. No. By the nature of calling it a customer              |  |  |
| 16 | charge, that charge would be applicable to all customers   |  |  |
| 17 | month in and month out, regardless of their level of use.  |  |  |
| 18 | Q. You also testified in surrebuttal on                    |  |  |
| 19 | page 8, lines 8 through 10, Ms. Morgan, referring to my    |  |  |
| 20 | witness, seems to suggest that in the interest of energy   |  |  |
| 21 | efficiency, customer charges should never change despite   |  |  |
| 22 | rising customer-related costs such as those the company    |  |  |
| 23 | has and will incur to replace aging infrastructure. Do     |  |  |
| 24 | you recall that testimony?                                 |  |  |
| 25 | A. That is correct.  |  |  |

Page 2083 1 **Q**. First of all, when you say a cost to 2 replace aging infrastructure, do you mean distribution 3 related costs only? Α. Yes. 4 5 Now, can fixed costs change over time? Q. 6 Would you define what you mean by fixed Α. 7 costs, please? 8 Q. Well, your customer-related costs that you 9 described. 10 Customer-related costs do change over time, Α. 11 yes. 12 And can they decline? Q. 13 Α. I would say anything is possible. I don't think it's reasonably probable that there would be a 14 significant decline in customer-related costs. 15 16 Q. Must the utility system be sized to meet 17 peak demand? 18 Α. Yep, in order to provide safe and adequate 19 service. 20 And can peak demand decline due to energy Q. 21 efficiency and demand response programs? Yes. We have seen that over the -- as a 22 Α. matter of fact, comparing billing units from this case to 23 24 the immediately prior case, there has been a reduction in usage in, if not all, in most of the customer classes that 25

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Page 2084 we serve. And again, the increased custom charge that 1 2 we're proposing in this case would promote rate and 3 revenue stability despite reduced sales. MR. ROBERTSON: Nothing further. 4 Thank 5 you. 6 THE WITNESS: Thank you. 7 JUDGE WOODRUFF: For MIEC? 8 MS. VUYLSTEKE: No questions. 9 JUDGE WOODRUFF: Public Counsel? 10 MR. MILLS: Yes. CROSS-EXAMINATION BY MR. MILLS: 11 12 Q. Good morning, Mr. Cooper. Good morning, Mr. Mills. 13 Α. 14 Q. Do you have your testimony there with you? 15 Yes, I do, direct, rebuttal and Α. surrebuttal. 16 17 Ο. Let's start with your direct. Can I get 18 you to turn to page 25? 19 Yes, I am there. Α. 20 And specifically the statement that you end Q. 21 with, the sentence that ends on line 8, your statement 22 there is that an increase in the customer charge, I believe is your premise, and you end with the statement 23 24 does not discourage energy efficiency. Is that how I 25 paraphrase that sentence?

Page 2085 That is correct. 1 Α. 2 Does not discourage energy efficiency is an **Q**. 3 absolute statement, is it not? It can be interpreted that way, yes. 4 Α. 5 You don't -- you don't acknowledge that Q. there could be any impact on a customer's decision to 6 7 implement energy efficiency measures because of a higher 8 customer charge; is that correct? 9 Α. If one were to, for example, increase the customer charge to the level to cover the entire, let's 10 11 say, on average revenue requirement associated with each 12 residential customer, then surely that would impact a customer's decision to engage or not engage in energy 13 efficiency efforts. 14 15 Doesn't Mr. Davis acknowledge that the Q. 16 increase that you've proposed in this case may have some 17 impact on a customer's decision? 18 I believe it would increase it by 12 days. Α. 19 Q. And doesn't he acknowledge that that could 20 have an impact on customers' decisions? 21 Α. I believe that he acknowledges that that from his perspective, and I agree with him, that that's 22 de minimis. 23 24 Q. But de minimis is not the same as none, is 25 it?

Page 2086 Α. It's not. 1 2 Q. But your testimony is it has no impact, 3 correct? Again, a strict or literal reading of what 4 Α. 5 I have there, your statement would be correct. But again, the testimony was written in the context of our proposal 6 7 in this case, and that is going from \$8 to \$12 for the residential customer charge. 8 9 ο. And with respect to that proposal, do you acknowledge now that it would have perhaps a de minimis 10 effect but some effect? 11 12 Α. Mr. Mills, I guess we're arguing our words 13 here. I would suggest that consumers when they look at the payback of purchasing a more energy efficiency 14 15 appliance versus a less energy efficiency appliance, 12 days is not enough to influence their decision. 16 17 Ο. Is 12 days the difference between, was it 191 and 179? 18 19 The math is right. I believe those numbers Α. 20 are correct. 21 What is that in terms of percentage? Q. 22 12 over 200 is about 6 percent. Α. 23 And it's not quite 200, so it's a little Q. more than 6 percent? 24 25 That's probably right. Α.

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1 0. A 6 percent increase? 2 Α. Percentage, yes. Days, 12. 3 Now, just going down further on that same ο. 4 page in your direct testimony, page 25, the numbers that 5 you changed on line 19, and this sort of follows a train that starts up above, I could not tell from this testimony 6 7 which was which. You're talking about 91 and 93. One is 8 SGS and one is res, correct? 9 Α. I apologize. Maybe I can clear that up for you. Currently we get approximately 91 percent of our 10 residential revenues in the energy volumetric charges and 11 12 approximately 9 percent from the customer charge. Going to \$12 would be 11 percent in the customer charge and the 13 difference, which I believe is 89 percent, in the 14 15 volumetric charge. 16 Moving to SGS, currently we get 17 approximately 93 percent in the volumetric charge and 7 percent in the customer charge. Our proposal would 18 yield 9 percent in the customer charge in total revenues 19 20 and the difference between that and 100, which I believe 21 is 91, in the volumetric charge. 22 0. Now, in your rebuttal testimony, you do an 23 examination of other regulated electric utilities and even 24 Missouri cooperatives with respect to their customer 25 charges, do you not?

Page 2088 1 Α. Yes, I do. 2 Other than for the purposes of looking at Q. 3 customer charges, do you in your testimony advocate looking to those other companies to make changes to 4 5 other -- any other rate elements for residential or small general service customers? 6 7 No. Those were just for informational Α. 8 purposes for the Commission. 9 Now, the table that you have on page 13 of 0. 10 your residential -- I'm sorry -- your rebuttal testimony 11 is where you lay out the customer charges for the other 12 Commission-regulated electric utilities, correct? 13 Α. I'm sorry, Mr. Mills. Let me get there. That was page 13 you said? 14 15 Page 13 of your rebuttal testimony. Q. 16 Okay. I'm there. Sorry. Α. 17 Ο. The way it paginates it's one really big line, line 5. 18 19 Α. Okay. 20 What is the difference in residential Q. 21 volumetric rates between Ameren Missouri and KCPL? Mr. Mills, I don't have that information 22 Α. before me. I will suggest that Ameren's rates are the 23 lowest overall, I believe among regulated utilities in the 24 state of Missouri. 25

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| 1  | Q. So with and so I won't have to repeat                   |  |
| 2  | that for each of these companies, but for each of these    |  |
| 3  | companies, your customer charge is lower than them,        |  |
| 4  | correct?   |  |
| 5  | A. Yes. Materially lower for the most part.                |  |
| 6  | Q. For each of these companies is not your                 |  |
| 7  | volumetric charge materially lower?                        |  |
| 8  | A. I don't have the other volumetric charges               |  |
| 9  | in front of me. I apologize.                               |  |
| 10 | Q. But it is lower than each of them?                      |  |
| 11 | A. The realization I believe is lower for the              |  |
| 12 | classes, so it would be reasonable to suggest that it      |  |
| 13 | would be lower.  |  |
| 14 | Q. Now, with respect to the cost study for                 |  |
| 15 | SGS, did your cost study for SGS customer charges          |  |
| 16 | differentiate between single phase and three phase?        |  |
| 17 | A. That would have been a better question for              |  |
| 18 | Mr. Warwick. I believe that the cost study actually came   |  |
| 19 | up with the value for the combined, but I'm not certain of |  |
| 20 | that. I apologize.   |  |
| 21 | Q. On page 16, specifically at lines 9 to 10               |  |
| 22 | of your rebuttal testimony, you testify and you note       |  |
| 23 | there that you also testified to this in your direct       |  |
| 24 | testimony that your cost study indicated a \$22 per        |  |
| 25 | month customer charge for SGS. Does that help refresh      |  |

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| 1  | your recollection?   |  |
| 2  | A. That's correct. I think that's a combined,              |  |
| 3  | I would say a weighted average.                            |  |
| 4  | Q. But you're proposing a \$29.24 customer                 |  |
| 5  | charge for three phase SGS, are you not?                   |  |
| 6  | A. That is correct.  |  |
| 7  | Q. Is that notably high other than the \$22                |  |
| 8  | that your cost study supported?                            |  |
| 9  | A. Yes, it is, but again, the \$22 is a                    |  |
| 10 | weighted figure, Mr. Mills. What we did there is the       |  |
| 11 | there are two charges in the SGS customer charges, one for |  |
| 12 | single phase and one for three phase, and I believe the    |  |
| 13 | increased reach is 50 percent.                             |  |
| 14 | Q. It is almost exactly 50 percent.                        |  |
| 15 | A. Okay.   |  |
| 16 | Q. And so was that 50 percent derived from                 |  |
| 17 | your cost study?   |  |
| 18 | A. No. In consideration of rate shock or rate              |  |
| 19 | gradualism, two very important principles, as we did for   |  |
| 20 | the residential class, we limited the increase to the      |  |
| 21 | proposed increase to 50 percent despite our study          |  |
| 22 | supporting a monthly customer charge greater than \$20. We |  |
| 23 | did the same approach was taken with the small general     |  |
| 24 | service class.   |  |
| 25 | Q. And on a relative scale, how many of the                |  |

Page 2091 1 SGS customers are single phase versus three phase? 2 Α. I may have that information with me. If 3 not, it's in the billing unit stipulation. I'm not certain that I included that in the material I brought to 4 5 the stand. I did not. I apologize. 6 Just sort of as a general parameter, are Ο. 7 there more single phase or more three phase? 8 Α. There would be more single phase, I believe. 9 10 Considerably more? Q. 11 Α. I would say yes, but again, I don't have 12 that information in front of me. I apologize. 13 Q. Okay. Now, you suggest that -- and I 14 believe this is in your surrebuttal testimony. No. It's in your rebuttal testimony. You suggest at page 16, 15 16 specifically lines 12 through 15, that the company's 17 robust energy efficiency programs, and you raise those programs as justification in part, not as your only 18 justification, but partly as justification for an increase 19 20 in the customer charges, correct? 21 Α. Yes. The non-program cost revenue 22 requirement and the MEEIA dollars, which were approximately 79 to 80 million, will vary based upon the 23 level of the customer charges. A higher customer charge 24 reduces that dollar amount or reduces the company's 25

Page 2092 revenue requirement. A lower customer charge increases 1 2 the company's revenue requirement, and that's associated 3 with the throughput disincentive. 4 Q. My question was more to the point that it 5 appears to be your testimony here that the Commission should look to the fact that you're implementing a robust 6 7 suite of energy efficiency programs through MEEIA as a 8 reason to grant your proposed increased customer charge. 9 Is that your testimony? 10 I would say, Mr. Mills, that's one of the Α. factors. I think what we have here is a balance. We're 11 12 looking at energy efficiency, we're looking at costs, we're looking at rate stability and revenue stability, and 13 that's how we arrived at the proposed increase from 8 to 14 12. 15 16 Q. All of the MEEIA issues were settled in the MEEIA case by a Unanimous Stipulation & Agreement, 17 18 correct? 19 That is correct. Α. 20 An agreement among all parties? Q. 21 Α. That's my understanding, yes. 22 0. And is it your understanding also that 23 Ameren Missouri received benefit from that agreement? 24 Α. I would ask that Mr. Davis be asked those 25 questions. He is the next witness.

Page 2093 1 0. As a general rule, would you not expect 2 that a well-run company would not enter into an agreement 3 that caused it detriment? Α. Yes. 4 5 Q. Okay. And conversely, you would assume, I suppose, that the other parties thought that there was 6 7 benefit to that agreement or they would not have entered 8 into it, correct? I don't know. 9 Α. 10 Isn't that the way negotiations usually go? Q. 11 Α. In most cases, but not always. 12 Do you have any reason to believe that the Q. 13 MEEIA stipulation was anything different than a normal 14 case? 15 I didn't participate in the MEEIA. Α. 16 Okay. But Ameren Missouri didn't get Q. 17 agreement on higher customer charges in that agreement, 18 did it? 19 That is correct. Α. 20 In fact, there's specific language that Q. 21 defers the question of customer charges to this case, 22 correct? 23 That is correct. Α. 24 Q. So aren't you trying to get additional 25 benefits here that weren't part of that agreement?

Page 2094 No, not at all. 1 Α. 2 Q. Okay. 3 Α. This proposal --4 Q. But at page 16, lines 12 to 15, you urge 5 the Commission in reliance upon your agreement to enter into these MEEIA programs to increase your customer 6 7 charge, do you not? 8 Α. What you stated with regard to what's in 9 the testimony is correct, but as I stated earlier, cost is an element, revenue stability is an element, rate 10 stability. So there are additional factors. 11 12 Now I'd like you to turn to your Q. 13 surrebuttal testimony if you have a copy there. 14 Certainly. Okay. I'm with you. Α. 15 And specifically at page 13, line 14, you Q. refer to an overwhelming majority of customers. 16 Do you 17 see that reference? Yes, I do. 18 Α. 19 Q. What is that in percentage numbers? 20 Α. Bear with me just a second, Mr. Mills. 21 Approximately -- I'm looking at a bar chart that I 22 developed after I submitted that testimony. I'm going to say better than 90 percent are in the 13 to 16 percent 23 24 range percent increase, current versus proposed, and the 14.6 percent average increase. And this was based upon a 25

Page 2095 sample of customers that had bills for -- or continuous 1 2 service, I'm sorry, for an entire 12-month period, very 3 recent 12-month period. 4 Q. So what your calculation shows is that 5 90 percent of -- if the company were to get a 14.6 percent increase in this case, your testimony is that 90 percent 6 7 of residential customers under your customer charge would 8 have less than that 14.6 percent? 9 Α. No. I'm sorry. I didn't hear your question properly. You're saying less than 14 percent? 10 It appears as if that number is approximately 19 percent 11 12 less than 14 percent. 13 0. Okay. And I'm struggling to reconcile 14 either of those percentages to the overwhelming majority 15 that you refer to in your testimony. 16 I'm sorry. What line number was that, Α. 17 Mr. Mills? 18 Q. Your surrebuttal testimony, page 13, 19 line 14. Said paying at or very close to the 20 Α. 21 average. At or very close. So that's the reason when I said the 90 percent, I looked to -- from 13 percent to 22 16 percent, and that's what I consider to be very close. 23 24 Q. And can you tell me what percent of that 25 group will be paying above the system average?

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Page 2096 You mean the remaining? I gave you that. 1 Α. 2 I said 90 percent would be in the band of about 13 to 16. 3 Ο. But that band can include some customers that will be above system average, does it not, if the 4 5 system average is 14.6? 6 That is correct. Α. 7 And I assume that that band would shift Q. 8 more or less in proportion to whatever the Commission 9 ultimately awards in this case, correct? 10 That's correct. Α. 11 So can you tell me from the 50 percent mark Ο. 12 on that curve how many are above the 50 percent mark? 13 Α. No, I can't. 14 0. But some portion of the customers will be 15 paying more than the system average, correct? 16 Yes. That would be correct. For example, Α. 17 a customer who had no usage, which would be very rare, I guess it would be a vacation home, would be paying 18 \$4 dollars -- 50 percent more, would have a 50 percent 19 increase assuming no usage. Unlikely, but the math would 20 21 work out that way. And similarly, customers with very low 22 Q. 23 usage would also be paying more, correct? That is correct. Very low, that is 2.4 Α. 25 correct.

Page 2097 1 **Q**. But you did not do a quantification to 2 determine the number of customers that would fall into 3 that category? I did not provide that in either my direct, 4 Α. 5 rebuttal or surrebuttal testimony, but we did do an analyses after that was raised by the NRDC witness in, I 6 7 believe it was -- I think it was rebuttal testimony. 8 Q. And what did that analysis show? 9 Α. Well, that's the data I just shared with 10 you. 11 But the data you have, you can't answer the Q. 12 question I was asking, which is the number of customers or 13 the percent of customers that would see an above average 14 increase as a result of the customer charge increase? 15 Α. That's correct. I don't have that 16 specificity. 17 MR. MILLS: Okay. That's all I have. Thank you. 18 19 JUDGE WOODRUFF: Thank you. Cross for Staff? 20 21 CROSS-EXAMINATION BY MS. McCLOWRY: 22 0. I have just one question for you. Assume a 23 milder than normal summer. Would a higher customer charge and lower volumetric charge collect more or less revenue 24 25 than a lower customer charge and higher volumetric charge?

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Page 2098 Α. If a warmer than normal summer with a 1 2 normal winter, based upon the normals that were 3 established --4 Q. My question was for a milder than normal 5 summer. 6 Α. So looking solely at the summer -- I'm 7 sorry. Repeat your question. 8 Q. Assume a milder than normal summer. Would 9 a higher customer charge and lower volumetric charge collect more or less revenue than a lower customer charge 10 11 and a higher volumetric charge? 12 Α. The higher customer charge would collect 13 more. 14 MS. McCLOWRY: That's all I have. Thank 15 you. Thank you. 16 THE WITNESS: Thank you. 17 JUDGE WOODRUFF: Mr. Cooper, before we come up for questions from the Bench, they are having a hard 18 19 time hearing you. 20 THE WITNESS: Oh, I'm sorry. 21 JUDGE WOODRUFF: Either speak up or get closer to the microphone. 22 23 THE WITNESS: I'll get closer, maybe. I don't know. 24 25 JUDGE WOODRUFF: We'll come up for

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|    |  | Page 2099                                |
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| 1  | questions from                                       | n the Bench. Commissioner Jarrett?       |
| 2  |  | COMMISSIONER JARRETT: Hello, Mr. Cooper. |
| 3  |  | THE WITNESS: Good morning.               |
| 4  |  | COMMISSIONER JARRETT: I don't have any   |
| 5  | questions for  | you. Thanks for your testimony.          |
| 6  |  | THE WITNESS: Thank you much.             |
| 7  |  | JUDGE WOODRUFF: Commissioner Kenney?     |
| 8  |  | COMMISSIONER KENNEY: Yes.                |
| 9  | QUESTIONS BY COMMISSIONER KENNEY:                    |  |
| 10 | Q.   | Still morning. Good morning, Mr. Cooper. |
| 11 | Α.   | Good morning, Commissioner Kenney.       |
| 12 | Q.   | Can you hear me okay?                    |
| 13 | Α.   | Yes. Can you hear me?                    |
| 14 | Q.   | I can. Thank you.                        |
| 15 | Α.   | Okay.                                    |
| 16 | Q.   | I just have a few questions. If the      |
| 17 | residential  | - let me back up.                        |
| 18 |  | The whole point of raising the customer  |
| 19 | charge is to collect more of Ameren's fixed charges, |  |
| 20 | correct?   |  |
| 21 | Α.   | Customer related costs.                  |
| 22 | Q.   | Higher percentage?                       |
| 23 | Α.   | That is correct, customer related costs, |
| 24 | which one can  | call fixed.                              |
| 25 | Q.   | So if the customer charge increases from |

Page 2100 1 \$8 to \$12, what percentage of Ameren's fixed charges will 2 it be collecting through that customer charge? 3 Α. It would be collecting 11 percent from the current 9 percent. 4 5 Q. That was what I had a hard time Okay. hearing. And then I know Mr. Mills asked you a little bit 6 7 about the relationship between the increased customer 8 charge and the throughput disincentive. I just want to 9 ask a couple of additional questions about that. 10 The throughput disincentive is essentially 11 the idea that Ameren was losing revenue by virtue of the 12 fact that it's selling less electrons, correct? That is correct. Simply stated, correct. 13 Α. 14 ο. And by increasing the customer charge, 15 you -- or Ameren rather diminishes that throughput disincentive, correct? 16 17 Α. That is correct, and that would be reflected in the company's revenue requirement in this 18 19 case. If we are successful increasing the customer charge, for example, to the \$12 level, Mr. Davis has 20 21 quantified what that reduction would be in our revenue requirement in this case. 22 23 ο. Well, here's my follow-up question, and I 24 quess maybe this might not be a question for you, then. It might be a question -- this might be a question for the 25

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Page 2101 1 other witness that you just mentioned. 2 The MEEIA filing or the MEEIA settlement 3 that was -- that we approved and that was unanimously entered into had mechanisms in place to address the 4 5 throughput disincentive, correct? 6 I would prefer that those questions be -- I Α. 7 don't like to defer questions to other witnesses, but Mr. Davis is the company's expert, so to speak, on the 8 MEEIA stipulation. 9 10 Is he -- is he testifying after you? Q. Yes. 11 Α. 12 Q. Is he testifying today? Yes. He's immediately after me, that is 13 Α. 14 correct. 15 But I guess we're going to break for lunch Q. 16 here in a minute, aren't we? 17 JUDGE WOODRUFF: I expect so. We don't 18 have to. 19 COMMISSIONER KENNEY: I have another conference call at one. 20 21 BY COMMISSIONER KENNEY: 22 Q. Well, I guess let me ask the question, and then if I'm not able to ask, the other guy's name you just 23 24 mentioned? 25 Α. Mr. Davis.

Page 2102 1 0. I'm losing my train of thought. 2 Α. That's okay. Mr. Davis. 3 Were you involved at all with the -- well, Q. 4 not whether you were involved with it. Are you familiar 5 with the terms of the MEEIA settlement? Only vaguely, Commissioner Kenney. 6 Α. 7 Q. Okay. All right. So you wouldn't be able 8 to tell me whether raising the customer charge would be 9 duplicative of the efforts that are outlined in the MEEIA 10 settlement to deal with the throughput disincentive? 11 Commissioner Kenney, I can again share what Α. I tried to convey earlier. Maybe I didn't do a good job 12 13 of communicating that. It's my understanding that the MEEIA revenue requirement in this case has two pieces. 14 One piece is associated with program costs, and the other 15 piece is associated with throughput disincentive. And 16 17 again, that dollar amount is not fixed at this time despite the MEEIA settlement because the customer charges 18 have not been established for residential and small 19 20 general service. And to the extent those customer charges 21 move beyond their existing levels, that piece of the MEEIA revenue requirement is reduced. 22 23 ο. So the parties that were discussing settlement in that context contemplated the possibility of 24 25 the customer charge increasing in the context of the rate

Page 2103 1 proceeding? 2 Α. Mr. Mills would probably say they didn't 3 contemplate the customer charge increasing but that it would be addressed in this particular docket. 4 5 Q. Got you. 6 COMMISSIONER KENNEY: Okay. Thank you very 7 much. 8 THE WITNESS: Thank you, Commissioner 9 Kenney. 10 JUDGE WOODRUFF: And Commissioner Kenney, I'll go ahead and add that I was intending to call 11 12 Mr. Davis yet before we break for lunch. So if that's your preference, we'll do that. 13 14 COMMISSIONER KENNEY: I'm sorry. Say that 15 again, Judge. I'm sorry. 16 JUDGE WOODRUFF: I was anticipating calling 17 Mr. Davis before we break for lunch, if we do break for lunch. So you'll have an opportunity to question him. 18 19 COMMISSIONER KENNEY: If you want to. Don't feel compelled to. Don't do it on my account. If 20 21 you want to break for lunch, that's fine. JUDGE WOODRUFF: I don't know how the 22 parties feel. I'd prefer to push forward. Anyway, 23 Commissioner Stoll? 24 25 COMMISSIONER STOLL: Yes. I do have one

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1 question.

2 QUESTIONS BY COMMISSIONER STOLL:

Q. Mr. Cooper, in listening to the opening statement and to the testimony, I just want to make sure that I have this right. How are the customer charges determined? Is that on a per household basis regardless of volume?

8 A. That is correct. It's the cost associated 9 with just making service available to our customers, I'll 10 say at the 50,000 feet level, metering, billing, customer 11 service and customer service expenses and certain pieces 12 of our various distribution plant items, or certain 13 portion of our various distribution plant items.

Q. The reason I ask that is, and maybe I'm -maybe I misunderstood, but -- so if it would be raised to, let's say, the \$12, it would be an increase of \$48 per year per household or does that -- is there a variable in there at all?

A. Yes, there is, Commissioner Stoll. Again, maybe I'll get back to the balloon. The revenue requirement for residential will be as established by the Commission in this case. So there's a pie of dollars here, and then you will slice that pie, or we would, into the customer piece and the volumetric piece. The sum of the parts would always equal the whole regardless of where

Page 2105 1 the customer charge ends up. 2 COMMISSIONER STOLL: Okay. Thank you. 3 THE WITNESS: Thank you. JUDGE WOODRUFF: Recross based on questions 4 5 from the Bench then. Does anybody wish to recross? I see Mr. Mills. Anybody else? All right. Mr. Mills. 6 7 RECROSS-EXAMINATION BY MR. MILLS: 8 Q. Mr. Cooper, in response to Commissioner 9 Stoll's questions about how you figure out what costs go 10 into the customer charge, isn't it true that the company 11 calculated that based on what's called the minimum system 12 calculation? That's correct. I tried to make that clear 13 Α. by saying at the 50,000 feet level. 14 15 Okay. And is another description of that Q. 16 methodology the zero intercept method? 17 Α. Yes. That's a fair characterization, yes. 18 And in order to make that calculation, the Q. 19 company doesn't actually go out and build a system that 20 would provide service to a customer but not provide any 21 electrons to a customer, do they? 22 That is correct. Α. 23 Q. It's strictly a mathematical calculation? That is correct. 2.4 Α. 25 And it's based on the theory that -- well, Q.

Page 2106 1 it's essentially based on drawing a line on a graph, 2 correct? 3 Α. Primarily, yes. Mr. Warwick explained that earlier this morning. 4 5 Q. And where the theoretical minimum system number lies depends upon where the slope of the line on 6 7 the graph crosses the Y intercept, correct? That's correct. It's an Y equals MX plus 8 Α. 9 plus B progression. 10 And are you aware of any utility anywhere Q. 11 in the world ever building a system like that? 12 Α. Not that works. MR. MILLS: Okay. That's all I have. 13 Thank you. 14 15 JUDGE WOODRUFF: Staff? RECROSS-EXAMINATION BY MS. McCLOWRY: 16 17 Ο. Mr. Cooper, I just want to clarify Commissioner Stoll's question. So if -- say someone 18 19 didn't use any -- they were connected to Ameren's service 20 and they paid for Ameren's service but they didn't use any 21 electricity. They would be paying \$12 every month no 22 matter what; that's correct? 23 Α. That's correct. 24 Okay. So compared to an \$8 customer Q. charge, that person would be paying 48 extra dollars a 25
Page 2107 1 year; is that correct? 2 That is correct, but I would suggest that a Α. 3 customer that is in that situation disconnects service if they're not using it. 4 5 MS. McCLOWRY: Thank you. No further questions. 6 7 JUDGE WOODRUFF: Redirect? 8 MR. MITTEN: Thank you. Just a few 9 questions. 10 REDIRECT EXAMINATION BY MR. MITTEN: 11 I believe Mr. Coffman asked you whether or Q. 12 not the company had done any studies to try and gauge the 13 effect of the proposed rate increase based upon household 14 income. Do you recall that question? He asked if I, I believe, had done any 15 Α. studies, and I said no. I do know that Mr. Davis 16 17 performed a study of the low income home energy assistance program customers and included that in his -- the results 18 of that, I'm sorry, in his rebuttal testimony in this 19 20 case. 21 But looking at the entire universe of Q. 22 Ameren Missouri's residential customers, do you have data on the household incomes of those customers? 23 24 No. We don't keep those demographics on Α. our system. I suspect that one could probably take a look 25

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|----|---|
| 1  | at census data and extrapolate that to possibly perform   |
| 2  | some type of analysis like that.                          |
| 3  | Q. But you agree that that would be a pretty              |
| 4  | imprecise analysis?                                       |
| 5  | A. Yes.   |
| 6  | Q. Mr. Robertson also asked you about your                |
| 7  | testimony that putting more costs in the customer charge  |
| 8  | would enhance the price signal to customers. Do you       |
| 9  | recall that question?                                     |
| 10 | A. That is correct.                                       |
| 11 | Q. What did you mean by that testimony?                   |
| 12 | A. Essentially it would provide customers a               |
| 13 | cost or a price that's reflective of the cost of pro      |
| 14 | again, making service available to that customer,         |
| 15 | comparable to charges that customers pay for Internet     |
| 16 | service, for example, that they may pay for TV content,   |
| 17 | for example. Laclede Gas I believe has a monthly customer |
| 18 | charge of approximately, it's north of \$20. Our natural  |
| 19 | gas monthly customer charge for residential customers is  |
| 20 | \$15. I believe those are associated with the costs of    |
| 21 | making service available to customers.                    |
| 22 | Q. How about the price signal for the usage of            |
| 23 | electricity, would Ameren Missouri's proposal to increase |
| 24 | the residential customer charge enhance those price       |
| 25 | signals as well?  |

Page 2109 Yes, because it would do a better job of 1 Α. 2 reflecting what those costs are. 3 Q. Mr. Mills also asked you to perform a calculation related to Mr. Davis' testimony about the 4 5 effect of the proposed increase in the customer charge on the payback period for investments in energy efficiency. 6 7 Do you recall that? 8 Α. I recall some questioning along that line, 9 yes. 10 Do you happen to have a copy of Mr. Davis' Q. 11 surrebuttal testimony? 12 Α. I do not. I apologize. 13 MR. MITTEN: Your Honor, may I approach the 14 witness? 15 JUDGE WOODRUFF: You may. BY MR. MITTEN: 16 17 Ο. Let me hand you a copy of Mr. Davis' 18 surrebuttal testimony. 19 Thank you, Mr. Mitten. Α. 20 And let me direct your attention to page 2. Q. 21 Mr. Mills asked you to calculate the percentage difference 22 of an increase from 1.78 years to 1.91 years. Do you recall that? 23 24 Α. Yes. 25 What is Mr. Davis' testimony about the Q.

Page 2110 1 difference in payback period? 2 Α. I'm sorry. I spoke too quickly. It's 12 3 davs. And is it 1.81 or 1.91? 4 Q. Α. It's 1.81 years versus 12 days. 5 And what is the percentage difference 6 Q. 7 between 1.78 years and 1.81 years? Quite a bit different than the percentage I 8 Α. 9 gave you earlier, but let me give you that. 1.7. 10 Q. So it's not 6 percent? That is correct. 11 Α. 12 Now, you also talked with Mr. Mills about Q. 13 testimony, your surrebuttal testimony at page 13, line 14. 14 Okay. I'm there. Α. 15 And the percentage of customers that would Q. fall at or very close to the average increase of 16 17 14.6 percent that's being requested by Ameren Missouri in this case; is that correct? 18 19 That is correct. Α. 20 And I believe you said that based upon your Q. 21 analysis, approximately 90 percent of the customers would 22 fall within a band that was at or very close to 23 14.6 percent; is that correct? That is correct. 24 Α. 25 Now, Mr. Mills asked you about very low Q.

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Page 2111 1 usage customers. Do you recall that? 2 Α. That is correct. 3 ο. Would very low usage customers fall within that 90 percent grouping that you --4 5 Α. No, they would not. 6 They would be someplace outside the Q. 7 90 percent? That is correct. 8 Α. 9 ο. So would it be some subset of the remaining 10 10 percent? Α. Yes. 11 12 Q. Do you have any idea how large a subset? Looking at the extreme, that would be a 13 Α. 50 percent increase, and again, that would be customers 14 15 who had no usage, that value is less than 1 percent. 16 MR. MITTEN: I don't have any further 17 questions. Thank you, your Honor. JUDGE WOODRUFF: Mr. Cooper, you can step 18 19 down, and we'll bring up Mr. Davis. 20 (AMEREN EXHIBIT NOS. 39 AND 40 WERE MARKED 21 FOR IDENTIFICATION BY THE REPORTER.) 22 (Witness sworn.) 23 WILLIAM R. DAVIS testified as follows: DIRECT EXAMINATION BY MR. MITTEN: 24 25 Would you please state your name and Q.

Page 2112 business address for the record. 1 2 Α. My name is William R. Davis. My business 3 address is 1901 Chouteau Avenue, St. Louis, Missouri. Mr. Davis, where are you employed and what 4 Q. 5 is your job title? 6 I'm employed by Ameren Services, and my job Α. 7 title is Senior Corporate Plan Analyst. 8 Q. Mr. Davis, did you cause to be filed in 9 this case rebuttal and surrebuttal testimonies which have been marked respectively as Exhibits 39 and 40? 10 11 Α. Yes, I did. 12 Do you have any changes or corrections to 0. 13 make to that testimony this morning? 14 Α. No, I do not. 15 If I asked you the questions that are Q. contained in your rebuttal and surrebuttal testimonies 16 17 today, would your answers be the same as reflected there? 18 Α. Yes, they would. 19 And are those answers true and correct to Q. 20 the best of your knowledge and belief? 21 Α. Yes, they are. MR. MITTEN: Your Honor, I offer into 22 evidence Exhibits 39 and 40. 23 JUDGE WOODRUFF: 39 and 40 have been 24 offered. Any objections to their receipt? 25

Page 2113 1 (No response.) 2 JUDGE WOODRUFF: Hearing none, they will be 3 received. (AMEREN EXHIBIT NOS. 39 AND 40 WERE 4 5 RECEIVED INTO EVIDENCE.) 6 MR. MITTEN: I have no further questions 7 for Mr. Davis. He's available for cross-examination. JUDGE WOODRUFF: All right. Let's for 8 9 cross-examination begin with Sierra Club. CROSS-EXAMINATION BY MR. ROBERTSON: 10 11 Mr. Davis, you testified that on the Q. 12 residential class at least, half of the customers will see 13 a reduction in bills and half will see an increase in 14 bills if this change is made, is that correct, on the 15 residential customer charge? 16 That's correct. Α. 17 Ο. And you say the impact will be small, mostly between 5 and \$25 annually, right? 18 19 For those customers who do experience an Α. increase, most of that will be between 5 and \$25 a year, 20 21 yes. 22 Q. And that will be on top of any additional 23 rate impacts that occur if Ameren gets a rate increase in this case; is that right? 24 25 Yes, for those customers, and the other Α.

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Page 2114 customers who will see a decrease will see a decrease on 1 2 top of any other rate increase the company receives. 3 Ο. You testified that 58 percent of LIHEAP 4 customers, Low Income Home Energy Assistance Program 5 customers, will be better off with a \$12 charge; is that right? 6 7 Α. Yes. 8 Q. Would you agree that low income customers 9 with higher usage are more likely to seek assistance 10 through LIHEAP? I don't know if they're more likely to seek 11 Α. 12 assistance. I would agree that a higher portion of their 13 income is dedicated to electricity bills. 14 Q. And you do testify that it's those low income customers with higher usage who will benefit from 15 the higher charge; is that correct? 16 17 Α. Yes. 18 Is that because they'll be paying a lower Q. 19 volumetric rate? 20 That's because they'll be paying a lower Α. 21 volumetric rate, so their total bill will be lower. 22 0. That's because -- well, in order to collect 23 the same revenue requirement, if the customer charge goes 24 up, the volumetric rate goes down; is that correct? 25 Α. Yes.

Page 2115 1 **Q**. So if these people are benefiting from 2 having a lower volumetric charge would then motivate them 3 to use less energy? Could you repeat that, please? 4 Α. 5 Q. If these customers are benefiting from having a lower volumetric charge, does that motivate them 6 7 to use less energy? 8 Α. I can say that it would -- you're talking 9 about low -- I'm sorry. Are you talking about low income customers? 10 11 Well, yeah, I am, but I could generalize Q. 12 the question. 13 Α. Okay. So for those low income customers, if they have a lower volumetric charge, it would 14 slightly -- in general, it would reduce their incentive to 15 16 decrease usage, but again, in this case the company's 17 proposal is to -- the size of the change is relatively small, going from 91 percent of total costs being 18 collected in the volumetric rate down to 89 percent of 19 total costs. 20 21 Now, you do -- the company has estimated it Q. 22 should be able to collect customer charge of 20 percent 23 and also referred frequently to straight fixed variable rate design. Can you assure me that if customer charges 24 25 are increased in this case, that you will not seek further

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Page 2116 1 increases in later rate cases? 2 Α. No, I cannot do that. 3 ο. Now, you also say that my witness, 4 Ms. Morgan, did not quantify the effects of a change in 5 payback periods for efficiency measures; is that correct? Α. Yes. 6 7 Did you yourself do a quantitative analysis Q. 8 before your surrebuttal testimony? 9 Α. Before my surrebuttal testimony, no. 10 Q. And in your rebuttal testimony, the final 11 page 15, you have a table, Table 2, comparison of 12 residential. What you've done here, correct me if I'm 13 wrong, is estimate the effect on all your -- all of 14 Ameren's efficiency programs, their cost effectiveness 15 under both the ratepayer impact measure and the 16 participant cost test; is that right? 17 Α. In that table, that's correct. I also pointed out on the previous page that there is no change 18 to total resource cost test or the utility cost test. 19 20 Because of the way that benefits and costs Q. 21 are allocated in those various tests; is that right? The way they're accounted for. 22 Α. 23 But under Table 2 on page 15, all of your Q. programs score as less cost effective with a \$12 customer 24 25 charge than with an \$8 charge; is that right?

Page 2117 I don't think I'd agree with that. I point 1 Α. 2 out that what I testified to was that there was a 3 2 percent degradation in the participant cost test, but there was actually an improvement in the ratepayer impact 4 5 measure. 6 You're right, there is in some of them Q. 7 either no change or a slight improvement, one 8 percentage -- .01 improvement in the RIM test. But in any 9 event, all of your programs failed the RIM test; is that 10 right? 11 Right, but this is an opportunity to Α. 12 improve that score, if you will. MR. ROBERTSON: That's all I have. Thank 13 14 you. 15 JUDGE WOODRUFF: MECG? 16 MR. WOODSMALL: No questions. 17 JUDGE WOODRUFF: AARP? 18 MR. COFFMAN: Yes. 19 CROSS-EXAMINATION BY MR. COFFMAN: 20 Q. Good afternoon, Mr. Davis. 21 Α. Good afternoon. 22 Q. Just to establish the basics, I think you 23 may have testified on this, but do you believe that 24 customers respond to price signals as a general rule? 25 As a general rule, yes. Α.

|    | Page 2118  |
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| 1  | Q. And do you believe that a change in rates               |
| 2  | that would increase the customer charge by 50 percent in   |
| 3  | this case would be significant enough to cause a cause     |
| 4  | an increase in usage?                                      |
| 5  | A. I don't think so, and I think Mr well,                  |
| 6  | I don't think. I know Mr. Cooper testified to the fact     |
| 7  | that the change in the customer charge would be more       |
| 8  | consistent with cost causation.                            |
| 9  | Q. Well, that wasn't exactly my question.                  |
| 10 | Would consumers with a with more of the rate increase      |
| 11 | going to the volumetric or usage-based component, wouldn't |
| 12 | consumers see a bigger return on their conservation        |
| 13 | activities?  |
| 14 | A. As a very general rule, yes. In my                      |
| 15 | testimony I quantified that the company's proposal has a   |
| 16 | small impact on that, and also I think I think everyone    |
| 17 | in here has agreement that other things need to be         |
| 18 | considered when determining this sort of rate design       |
| 19 | proposal.  |
| 20 | Q. But just as a very basic concept, you would             |
| 21 | agree with me, wouldn't you, that the higher the           |
| 22 | volumetric rate is increased, the more benefit a consumer  |
| 23 | would see from energy efficiency or conservation measures? |
| 24 | A. Right. Conceptually from that single                    |
| 25 | perspective, I would agree with that.                      |

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Page 2119 1 0. Have you performed any studies that analyze 2 customer usage based on demographics that include age? 3 Α. No. 4 Q. Are you aware of any studies that have? 5 Α. No, I'm not. 6 Other than what you have placed in your Q. 7 testimony, have you performed any studies that look at 8 income, household income or household energy burden as it 9 relates to energy usage? 10 Α. Not in addition to what was included in my 11 written testimony. 12 Let's turn to that for a moment. On 0. page 10 of your rebuttal testimony, I believe you have a 13 14 Figure 1, a chart that shows the impact of increasing the customer charge from \$8 to \$12. And would it be a fair 15 16 reading of this chart to suggest that the -- approximately 17 13 percent of your lowest usage customers would see an increase in their monthly bill -- or annual bill from 25 18 to \$48? Is that about 13 percent? 19 20 Α. Yes. 21 And the 6 percent of your highest usage Q. 22 customers would save somewhere in the amount greater than 23 \$50? 24 Yes. Α. With a smattering of different results in 25 Q.

Page 2120 1 between; would that be fair? It's not necessarily an even 2 scattering of the savings between those? 3 Α. I wouldn't say it's even. I'd just point out that the high frequency amounts are in between 5 and 4 5 \$25, whether savings or from a cost perspective. Have you -- I know you said you haven't 6 Q. 7 reviewed any other analyses of low income customers and 8 their usage, but have you seen any analysis that suggests 9 that usage for low income customers may be a U shape with 10 a cluster of very low usage customers as well as a cluster 11 of high use customers? Have you seen any analysis like 12 that? 13 Α. I've seen some -- I can't remember when it I've seen some testimony from some gas cases that 14 was. 15 indicate that lower income customers have higher than average usage at one side of the U, as you will, and that 16 17 high income folks are on the other side of the U, and that somewhere in the middle is kind of the middle of that 18 19 shape. 20 So would you -- would you expect to see a Q. 21 cluster of very low usage customers amongst the group of 22 low income customers? 23 Α. I'm not sure I understood your question. Ι think what I would expect to see is that, from a low 24 income standpoint, there would be higher than average use 25

Page 2121 customers and lower than average use customers. 1 The 2 analysis I performed in my testimony was to try to help 3 understand if it's weighted more heavily one side or the other. 4 5 Q. Okay. Let me direct you to your testimony where you do have the -- the one quantification that you 6 7 do have that is sort of a surrogate for low income 8 customers you looked at in Figure 2, which is I believe on 9 page 13 of your rebuttal testimony. Are you suggesting 10 that the LIHEAP customers that you're aware of is a fair 11 surrogate of low income customers on the Ameren Missouri 12 system? 13 Α. I think it's a good data point to understand how the company's proposal would impact on low 14 15 income customers. 16 Q. Are you aware of what the participation 17 rate is in Missouri that is -- or penetration rate? That is, do you know what the official estimates are of 18 19 customers who might be eligible for LIHEAP assistance and 20 those who actually receive it? 21 Α. No, I do not know that. 22 Q. Would you be surprised if Missouri's 23 participation rate was between 10 and 20 percent? I don't know. 2.4 Α. 25 Do you have any experience working in the Q.

Page 2122 1 customer service role for your utility? 2 Α. No, I do not. 3 Q. You've never actually dealt on the phone or 4 in person with customers who were struggling with their 5 bills? 6 No, I have not. Α. 7 Would you expect that customers who sought Q. 8 LIHEAP assistance might be those customers who are 9 struggling with an inability to keep their homes energy 10 efficient, who have out-of-control high bills? I don't know what drives participation. 11 Α. Ι 12 would just expect the customers who are interested in that 13 program to be customers who have low income and have -and need some sort of energy assistance. 14 15 Q. Did you review any of the local public 16 hearing transcripts in this case or attend any of the 17 local public hearings? No, I have not. 18 Α. 19 Q. If you assumed with me that LIHEAP 20 participation in Missouri was no greater than 20 percent, 21 would you agree that your Figure 2 is not a very reliable 22 estimation of low income -- of the usage of low income 23 customers generally on your system? 24 Sir, maybe you can help me understand what Α. the 10 to 20 percent is. 25

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| 1  | Q. If you were to assume that participation in             |
| 2  | LIHEAP program was only 20 percent or less those customers |
| 3  | who would actually be eligible if they applied for LIHEAP? |
| 4  | MR. MITTEN: I'm going to object to the                     |
| 5  | question. Counsel is asking him to assume information      |
| 6  | about LIHEAP customers that's not in the record in this    |
| 7  | case and really is not going to get in the record in this  |
| 8  | case since the date for prefiling has actually passed.     |
| 9  | The witness said he doesn't know how many customers        |
| 10 | participate in LIHEAP. So I object to any further          |
| 11 | questions regarding that. That assumes facts that either   |
| 12 | aren't in evidence or aren't going to be in evidence.      |
| 13 | MR. COFFMAN: I'll withdraw the question,                   |
| 14 | but I will take issue with Mr. Mitten's suggestion that it |
| 15 | won't get in the record. There's still some                |
| 16 | cross-examination to go. We don't know yet exactly what    |
| 17 | the record will look like.                                 |
| 18 | JUDGE WOODRUFF: Are you withdrawing the                    |
| 19 | question?  |
| 20 | MR. COFFMAN: Yes. And that's all I have.                   |
| 21 | Thank you very much.                                       |
| 22 | THE WITNESS: Thank you.                                    |
| 23 | JUDGE WOODRUFF: Then for MIEC?                             |
| 24 | MS. VUYLSTEKE: No questions.                               |
| 25 | JUDGE WOODRUFF: Public Counsel?                            |

Page 2124 1 MR. MILLS: Thank you. 2 CROSS-EXAMINATION BY MR. MILLS: 3 Ο. Good afternoon, Mr. Davis. Α. Good afternoon. 4 5 Are you familiar with the reconciliation in Q. this case that shows the range of probable outcomes 6 7 depending on how the Commission decides various issues in 8 this case? 9 Α. No, I'm not. 10 Under your proposal to increase the Q. 11 customer charge from -- and focusing solely on residential 12 for this question -- to raise the customer charge from \$8 13 to \$12, can you envision a scenario in this case in which 14 any customers will be better off given that increase along 15 with any increase in volumetric rates that's part of the outcome of this case? 16 17 Α. Just to make sure I understood your question, are you referring to the net impact? 18 19 Q. The net impact on customers in this case of 20 your proposal to increase the customer charge as well as 21 to increase overall rates. I don't know the answer. I would expect 22 Α. 23 most -- I would expect for the most part everyone would see an increase of some amount. 24 25 Now, in your rebuttal testimony you, like Q.

Page 2125 1 Mr. Cooper, point to both other Missouri IOUs and Missouri 2 electric coops and their customer charges, do you not? 3 Α. Right. We felt like that was a useful data point for consideration as the Commission was thinking 4 5 about what an appropriate customer charge level may be. 6 Did you look at any of the cost studies Q. 7 that underlay the establishment of those customer charges? 8 Α. No, I have not. 9 Are you recommending that any other rate 0. elements from any of those companies be adopted for Ameren 10 Missouri in this case? 11 12 Α. Not that I'm aware of. 13 Q. Now, you talk in your testimony about the 14 customer charges for a couple of gas companies, and in 15 particular you mention Missouri Gas Energy's straight fixed variable and resulting customer charge that they 16 17 have implemented, correct? 18 Yes, as an example to understand what Α. proposals had been approved in the past and comparing that 19 20 to the company's proposal to understand whether or not 21 rate shock was an issue. 22 0. And do you know how many complaints the Public Service Commission and the Public Counsel have 23 24 received about MGE's high fixed charges? 25 Α. No, I do not.

Page 2126 1 **Q**. Is customer acceptance of high fixed 2 charges a relevant consideration for the Public Service 3 Commission on this issue? Α. Sorry. Could you repeat that? 4 5 Q. Should the Public Service Commission consider whether or not customers are accepting of or 6 7 resistent to high fixed charges when it decides this 8 issue? I believe the Commission needs to consider 9 Α. how customers would respond to a change in the customer 10 11 charge. I think that was your question. 12 Yes. Now, in your rebuttal testimony, on Q. 13 page 12, you begin -- specifically at line 5, you begin a 14 discussion of low income customers, correct? 15 Sorry. Which line number? Α. 16 Page 12, line 5. Q. 17 Α. Okay. 18 Q. And as you use that term low income customers on line 5, how do you define that? 19 20 Α. I guess one general definition may be that 21 they are at or below the poverty line established by the 22 Federal Government. 23 **Q**. And --24 I don't think I had a specific definition Α. in mind when I wrote that. 25

Page 2127 1 0. Okay. Well, let me ask you this. Do you 2 believe that the -- the universe of Ameren Missouri 3 customers who have received LIHEAP assistance is the same as the universe of Ameren Missouri's low income customers? 4 5 Α. I would believe that the LIHEAP analysis -the LIHEAP customers that are part of this analysis are a 6 7 reasonable representation of the universe of low income 8 customers. 9 And what analysis did you do to come to 0. that conclusion? 10 I didn't do any analysis to come to that 11 Α. 12 conclusion. I'm just relying on the fact that I have 14,000 -- over 14,000 accounts included in the analysis. 13 14 But you don't know how many more customers Q. would qualify as low income under your definition or under 15 the LIHEAP definition, do you? 16 17 Α. No. 18 Q. How many customers does Ameren Missouri have, total residential customers? 19 20 I believe it's around one million. Α. 21 Now, with respect to customers who actually Q. 22 participate in LIHEAP, do you know whether customers have to seek assistance from LIHEAP? 23 24 My understanding is there's an application Α. process, so that would imply that they have to, you know, 25

Page 2128 seek out some paperwork, fill it out and submit that. 1 2 It doesn't just automatically flow to Q. 3 customers based on income level? That's not my understanding. 4 Α. 5 So is it your testimony that the customers Q. who do participate in LIHEAP are representative of low 6 7 income customers in general? I think this is a fair representation based 8 Α. on -- I think it's at least the best available information 9 we have. I'd also point out that, just to kind of put it 10 into perspective, we have 14,000 accounts here. When we 11 12 do our load research for our residential customers, we have less than 300 sample points representing all 13 1 million customers. 14 15 Those 300 sample points are selected Q. 16 specifically to be a representative sample, are they not? 17 Α. They are. 18 Q. And the LIHEAP customer group was not, was 19 it? No. It was the best available data we had 20 Α. 21 on low income customers. 22 Q. Isn't the group of customers who actually 23 participate in LIHEAP by definition made up of people who 24 historically have had difficulty paying their bills? 25 I don't think I know the answer to that. Α.

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Page 2129 All I know is the requirements for LIHEAP I think are 1 2 based on income levels and household size. I don't know 3 about the history of participation or assistance needs. The LIHEAP participants that you looked at 4 Q. 5 were from an historical period, correct? 6 Α. Yes. 7 Okay. Would it be your expectation that Q. 8 customers who were not having difficulty paying their 9 bills would apply for LIHEAP? 10 If they were not having difficulty paying Α. 11 for their bills, they may not be eligible. 12 If they were eligible, would it be your Q. 13 expectations that customers who were eligible but not have 14 difficulty paying their bills would apply for LIHEAP? 15 Α. No. And isn't it also true that a low income 16 Q. 17 customer with a low monthly bill would be less likely to seek assistance than a low income customer with a high 18 monthly bill? 19 20 MR. MITTEN: I'm going to object to the 21 question on the grounds it asks the witness to speculate. MR. MILLS: I'm not asking the witness to 22 speculate. If he doesn't know, he can say he doesn't 23 24 know. I'm trying to get to how thoroughly he vetted this group of customers to determine whether they were 25

Page 2130 representative of low income customers. 1 2 JUDGE WOODRUFF: Overrule the objection. 3 You can answer the question. THE WITNESS: Could you please repeat that? 4 5 BY MR. MILLS: 6 Yes. Wouldn't you expect that a low income Ο. 7 customer with a low monthly bill would be less likely to 8 seek assistance than a low income customer with a high 9 monthly bill? 10 I don't know. I think it may -- it would Α. also depend on what their total income is. Just because 11 12 they have a low bill, if they have even lower income, it 13 may still be a burden to them. 14 0. All else being equal, though, wouldn't my question, wouldn't you agree with it? 15 16 All else being equal, that would be Α. 17 conceptually correct. 18 Q. Doesn't your proposal to raise the customer 19 charge impact customers with low monthly bills more than 20 customers with higher monthly bills? 21 Α. I'm sorry. Could you repeat that? 22 0. Yes. Doesn't your proposal to raise the 23 customer charge from \$8 to \$12 impact customers with low 24 monthly bills more than it impacts customers with high 25 monthly bills? Let me rephrase that and say negative

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Page 2131 1 impacts. 2 Α. That may not be true from a dollars 3 perspective, but it may be true from a percentage perspective. So as a percentage of their bill, it may be 4 5 higher, but from a just absolute dollars perspective, that 6 may not be true. 7 But from a percentage perspective it would Q. 8 be, would it not? 9 Α. I think so, yes. 10 Low income customers would see a higher Q. 11 percent increase on their bills from the change in the 12 customer charge, the volumetric charge than would high 13 bill customers? 14 Α. Right. So the dollar size would be maybe 15 comparable, but just because their bill is lower, just by 16 the math it would result in a higher percentage. 17 ο. Now, still on page 12 of your rebuttal testimony, at line 13, you point out that the LIHEAP 18 participants as an overall group would be slightly better 19 20 off with the \$12 customer charge, correct? 21 Α. Yes. 22 Q. How slightly? 23 I don't remember in terms of dollars. Α. Ι 24 think it was maybe a few tenths of a percent. 25 A few tenths of a percent? Q.

Page 2132 1 Α. Right. 2 And you believe that's significant enough Q. 3 to point out to the Commission? Α. I believe that's why I characterize it as 4 5 slightly. 6 Now, in your rebuttal testimony at the very Q. 7 end on page 16, you talk about the effects of a hot 8 summer, correct? Α. 9 Yes. 10 Did you do any quantitative analysis in Q. terms of how much better off customers would be depending 11 12 on certain weather patterns? 13 Α. No. I just pointed out that because the volumetric charge is going down, that the marginal cost of 14 15 an additional unit of electricity would be lower. 16 So this is -- this is really sort of a Q. 17 directional analysis rather than a quantitative analysis? 18 Α. On this particular question, yes. 19 Q. A couple of questions about your 20 surrebuttal testimony, if you have that with you. I was 21 going to ask you to calculate the percentage that's on the top of page 2 at line 1, but we've already been through 22 23 that --24 Right. Α. 25 -- with Mr. Cooper, and I appreciate Q.

Page 2133 1 Mr. Mitten correcting my math. 2 Did you calculate a change in payback 3 periods from changing the SGS customer charges in the same way that you did for residential customer charges? 4 5 Α. No, not the same way. I didn't do that analysis. The way we do our cost effective screening for 6 7 the business side is different because we market programs just to the business class, so it wasn't really accessible 8 9 to peel out the SGS participation, run the analysis, but I 10 would expect the impact to be similar magnitude-wise. 11 Now, your analysis throughout both pieces Q. 12 of your testimony contemplates an increase in all three of these customer charges of 50 percent, correct? 13 14 Α. Yes. 15 Did you do any quantitative analysis of an Q. increase in customer charges of less than 50 percent? 16 17 Α. I'm sorry. Could you repeat that? For example, the Staff has proposed an 18 Q. increase of customer charge for residential customers from 19 20 \$8 to \$9. Did you do any quantitative analysis similar to 21 what you did for the increase from \$8 to \$12 on the impact 22 of increasing from \$8 to \$9? Specifically related to my surrebuttal 23 Α. 24 or --25 Any of your testimony? Q.

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| 1  | A. No, I haven't. I would point out that in                |
| 2  | terms of something like the payback period, you know,      |
| 3  | since the impact from going from 8 to 12 is 12 days, going |
| 4  | from 8 to 9 would probably be roughly a quarter of that,   |
| 5  | which may be, what, three days. I think something like     |
| 6  | that's easy to kind of interpellate what the impact would  |
| 7  | be.  |
| 8  | Q. But you didn't do an analysis of the number             |
| 9  | of customers that would be affected or how much they would |
| 10 | be affected by for a lower increase in the customer        |
| 11 | charge?  |
| 12 | A. No.   |
| 13 | MR. MILLS: That's all I have. Thank you.                   |
| 14 | JUDGE WOODRUFF: For Staff?                                 |
| 15 | CROSS-EXAMINATION BY MS. McCLOWRY:                         |
| 16 | Q. I just have a few questions for you. In                 |
| 17 | your rebuttal testimony, you talk a little bit about       |
| 18 | moving how moving the customer charge from 8 to $$12$ ,    |
| 19 | your confusion about how it could cause rate shock; is     |
| 20 | that correct?  |
| 21 | A. I guess you're paraphrasing that.                       |
| 22 | Q. You say, it is difficult to see how this                |
| 23 | constitutes rate shock; is that correct?                   |
| 24 | A. Could you point me where that is?                       |
| 25 | Q. Line 15.  |

Page 2135 Which page? I'm sorry. 1 Α. 2 Page 9. Q. 3 Α. Right. Thinking -- talking about the maximum increase of \$48 which would be applicable to 4 5 someone who uses zero electricity every month, and then I go on to provide some examples of why I believe that. 6 7 Q. And you talk about how in the past the 8 Staff of the Commission has recommended customer charge 9 increases that were from 15 to over \$30; is that correct? 10 That's moving on to page 10. 11 Yes, to provide an example, again, to Α. 12 provide context for the company's proposal in this case 13 relative to what's been proposed in other cases. 14 I didn't really ask for any context, but Q. 15 thank you. 16 So you actually in your testimony do bring 17 up some examples, and they're all gas cases; isn't that correct? 18 19 Yes. Α. 20 Would you agree with me that there are Q. 21 differences between the regulation of gas utilities and 22 electric utilities in the state of Missouri, if you know? Ι 23 Α. I would agree that there's differences. would also expect that customer attitudes towards changes 24 in their fixed customer charges, though, may be similar. 25

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| 1  | MS. McCLOWRY: I have no further questions.                 |
| 2  | JUDGE WOODRUFF: Come up to questions from                  |
| 3  | the Bench. Commissioner Jarrett?                           |
| 4  | COMMISSIONER JARRETT: Good afternoon,                      |
| 5  | Mr. Davis.   |
| 6  | THE WITNESS: Good afternoon, Commissioner.                 |
| 7  | COMMISSIONER JARRETT: I don't have any                     |
| 8  | questions, but thanks for your testimony.                  |
| 9  | THE WITNESS: Thank you.                                    |
| 10 | JUDGE WOODRUFF: Commissioner Kenney.                       |
| 11 | QUESTIONS BY COMMISSIONER KENNEY:                          |
| 12 | Q. Just a few, Mr. Davis. Thank you. Can you               |
| 13 | hear me okay?  |
| 14 | A. Yes, I can.   |
| 15 | Q. Were you in the room when I was asking                  |
| 16 | Mr. Cooper some questions?                                 |
| 17 | A. Yes, I was.   |
| 18 | Q. Okay. So you know, you have some general                |
| 19 | idea what I'm going to ask. I'm going to ask about the     |
| 20 | throughput disincentive and whether the parties that       |
| 21 | negotiated the MEEIA settlement contemplated or understood |
| 22 | that an increase to the customer charge would be addressed |
| 23 | in this general rate proceeding.                           |
| 24 | A. The stipulation specifically states that                |
| 25 | the customer charge will be determined in this case. The   |

|    | Page 2137  |
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| 1  | stipulation also specifically states how the revenue       |
| 2  | requirement portion of the throughput disincentive will be |
| 3  | determined if it changes, and that's lined out that's      |
| 4  | spelled out as using a linear interpellation if there's a  |
| 5  | change specifically designed to make sure there's no       |
| 6  | double counting of the throughput disincentive.            |
| 7  | Q. So if the customer charge is increased in               |
| 8  | this case, there will be a downward adjustment to the      |
| 9  | revenue requirement for purposes of the MEEIA settlement?  |
| 10 | A. Yes. And the parties have agreed to the                 |
| 11 | method and how we would calculate that adjustment.         |
| 12 | Q. Is it essentially a dollar for dollar                   |
| 13 | adjustment?  |
| 14 | A. It's linear. I mean, one dollar change in               |
| 15 | customer charge equals X dollars on the throughput         |
| 16 | disincentive. So it is linear in that way, yes.            |
| 17 | Q. Okay. And let me ask you something. I                   |
| 18 | mean, essentially by raising the customer charge and       |
| 19 | recovering more of Ameren's fixed charges through that     |
| 20 | customer charge, is that, you know, a way of moving        |
| 21 | towards some type of decoupling mechanism?                 |
| 22 | A. Well, I guess you could characterize it as              |
| 23 | a move towards a decoupling mechanism, but it would be a   |
| 24 | very small movement towards that. And by decoupling        |
| 25 | mechanism, the presumption is that you would be moving     |

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| 1  | towards something like straight fixed variable, and since |
| 2  | we're at we're talking about increasing the amount of     |
| 3  | fixed costs being collected in the in the fixed charge    |
| 4  | going from 9 to 11 percent, you can tell that we'd have a |
| 5  | very long way to go before we even got close to that. So  |
| 6  | I wouldn't really characterize the company's proposal as  |
| 7  | movement towards decoupling.                              |
| 8  | Q. What would the customer charge need to be              |
| 9  | to collect 100 percent of Ameren's fixed charges?         |
| 10 | A. I think it would have to be probably close             |
| 11 | to \$90.  |
| 12 | COMMISSIONER KENNEY: Okay. That's all I                   |
| 13 | have. Thank you.  |
| 14 | JUDGE WOODRUFF: Commissioner Stoll?                       |
| 15 | COMMISSIONER STOLL: I have no questions,                  |
| 16 | your Honor. Thank you for your testimony.                 |
| 17 | THE WITNESS: Thank you.                                   |
| 18 | JUDGE WOODRUFF: Anyone wish to recross                    |
| 19 | based on those questions from the Bench? I don't see any  |
| 20 | hands going up, so redirect.                              |
| 21 | MR. MILLS: I'm sorry, Judge. Did you ask                  |
| 22 | about questions based on Commissioner questions?          |
| 23 | JUDGE WOODRUFF: Yes.                                      |
| 24 | MR. MILLS: I do have some.                                |
| 25 | JUDGE WOODRUFF: All right. Go ahead.                      |

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Page 2139 RECROSS-EXAMINATION BY MR. MILLS: 1 2 Mr. Davis, in response to questions from Q. 3 Commissioner Kenney, you talked about the MEEIA stipulation, correct? 4 5 Α. Yes. 6 You have a copy of that attached to your Ο. 7 rebuttal testimony, correct? 8 Α. Yes, I do. 9 ο. Does that Stipulation & Agreement only 10 contemplate changes to the residential customer charge and 11 not to the SGS customer charge, customer charges? 12 Α. Yes, it does. That's why in my surrebuttal 13 testimony I included what the adjustment would have to be made to accommodate the company's change in SGS customer 14 15 charge. 16 Q. But that wasn't contemplated at the time 17 the agreement was entered into, was it? 18 No, it was not part of the MEEIA case. Α. 19 Q. And no other party has agreed to the 20 calculations in your testimony, have they? 21 Α. Not to my understanding. I don't know that they're opposed to them either, one way or the other. 22 23 MR. MILLS: No further questions. JUDGE WOODRUFF: Then redirect. 24 25 REDIRECT EXAMINATION BY MR. MITTEN:

Page 2140 1 0. Mr. Davis, do you recall Mr. Robertson 2 asked you some questions regarding the chart that is on 3 page 15 of your rebuttal testimony? Yes. 15? The table on page 15? 4 Α. 5 Yes. Q. Yes. 6 Α. 7 Q. Could you tell me why you did calculations 8 for the PCT and RIM tests? 9 Α. Yes. The participant cost test compares the benefits a participant receives versus the costs of 10 11 the programs basically, while the ratepayer impact measure 12 test compares the cost to customers who cannot participate 13 in the program, and it measures a -- basically, in the participant cost test, the fixed cost portion of bill 14 15 savings are a benefit, but in the ratepayer impact measure test those same savings are a cost. So it helps 16 17 understand the interplay between shifting costs between participants and non-participants in our programs. 18 19 An Mr. Robertson also noted that on the Q. 20 chart, Table 2, the proposed increase in the monthly 21 customer charge for residential customers failed the RIM 22 test in every instance; is that correct? 23 Α. Yes. 24 Q. Is that significant for purposes of this 25 case?

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| 1  | A. No. It failed the RIM test at the \$8                   |
| 2  | customer charge and \$12 customer charge. In fact, what we |
| 3  | saw in this case was going with the \$12 customer charge   |
| 4  | would actually improve the results of that test.           |
| 5  | Q. Mr. Coffman also asked you whether or not a             |
| 6  | higher volumetric rate would provide more benefits to      |
| 7  | customers who invested in energy efficiency measures. Do   |
| 8  | you recall that question?                                  |
| 9  | A. Yes.  |
| 10 | Q. And I believe you agreed that theoretically             |
| 11 | that's the case?   |
| 12 | A. Yes, I did.   |
| 13 | Q. Would doing away with the customer charge               |
| 14 | altogether and putting 100 percent of Ameren Missouri's    |
| 15 | revenue requirement on volumetric rates even increase the  |
| 16 | benefit to customers who participate in the energy         |
| 17 | efficiency programs even more?                             |
| 18 | A. Yes, it would. Again, that's a good                     |
| 19 | example of why it's important to take a balanced view,     |
| 20 | consider the costs from the cost of service studies and    |
| 21 | other factors such as how the Commission might expect      |
| 22 | customers would receive a change in customer charge.       |
| 23 | Q. Mr. Mills also asked you about the                      |
| 24 | information that you included in your rebuttal testimony   |
| 25 | about the customer charges of other investor-owned         |

Page 2142 1 utilities in Missouri and various coops in the state. Do 2 you recall that question? 3 Α. Yes. 4 Q. And you said that was a useful data point. 5 Could you explain that, please? 6 Yes. As I just mentioned, it's important Α. 7 to balance different perspectives, and what I provided in my testimony is a lot of different data points for the 8 9 Commission to consider as they're going -- thinking 10 through this process: What's the impact on the overall customers? What's the impact on a representation of low 11 12 income customers? How does the company's customer charge 13 compare to other investor-owned utilities? How does it compare to other Missouri cooperatives? How does it 14 15 impact the participants of its programs? How does it impact the nonparticipants of its programs? 16 17 All these factors are important, and my testimony provides analysis on each one of those factors. 18 19 MR. MITTEN: I don't have any further 20 questions. Thank you, Mr. Davis. 21 JUDGE WOODRUFF: Then, Mr. Davis, you can 22 step down. 23 It's now almost one o'clock. We're past due time for lunch. We'll take a break now and come back 24 25 at two o'clock.
Page 2143 1 (A BREAK WAS TAKEN.) 2 JUDGE WOODRUFF: We're back from lunch, and 3 there were some discussions while we were off the record. Mr. Mills, do you want to deal with that? 4 5 MR. MILLS: Yes. Thank you, your Honor. It appears as though none of the parties have any 6 7 questions for either Barb Meisenheimer or Ryan Kind on 8 this -- well, on this or any other issues, and so unless 9 the Commissioners have questions, I would like to simply offer their testimony at this time. 10 JUDGE WOODRUFF: All right. What numbers 11 12 were their testimony? 13 MR. MILLS: That would be Exhibits 402, 403. Let me explain what they are. 402 is Meisenheimer's 14 15 direct on revenue requirement. 403 --16 JUDGE WOODRUFF: That's already in. 402 is 17 already in. 18 MR. MILLS: So all of Meisenheimer's is 19 probably in. 20 JUDGE WOODRUFF: No. Just 402. 21 MR. MILLS: Okay. So 403, Meisenheimer direct testimony on rate design; 404, Meisenheimer 22 rebuttal; 405, Meisenheimer surrebuttal; 400, which is 23 Kind rebuttal; and 401, which is Kind surrebuttal. 24 25 JUDGE WOODRUFF: All right. 400, 401, 403,

Page 2144 404 and 405 have been offered. Any objections to their 1 2 receipt? 3 (No response.) JUDGE WOODRUFF: Okay. Hearing none, they 4 5 will be received. (OPC EXHIBIT NOS. 400, 401, 403, 404 AND 6 7 405 WERE RECEIVED INTO EVIDENCE.) 8 MR. MILLS: Thank you. 9 JUDGE WOODRUFF: All right. 10 MR. MILLS: And they both are here today, and if the Commissioners come in later and have questions, 11 12 we can manage to round them up and present them for 13 Commissioner questions. 14 JUDGE WOODRUFF: That's fine. Thank you. The next witness on my list was Mr. Brubaker for MIEC. 15 Before you come up, Mr. Brubaker, I want to ask, does 16 17 anyone have any questions of Mr. Brubaker about the customer charge issue? 18 19 We talked about bringing him up later to talk about the stipulations. I propose to finish off 20 21 Mr. Scheperle then on the customer charge issue and then we'll deal with the others. All right. Then we'll bring 22 up Mr. Scheperle. Good afternoon. 23 MR. SCHEPERLE: Good afternoon. 24 25 JUDGE WOODRUFF: This is the first time

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     you've testified, isn't it?
 1
 2
                    MR. SCHEPERLE: Yes.
 3
                    JUDGE WOODRUFF: Please raise your right
     hand. I'll swear you in.
 4
 5
                    (Witness sworn.)
 6
                    JUDGE WOODRUFF: Thank you. You may
 7
     inquire.
     MICHAEL SCHEPERLE testified as follows:
 8
     DIRECT EXAMINATION BY MS. McCLOWRY:
 9
10
             Q.
                    Good afternoon, Mr. Scheperle. Can you
11
     please state your name for the record?
12
             Α.
                    Michael S. Scheperle.
13
             Q.
                    Can you spell your last name for the court
14
     reporter?
15
                    S-c-h-e-p-e-r-l-e.
             Α.
16
                    And by who are you employed and in what
             Q.
17
     capacity?
18
             Α.
                    I am employed by the Missouri Public
19
     Service Commission Staff, and I'm the manager of the
     Economic Analysis Section.
20
21
                    And are you the same Michael Scheperle who
             Q.
22
     prepared, sponsored and caused to be filed Staff's rate
23
     design and class cost of service reported filed on
     July 19th, 2012, marked as Exhibit 205?
24
25
             Α.
                    Yes.
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Page 2146 1 0. And are you the same Michael Scheperle who 2 prepared and caused to be filed direct testimony in this 3 matter marked as Exhibit 204? Α. Yes. 4 5 Q. And are you the same Michael Scheperle who prepared and caused to be filed rebuttal testimony in this 6 7 matter filed on August 14th, 2012, marked as Exhibit 212? 8 Α. Yes. 9 ο. Do you have any corrections to the report or to your other testimony that have been -- have not been 10 addressed in subsequent testimony? 11 12 Α. No. 13 Q. Is the testimony that you have filed in 14 this matter true and accurate to the best of your 15 knowledge and belief? 16 Α. Yes. 17 ο. And if asked the same questions today as were contained in your testimony in this case, would your 18 19 answers be the same? 20 Α. Yes. 21 MS. McCLOWRY: At this time I move for the admission of Staff's report concerning rate design and 22 class cost of service, Exhibit 205, as well as Exhibit 204 23 and 212 representing Mr. Scheperle's direct and rebuttal 24 25 testimony.

Page 2147 JUDGE WOODRUFF: 204, 205 and 212 have been 1 2 offered. Any objections? 3 (No response.) JUDGE WOODRUFF: Hearing none, they will be 4 5 received. 6 (STAFF EXHIBIT NOS. 204, 205 AND 212 WERE 7 RECEIVED INTO EVIDENCE.) MS. McCLOWRY: I tender the witness for 8 9 cross-examination. 10 JUDGE WOODRUFF: Thank you. And for cross, we begin with Public Counsel. 11 12 CROSS-EXAMINATION BY MR. MILLS: 13 Q. Mr. Scheperle, were you here when I asked questions of Mr. Warwick about Exhibit 410? 14 15 Α. Yes. 16 Q. When you looked at costs to classify as 17 customer related for purposes of determining customer 18 charges, did you include amounts for Accounts 364 through 19 368? 20 Α. I do not have a copy of that. 21 MR. MILLS: Judge, may I approach? JUDGE WOODRUFF: You may. 22 23 THE WITNESS: You asked the question, did I include any -- any amounts for the customer charge for 24 Accounts 364 through 368? 25

Page 2148 BY MR. MILLS: 1 2 Q. Yes. 3 Α. No, I did not. 4 Q. And why not? 5 Α. I did not think that they were customer 6 related. 7 Okay. And have you done other class cost Q. 8 of service studies to evaluate what an appropriate 9 customer charge would be for other electric utilities? 10 Yes, I have. Α. 11 And have you included those -- any amounts Q. 12 from those accounts for those other utilities in the 13 calculation of a proper customer charge? 14 When I was new to my current position, I Α. think I did in the first study, but on reexamination on 15 later studies, I have not. 16 17 Ο. As you got older and wiser, you determined 18 that was wrong? 19 Α. Yes. 20 Now, your cost of service study showed that Q. 21 the appropriate amount to include in a customer charge for 22 the residential class was a little less than \$9, correct, 23 about 8.97? That is correct. 24 Α. 25 And so you're recommending actually a Q.

Page 2149 1 customer charge that is higher than what your customer 2 charge supports? 3 Α. I rounded it to \$9. 4 Q. By those three cents? 5 Α. Yes. 6 Okay. Now, when you calculated the costs Q. 7 that should be included for a customer charge, did you 8 include uncollectible amounts? 9 Α. Yes, I did. 10 For an average residential customer, is the Q. 11 customer charge component or the energy charge component 12 larger on an average bill? 13 Α. The energy charge would be larger. 14 Q. Okay. Is that generally true for all 15 classes? 16 Yes. Α. 17 ο. So when customers default on their bills, the uncollectible amount is more energy related than 18 customer related, is it not? 19 20 The amount that would be written off, yes, Α. 21 it would be. 22 Q. Now, are you aware that the concerns of 23 OPC, AARP and perhaps others about the proposed customer 24 charge increase on low income customers in this case? 25 Α. Yes.

Page 2150 1 **Q**. Has the Commission recently opened a case 2 to study low income issues? 3 Α. I'm aware of that. Could a thorough examination of customer 4 Q. 5 charges on low income customers be done in that case? 6 Α. Yes. 7 Have you done a thorough examination of the Q. 8 impact of changes to customer charges on low income 9 customers in this case? 10 Α. No. 11 Do you believe that anyone has done a Q. 12 thorough examination of that question in this case? Sitting here this morning, I don't believe 13 Α. they've done a thorough job on it. 14 15 MR. MILLS: That's all the questions I 16 have. Thank you. 17 JUDGE WOODRUFF: All right. Let's go to 18 AARP. 19 MR. COFFMAN: No questions. Thank you. 20 JUDGE WOODRUFF: Sierra Club? 21 MR. ROBERTSON: No questions. 22 JUDGE WOODRUFF: MIEC? MS. VUYLSTEKE: No questions. 23 JUDGE WOODRUFF: Ameren? 2.4 25 MR. MITTEN: Thank you, your Honor.

Page 2151 CROSS-EXAMINATION BY MR. MITTEN: 1 2 Mr. Scheperle, do you still have a copy of Q. 3 Exhibit 410? Α. Yes. 4 5 Q. And I believe it was your testimony that you did not include any of the costs in Accounts 364 6 7 through 368, you did not classify those as customer 8 related; is that correct? 9 Α. That is correct, for the customer charge. 10 Now, when Mr. Warwick was on earlier today, Q. 11 he defined customer related as the cost of providing 12 service irrespective of the amount of electricity sold. 13 Do you agree with that definition? 14 Would you repeat the question? Α. 15 It would be the cost of providing service Q. 16 irrespective of the amount of electricity sold? 17 Α. I would agree with that definition. 18 Looking at Account 364, poles and fixtures, Q. what's in that account, Mr. Scheperle? 19 20 It would be poles and guide wires. Α. 21 Don't you have to have poles in order to Q. 22 provide service to customers irrespective of the amount of 23 energy they use? 2.4 To serve customers that would actually use Α. electricity, yes, you would need the poles to do it. 25

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| 1  | Q. But even if you were hooking up a customer              |
| 2  | who for one reason or another didn't use electricity,      |
| 3  | wouldn't you have to have poles and guide wires to provide |
| 4  | service to that customer?                                  |
| 5  | A. If they were not going to use any                       |
| 6  | electricity, I don't see why you would need that.          |
| 7  | Q. Well, but you don't know that. Let's                    |
| 8  | assume they go on vacation for six months and aren't using |
| 9  | electricity for six months. You'd still have to have       |
| 10 | poles and wires so that if they turn on the switch when    |
| 11 | they came back they'd have power, wouldn't they?           |
| 12 | A. You would need those facilities for usage,              |
| 13 | for KWH usage.   |
| 14 | Q. And Account 365, wires and devices, what's              |
| 15 | in that account?   |
| 16 | A. Well, it would be the wires. They could be              |
| 17 | overhead wires or underground wires to serve customers     |
| 18 | that use electricity.                                      |
| 19 | Q. And again, don't you have to have those so              |
| 20 | that when a customer flips on the switch, they get power   |
| 21 | to their residence?  |
| 22 | A. If they are going to use electricity, yes.              |
| 23 | Q. But even when the switch is off, you have               |
| 24 | to have those in the ground so that whenever they decide   |
| 25 | to use electricity, it will be there, correct?             |

Page 2153 When they are going to use electricity, 1 Α. 2 they would need to be there. 3 Ο. And how about Account 366, conduit, what's in that account? 4 5 Α. Conduit is kind of akin to 365 and 367. It 6 would be wires. 7 Q. And maybe we can shorten the questioning. 367, what's in that account? 8 Well, there's cables and devices, but I 9 Α. look at that as also wires and devices. 10 And since 367 and 366 are related to 11 0. 12 Account 365, would your answer be the same if I asked you if those investments have to be there in order for a 13 14 customer to have electricity whenever he or she flips on 15 the switch? 16 Α. Yes. 17 Q. And finally, Account 368, what is in that 18 account? 19 Well, it would be transformers. Α. 20 And again, don't you have to have Q. 21 transformers so that electricity is available to the 22 customer whenever he or she flips on the switch? 23 For them to use electricity, you would need Α. transformers. 24 25 Now, you also indicated earlier that you Q.

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| 1  | believed that for customers who default on their energy    |
| 2  | bill, a higher percentage of those default charges would   |
| 3  | be energy related rather than fixed cost related. Do you   |
| 4  | recall that?   |
| 5  | A. I recall that question, yes.                            |
| 6  | Q. And I believe it was your testimony that                |
| 7  | you believe a higher percentage of those charges would be  |
| 8  | energy related; is that correct?                           |
| 9  | A. That is correct, based on my usage and what             |
| 10 | I've seen from the electric industry.                      |
| 11 | Q. On an individual customer basis, wouldn't               |
| 12 | that determination depend on the amount of electricity     |
| 13 | that a customer used in a particular month?                |
| 14 | A. That would be true. I mean, if you have an              |
| 15 | \$8 if you have if you do not use any electricity and      |
| 16 | you have an \$8 customer charge, then it would be an       |
| 17 | \$8 customer charge and no energy charge.                  |
| 18 | Q. And can you quantify the percentage of                  |
| 19 | uncollectibles that relate to energy charges as opposed to |
| 20 | customer charges?  |
| 21 | A. No.   |
| 22 | Q. And just one final question. When we're                 |
| 23 | talking about an Ameren customer, is that someone who is   |
| 24 | simply connected to the Ameren system or does someone have |
| 25 | to actually use electricity to be considered a customer?   |

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Page 2155 It would be an Ameren cus-- an active 1 Α. 2 Ameren customer. 3 Ο. Well, again, my question is, is that 4 someone who's simply hooked up to the Ameren system and 5 has a billing account or does that person have to actually use electricity to be considered an Ameren customer? 6 7 Α. If they have a billing account, that would be sufficient. 8 MR. MITTEN: I don't have any further 9 questions. Thank you, Mr. Scheperle. 10 JUDGE WOODRUFF: All right. We'll come up 11 12 for questions from the Bench. Commissioner Stoll, do you have any questions? 13 14 COMMISSIONER STOLL: I have no questions, your Honor. Thank you for your testimony. 15 16 JUDGE WOODRUFF: No need for recross. Any 17 redirect? 18 MS. McCLOWRY: I just have one question. 19 REDIRECT EXAMINATION BY MS. McCLOWRY: 20 Mr. Scheperle, Mr. Mills asked you a Q. 21 question if you understood that OPC, AARP and NRDC, that 22 their concern was impact of the customer charge on low 23 income customers. Do you recall that? 24 Α. Yes. 25 What is Staff's objective? Q.

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| 1  | A. Well, Staff's objective is not to look at               |
| 2  | subgroups like that for rate design purposes.              |
| 3  | MS. McCLOWRY: That's the only question I                   |
| 4  | had. Thank you.  |
| 5  | JUDGE WOODRUFF: Thank you. And                             |
| 6  | Mr. Scheperle, you can step down. And I believe that       |
| 7  | takes care of the customer charge issue.                   |
| 8  | We'd talk about bringing Mr. Brubaker up                   |
| 9  | now to talk about the Stipulation & Agreement that was     |
| 10 | earlier filed. So if Mr. Brubaker would come forward.      |
| 11 | Mr. Brubaker, I recall you testified on the very first day |
| 12 | of the hearing; is that correct?                           |
| 13 | MR. BRUBAKER: That's correct.                              |
| 14 | JUDGE WOODRUFF: You are still under oath.                  |
| 15 | I believe all his testimony is also already in. Does the   |
| 16 | MIEC attorney want to question him at this point or $$     |
| 17 | MS. VUYLSTEKE: Sure. Your Honor, my                        |
| 18 | understanding is that it was the Commission's preference   |
| 19 | to have Mr. Brubaker testify to explain the nonunanimous   |
| 20 | stipulation that was filed last night, and so at this time |
| 21 | I would ask Mr. Brubaker to explain how the stipulation    |
| 22 | works, and then also to explain why he believes that it's  |
| 23 | reasonable.  |
| 24 | JUDGE WOODRUFF: All right.                                 |
| 25 | THE WITNESS: All right. Thank you.                         |

Page 2157 1 JUDGE WOODRUFF: Thank you. 2 MR. BRUBAKER: The stipulation addresses 3 interclass revenue allocation and a few miscellaneous rate design issues. As to the interclass allocation, there is 4 5 a three-step process. First, there's an adjustment to reduce the small general service, large general service 6 7 class revenues by about \$1.37 million and simultaneously 8 increase the lighting class revenues by that same amount. So it's a revenue neutral. 9 10 This provides some modest realignment and movement toward cost of service, so we preserve that 11 12 concept going forward, but is relatively minor. It's 4 percent on the lighting class, similar to the adjustment 13 on the lighting class last time. And the company's cost 14 15 of service study supports that from a cost of service basis, as do several other cost studies in the record 16 17 support that. 18 The second part is to recognize the energy efficiency costs, both the MEEIA and the pre-MEEIA, by 19 20 specifically assigning those dollars by customer class. 21 Those dollar assignments are shown in Table 2 on the 22 appendix to the stipulation. It's necessary to do that to 23 preserve the opt-out concept and to make sure that each 24 class pays its proper share of the energy efficiency 25 costs.

Page 2158 1 Dollars that are not then accounted for in 2 the energy efficiency column are then allocated to all the 3 classes as an equal percent of base rate revenues after making the adjustment between lighting and large general 4 5 service, small general service in step one. 6 So with the exception of the modest 7 adjustment between lighting and small general service, large general service, there is no further realignment 8 9 among classes to move toward cost. The only difference 10 from that point forward is the specific assignment of the MEEIA charges and the pre-MEEIA charges to be consistent 11 12 with the concept of opt-out, and each class bears its own 13 responsibilities for those costs. 14 In addition, in -- I believe it's in 15 paragraph 2, there are some minor points on the larger industrial and commercial rate schedules to provide for 16 17 consistency among those schedules in terms of certain charges. I think we did the same thing in the two prior 18 cases just to make sure we didn't have any abnormal and 19 20 ragged rate relationships. 21 And then there's also one other item, which is resolving some issues on rate five lighting that both 22 Staff and company have worked on and believe are 23 24 appropriate to be made. 25 That's -- I think those are the key points

Page 2159 of the stipulation on revenue allocation and these 1 2 particular rate design issues. 3 JUDGE WOODRUFF: Any of the other parties want to ask any questions of Mr. Brubaker? 4 5 MR. WOODSMALL: I don't want to ask any questions. I just want to note that the stipulation has 6 7 been signed and supported by MIEC, MECG, Staff and Missouri Retailers Association, and with Mr. Robertson's 8 9 statement today, all the parties have indicated that they are not opposing the stipulation. So I think we've 10 accounted for all parties. 11 12 JUDGE WOODRUFF: Very good. Commissioner 13 Stoll, did you have any questions? 14 COMMISSIONER STOLL: I don't. I will -the stipulation has been filed; is that correct? 15 16 MR. BRUBAKER: It's my understanding it has 17 been, yes. 18 JUDGE WOODRUFF: And the stipulation we're talking about is Staff's amendment to that? 19 20 MR. WOODSMALL: You're correct, your Honor. 21 There were two filed. The second one completely subsumes the first one. So the second one, the revised one it's 22 labeled, is the one that we'd asked to have approved. 23 COMMISSIONER STOLL: Okay. I will look at 24 25 that.

Page 2160 JUDGE WOODRUFF: Since not all the 1 2 Commissioners are here, they may have further questions 3 about it, in which case we'll set an on-the-record if that becomes necessary. 4 5 All right. Thank you, Mr. Brubaker. 6 MR. BRUBAKER: Very good. Thank you. 7 JUDGE WOODRUFF: And I believe that takes care of that issue. That, in fact, is all the issues. We 8 still need to take care of marking -- or admitting some 9 exhibits where the issues were resolved. 10 MR. THOMPSON: Right. That's what I was 11 12 going to take up. 13 JUDGE WOODRUFF: Okay. Should we do this party by party? 14 15 MR. THOMPSON: Absolutely. 16 JUDGE WOODRUFF: Let's start with Ameren. 17 MS. TATRO: Thank you. Exhibit 7, rebuttal testimony of Trina Muniz. 18 19 JUDGE WOODRUFF: Do you want to just list them all? 20 21 MS. TATRO: Yeah, I'll just list them all. 15, direct testimony -- 15, direct testimony of Steven 22 Wills; 16, rebuttal testimony of Steven Wills; 17, 23 surrebuttal testimony of Steven Wills; 19, rebuttal 24 testimony of Greg Lovett; 27, direct testimony of Mark 25

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| 1  | Peters, 28HC and 28NP, rebuttal testimony of Mark Peters;  |
| 2  | 29, surrebuttal of Mark Peters; 41, direct testimony of    |
| 3  | Mark Mueller; 42, rebuttal testimony of Allen Dutcher; 43, |
| 4  | surrebuttal testimony of Allen Dutcher; 44, direct         |
| 5  | testimony of James Pozzo; 45, rebuttal testimony of        |
| 6  | William Barbieri.  |
| 7  | And I do need to go back to, I apologize,                  |
| 8  | Steve Wills' rebuttal testimony, which was 16. We are      |
| 9  | we've agreed to remove starting on page 32, line 16,       |
| 10 | through page 36, line 12. I'd ask that portion be          |
| 11 | stricken.  |
| 12 | JUDGE WOODRUFF: That was on his rebuttal?                  |
| 13 | MS. TATRO: That was on rebuttal, yes.                      |
| 14 | JUDGE WOODRUFF: What issue does that                       |
| 15 | involve?   |
| 16 | MS. TATRO: It was the depreciation issues                  |
| 17 | in response to Guy Gilbert's issue. So we will not be      |
| 18 | offering the testimony of Guest or Moore. I don't know if  |
| 19 | you have them on the list.                                 |
| 20 | JUDGE WOODRUFF: They were not on the list.                 |
| 21 | All right. 7, 15, 16 as modified, 17, 19, 27, 28HC and     |
| 22 | NP, 29 and 41, as well as 42, 43, 44 and 45 have all been  |
| 23 | offered. Are there any objections to their receipt?        |
| 24 | (No response.)   |
| 25 | JUDGE WOODRUFF: Hearing none, they will be                 |

Page 2162 1 received. 2 (AMEREN EXHIBIT NOS. 7, 15, 16, 17, 19, 27, 3 28HC AND NP, 29, 41, 42, 43, 44 AND 45 WERE MARKED AND RECEIVED INTO EVIDENCE.) 4 5 JUDGE WOODRUFF: And while we're on Ameren, in looking through my list here, I show that I reserved 6 7 Exhibit No. 50. I have it down as reserved for chart from Barnes or Weiss. Do you remember what that was? 8 9 MS. TATRO: That was an ROE chart that I think ended up being marked the next day as, was it 67? I 10 think it became 66. I don't think there will be a 50. 11 12 JUDGE WOODRUFF: Very good. 13 MS. TATRO: And just one other note. I do believe there are two stipulations still outstanding that 14 15 we expect to be filed probably tomorrow, the low income weatherization stipulation, and then there's one on glass 16 17 kilowatt hours, revenues, billing determinants, net base fuel costs and some fuel adjustment class tariff language. 18 19 JUDGE WOODRUFF: I think that second one, those were not identified as issues; is that correct? 20 21 MS. TATRO: I think that's right because we 22 had agreement before the hearing. 23 JUDGE WOODRUFF: All right. I think that takes care of Ameren, then. Let's move on to Staff. 24 25 MR. THOMPSON: We would have 210, the

|    | Page 2163  |
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| 1  | rebuttal testimony of Seoung Joun Won; 211, the rebuttal   |
| 2  | testimony of Erin Maloney; 213, the rebuttal testimony of  |
| 3  | Henry Warren; 214HC, the rebuttal testimony of Henry       |
| 4  | Warren; 215, rebuttal testimony of Hojong Kang; 219,       |
| 5  | surrebuttal testimony of Michael Ensrud; 220HC,            |
| 6  | surrebuttal testimony of Michael Ensrud; 222, surrebuttal  |
| 7  | testimony of Erin Maloney; 225, surrebuttal testimony of   |
| 8  | Henry Warren; 226, surrebuttal testimony of Hojong Kang;   |
| 9  | 227 the surrebuttal testimony of Seoung Joun Won; 228, the |
| 10 | surrebuttal testimony of Shawn Lange, and that's it. And   |
| 11 | then we would have a portion we're going to ask be         |
| 12 | stricken, which we can take up next.                       |
| 13 | JUDGE WOODRUFF: And I assume Gilbert's                     |
| 14 | surrebuttal is also not being offered?                     |
| 15 | MR. THOMPSON: We're not offering any of                    |
| 16 | the testimony of Guy Gilbert.                              |
| 17 | JUDGE WOODRUFF: Okay. So 210, 211, 213,                    |
| 18 | 214, 215, 219, 220, 222, 225, 226, 227 and 228 have been   |
| 19 | offered. Any objections to their receipt?                  |
| 20 | (No response.)   |
| 21 | JUDGE WOODRUFF: Hearing none, they will be                 |
| 22 | received.  |
| 23 | (STAFF EXHIBIT NOS. 210, 211, 213, 214,                    |
| 24 | 215, 219, 220, 222, 225, 226, 227 AND 228 WERE RECEIVED    |
| 25 | INTO EVIDENCE.)  |

Page 2164 JUDGE WOODRUFF: That takes of everything 1 2 from Staff. 3 MR. THOMPSON: Well, then with respect to Staff's revenue requirement report, which would be 4 5 Exhibits 201 and 202, which have already been offered and received, we simply ask that the section on depreciation 6 7 expense by Mr. Gilbert be stricken, and that's on pages 144 through 155. 8 9 JUDGE WOODRUFF: Okay. Any objections to that? 10 11 (No response.) 12 JUDGE WOODRUFF: Those portions will be stricken then. 13 14 MR. THOMPSON: Thank you. 15 JUDGE WOODRUFF: Okay. Moving on to Public Counsel. I show all of your exhibits have been admitted 16 17 and received, offered and received. MR. MILLS: They have, although, Judge, I 18 forgot to note a correction to Ms. Meisenheimer's 19 surrebuttal testimony, and I'd like to do that now. 20 21 JUDGE WOODRUFF: Okay. MR. MILLS: It's page 7, lines 10 and 11. 22 23 The sentence refers to an average in excess allocator, and 24 the correct reference is to a non-coincidental peak demand allocator. 25

Page 2165 JUDGE WOODRUFF: So that's with that 1 2 correction then. 3 MR. MILLS: Thank you. JUDGE WOODRUFF: Moving on to MIEC. You 4 5 had Phillips direct and Phillips surrebuttal have not been offered or received. 6 7 MS. VUYLSTEKE: Your Honor, we would like to offer those two pieces of testimony and have those 8 received into the record. 9 10 JUDGE WOODRUFF: That would be 520HC and 521NP, 522HC and 523NP. Any objections to their receipt? 11 12 (No response.) JUDGE WOODRUFF: Hearing none, they will be 13 14 received. (MIEC EXHIBIT NOS. 520HC, 521, 522HC AND 15 523 WERE RECEIVED INTO EVIDENCE.) 16 17 JUDGE WOODRUFF: For NRDC I show Morgan rebuttal has already been received. AARP had no exhibits. 18 And I believe the only other testimony I had was 19 Commissioner Exhibits A and B, which were the EEI reports 20 21 offered by Chairman Gunn, and they've both been received. 22 Have I missed anything? 23 MS. TATRO: I don't believe so. 2.4 JUDGE WOODRUFF: Okay. Do we have any idea yet whether we will need a true-up hearing? Any issues 25

Page 2166 percolating out there? MS. TATRO: Not that I know of. Mr. Weiss is not here, but I don't believe there is any disagreement on that. JUDGE WOODRUFF: Of course, I'm not going to hold you to anything you say today. We'll see what happens on that. Okay. Anything else we need to take up? Then we are adjourned. Thank you. WHEREUPON, the hearing was adjourned at 2:29 p.m.) 

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| 1  | I N D E X                            |           |
|    | RETURN ON EQUITY                     |           |
| 2  | STAFF'S EVIDENCE:                    |           |
|    | DAVID MURRAY                         |           |
| 3  | Direct Examination by Mr. Thompson   | 1966      |
|    | Cross-Examination by Ms. Baker       | 1970      |
| 4  | Cross-Examination by Mr. Byrne       | 1977      |
|    | Questions by Commissioner Kenney     | 2014      |
| 5  | Recross-Examination by Ms. Baker     | 2022      |
|    | Recross-Examination by Mr. Byrne     | 2023      |
| 6  | Redirect Examination by Mr. Thompson | 2028      |
|    | CUSTOMER CHARGES                     |           |
| 7  | Opening Statement by Mr. Mitten      | 2050      |
|    | Opening Statement by Ms. McClowry    | 2058      |
| 8  | Opening Statement by Mr. Mills       | 2059      |
|    | Opening Statement by Mr. Robertson   | 2061      |
| 9  | Opening Statement by Mr. Coffman     | 2062      |
| 10 | AMEREN'S EVIDENCE:                   |           |
| 11 | WILLIAM WARWICK                      |           |
| 12 | Direct Examination by Mr. Mitten     | 2065      |
| 13 | Cross-Examination by Mr. Mills       | 2067      |
| 14 | Redirect Examination by Mr. Mitten   | 2073      |
| 15 | WILBON COOPER                        |           |
| 16 | Direct Examination by Mr. Mitten     | 2075      |
| 17 | Cross-Examination by Mr. Coffman     | 2077      |
| 18 | Cross-Examination by Mr. Robertson   | 2082      |
| 19 | Cross-Examination by Mr. Mills       | 2085      |
| 20 | Cross-Examination by Ms. McClowry    | 2098      |
| 21 | Questions by Commissioner Kenney     | 2100      |
| 22 | Questions by Commissioner Stoll      | 2105      |
| 23 | Recross-Examination by Mr. Mills     | 2106      |
| 24 | Recross-Examination by Ms. McClowry  | 2107      |
| 25 | Redirect Examination by Mr. Mitten   | 2108      |
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| 3  | Cross-Examination by Mr. Robertson   | 2114      |
| 4  | Cross-Examination by Mr. Coffman     | 2118      |
| 5  | Cross-Examination by Mr. Mills       | 2125      |
| 6  | Cross-Examination by Ms. McClowry    | 2135      |
| 7  | Questions by Commissioner Kenney     | 2137      |
| 8  | Recross-Examination by Mr. Mills     | 2140      |
| 9  | Redirect Examination by Mr. Mitten   | 2140      |
| 10 | STAFF'S EVIDENCE:                    |           |
| 11 | MICHAEL SCHEPERLE                    |           |
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| 13 | Cross-Examination by Mr. Mills       | 2148      |
| 14 | Cross-Examination by Mr. Mitten      | 2152      |
| 15 | Redirect Examination by Ms. McClowry | 2156      |
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|    | EXHIBIT NO. 15                          |       |           |
| 4  | Direct Testimony of Steven M. Wills     | 2163  | 2163      |
|    | EXHIBIT NO. 16                          |       |           |
| 5  | Rebuttal Testimony of Steven M. Wills   | 2163  | 2163      |
|    | EXHIBIT NO. 17                          |       |           |
| 6  | Surrebuttal Testimony of Steven M.      |       |           |
|    | Wills                                   | 2163  | 2163      |
| 7  | EXHIBIT NO. 19                          |       |           |
|    | Rebuttal Testimony of Greg Lovett       | 2163  | 2163      |
| 8  | EXHIBIT NO. 27                          |       |           |
| 9  | Direct Testimony of Mark J. Peters      | 2163  | 2163      |
| 10 | EXHIBIT NO. 28NP/HC                     |       |           |
| 11 | Rebuttal Testimony of Mark J. Peters    | 2163  | 2163      |
| 12 | EXHIBIT NO. 29                          |       |           |
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| 17 | Rebuttal Testimony of William M.        |       |           |
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| 20 | Surrebuttal Testimony of William M.     |       |           |
| 21 | Warwick                                 | 2065  | 2066      |
| 22 | EXHIBIT NO. 36                          |       |           |
| 23 | Direct Testimony of Wilbon L. Cooper    | 2075  | 2077      |
| 24 | EXHIBIT NO. 37                          |       |           |
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| 13 | STAFF'S EXHIBITS                       |      |           |
| 14 | EXHIBIT NO. 201                        |      |           |
| 15 | Staff Cost of Service Report and       |      |           |
| 16 | Appendices                             |      | 1969      |
| 17 | EXHIBIT NO. 202HC                      |      |           |
| 18 | Staff Cost of Service Report and       |      |           |
| 19 | Appendices, Highly Confidential        |      | 1969      |
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| 20  | EXHIBIT NO. 227                                |           |
| 21  | Surrebuttal Testimony of Seoung Joun           |           |
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|----|---|
| 1  | CERTIFICATE   |
| 2  | STATE OF MISSOURI )                                       |
| 3  | ) ss.   |
| 4  | COUNTY OF COLE )  |
| 5  | I, Kellene K. Feddersen, Certified                        |
| 6  | Shorthand Reporter with the firm of Midwest Litigation    |
| 7  | Services, do hereby certify that I was personally present |
| 8  | at the proceedings had in the above-entitled cause at the |
| 9  | time and place set forth in the caption sheet thereof;    |
| 10 | that I then and there took down in Stenotype the          |
| 11 | proceedings had; and that the foregoing is a full, true   |
| 12 | and correct transcript of such Stenotype notes so made at |
| 13 | such time and place.                                      |
| 14 | Given at my office in the City of                         |
| 15 | Jefferson, County of Cole, State of Missouri.             |
| 16 |   |
| 17 |   |
| 18 |   |
| 19 |   |
| 20 |   |
| 21 |   |
| 22 | Kellene K. Feddersen, RPR, CSR, CCR                       |
| 23 |   |
| 24 |   |
| 25 |   |

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