1	STATE OF MISSOURI
2	PUBLIC SERVICE COMMISSION
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6	TRANSCRIPT OF PROCEEDINGS
7	Hearing
8	November 8, 2005
	Jefferson City, Missouri
9	Volume 5
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11	In the Matter of an Examination of )
12	
13	Jurisdictional Electric Service ) Case No. EO-2002-384 Operations of Aquila, Inc., )
14	Formerly Known as UtiliCorp ) United, Inc. )
15	
16	KEVIN A. THOMPSON, Presiding,
17	DEPUTY CHIEF REGULATORY LAW JUDGE.
18	
19	STEVE GAW,
20	LINWARD "LIN" APPLING,
21	COMMISSIONERS.
22	REPORTED BY:
23	KELLENE K. FEDDERSEN, CSR, RPR, CCR MIDWEST LITIGATION SERVICES
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1 PROCEEDINGS 2 JUDGE THOMPSON: Good morning. I think we're ready for Mr. Conrad's cross-examination. 3 You may inquire whenever you're ready, 4 5 Mr. Conrad. 6 MR. CONRAD: I'm sorry. I thought I had 7 the piece of paper here with me. 8 JUDGE THOMPSON: Remember, Mr. Busch, you 9 are still under oath. 10 THE WITNESS: Yes, sir. 11 JAMES BUSCH testified as follows: CROSS-EXAMINATION BY MR. CONRAD: 12 13 Q. Well, good morning, Mr. Busch. 14 Α. Good morning, sir. 15 Q. Let me ask you -- I just have a couple of 16 things to clear up with you. Would you please look at page 11 of your direct testimony? 17 Α. Yes. 18 19 And I want to direct your attention to Q. line 7. 20 A. Yes, sir. 21 22 Q. How did you derive production capacity 23 costs from the hourly marginal energy costs? 24 Again, Mr. Watkins performed the Α. 25 calculations for the time of use allocators. I did not do

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the calculations. 1 2 Let's look at that sentence a second. What Q. 3 does the word derived mean? Calculated, determined. 4 Α. 5 Q. Now, this is -- I am looking, I trust, 6 Mr. Busch, at Exhibit 13? 7 Α. Yes, sir. 8 Q. And on the cover page of that, it says 9 direct testimony of James Busch, doesn't it? 10 Α. It does state that, yes. 11 Ο. Doesn't say Mr. Watkins there, does it? It does not. 12 Α. And the second page of that packet is an 13 Q. affidavit, am I correct? 14 15 Α. It is correct. 16 So this is your testimony? Q. This is my testimony of Staff's method. 17 Α. Mr. Watkins --18 19 Well, but you're on the stand now. Q. That is correct. 20 Α. 21 Not some faceless, nameless Staff that's Q. 22 here. It's you. Just you and me. A. Yes. 23 24 Okay. So I want to talk to you about this Q. 25 sentence that is in your testimony.

1 A. Okay. 2 And I want you to tell me how you derived Q. marginal production capacity costs from the hourly 3 marginal energy costs. 4 5 Α. And I cannot tell you that answer. 6 Mr. Watkins did that. This is what Staff -- my testimony 7 presents what Staff did. Mr. Watkins performed that 8 calculation, and he will be happy to discuss that with 9 you. 10 Ο. We've been down this road before, 11 Mr. Busch, but, you know, you're not the Staff. You're 12 James Busch, right? 13 Α. Yes. And Staff didn't sign this affidavit. 14 Q. 15 You did. Do you know -- do you know what you testified 16 to? 17 I testified to the methodology. Α. What did you do, Mr. Busch? 18 Q. 19 I took the allocator, the time of use Α. allocator that Mr. Watkins derived and provided me, and 20 put that into a cost of service study. 21 22 Q. All right. Did you calculate -- well, let 23 me ask you this: What is the revenue requirement of 24 Sibley 1? 25 A. What is the revenue requirement of

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1 Sibley 1? 2 Yes, sir. Q. 3 Α. Are you asking for what the dollars are? I'm asking you what is the revenue 4 Q. 5 requirement of Sibley 1, Sibley Generating Unit 1? 6 Α. I don't know. 7 Q. Would your answer be the same if I asked 8 you about Sibley Unit 2? 9 Α. Yes. 10 Would your answer be the same if I asked Ο. 11 you about one of the Greenwood units? 12 Α. Yes. Did you calculate the revenue requirements 13 Q. of each generating plant for Aquila? 14 15 Α. No, I did not. Did anyone do so, to your knowledge? 16 Q. 17 Not to my knowledge. Α. Now, Mr. Busch, I want you to think 18 Q. 19 about -- I'll switch gears here for a second. You did -you have testified that you did do an allocation study, 20 cost of service study, correct? 21 22 Α. I did a class cost of service study. 23 Q. Look at, please, if you would -- and I'm not sure where in your -- probably in your direct or one 24 25 of the attachments -- how you handled Accounts 512, 513

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1 and 514. 2 A. Okay. Unless you know. 3 Q. I looked at them this morning. 4 Α. 5 Q. Okay. Did you allocate those on production 6 capacity? A. Yes, sir, I did. 7 8 Q. Did you also allocate Account 509 on production capacity? 9 10 A. I believe I did. 11 MR. CONRAD: Thank you, Mr. Busch. That's 12 all I have, Judge. JUDGE THOMPSON: Mr. Swearengen? 13 MR. SWEARENGEN: Yes, sir. We have no 14 15 questions. 16 JUDGE THOMPSON: Questions from the Bench 17 for Mr. Busch, Commissioner Appling? 18 COMMISSIONER APPLING: No questions. OUESTIONS BY JUDGE THOMPSON: 19 20 Q. Tell me again which part of it that you did, Mr. Busch. 21 A. I performed the class cost of service study 22 for the Staff. 23 24 Q. And how did you do that? What were the 25 steps that you followed?

1 I took the accounting data from the Α. previous rate case, which I believe was ER-2004-0034. I 2 3 took some of the load data that Ms. Pyatte had gotten from the company, and I put those into the Staff's class cost 4 5 of service model. 6 Q. Is that a computer model? It's in an Excel --7 Α. 8 Q. Spreadsheet? 9 Α. -- spreadsheet. 10 Ο. Okav. It was developed by Staff before I started 11 Α. 12 with Staff, and I just plugged in those numbers. We used some allocators that were developed and then got the 13 14 results for the revenue requirement or the class cost of 15 service for each class, and then I provided that 16 information to Ms. Pyatte and Mr. Watkins. 17 Okay. Now, did you use at any point the Q. 18 billing determinants that were provided on August 19th? 19 No. I believe those billing determinants Α. would be utilized once the class -- once each class's cost 20 21 of service was determined, they would use the billing 22 determinants then to figure out the rates and what to --23 the appropriate rates to charge each class. So that was a step that someone else did? 24 Q. 25 That was a step after what I would have Α.

1 done, yes. 2 Okay. All you did was determine the class Q. 3 cost responsibility? Α. Yes, sir. 4 5 Ο. Okay. Using cost information from 6 ER-2004-0034? 7 Α. Yes. 8 Q. Okay. And was it agreed in this case by 9 the parties that that would be the cost information that 10 was used? 11 Α. Yes, sir. Okay. Now, you talk about developing 12 Q. allocators. How did you go about developing allocators? 13 The allocators, the one is a time use 14 Α. 15 allocator that Mr. Watkins performed. There are other 16 allocators that are based upon class peaks. I used the 17 information provided by Ms. Pyatte to determine each class's peak. There's a -- customer weighted numbers is 18 19 an allocator based upon customers for each class. And then there's various allocators that are developed within 20 the study itself. 21 22 Q. Okay. Now, were you present yesterday 23 throughout the hearing? 24 Α. I was.

25

Q.

And did you hear criticism by various

witnesses, particularly Mr. Tracy and Mr. Brubaker, of 1 Staff's method, particularly it seemed to me to be aimed 2 at the allocators? Did you hear that criticism? 3 4 Α. I believe they were criticizing the time of 5 use allocator that Mr. Watkins developed, yes. 6 Q. That was developed by Mr. Watkins? 7 Α. Yes. 8 Q. All you did was plug it in? 9 Α. Yes. 10 So if I asked you questions about that, all Ο. you can say is, well, Mr. Watkins handed it to me and I 11 12 plugged it in? That's all I can say. 13 Α. 14 Q. I understand. So would I -- would I be 15 right in saying that you really have no professional 16 opinion with respect to the criticisms that were made of 17 that allocator by those two witnesses? I mean, you didn't develop that allocator? 18 19 Α. I didn't develop that allocator. I simply used it in the class cost of service study that I 20 21 performed. 22 Q. Would I be right in saying that the 23 development of that allocator drew upon and was dependent upon expertise that you don't have? You have different 24 25 expertise?

1 As far as that allocator is concerned, yes. Α. 2 Q. Okay. Now, what about the other allocators 3 that you used? You mentioned that there were several. Some were developed in the course of the program itself, 4 5 correct? 6 Α. Correct. 7 Q. Customer peaking information, I think you 8 said you got from Ms. Pyatte? 9 Α. Right. 10 Now, did she give you raw data or did she Ο. 11 give you allocators? She gave me the data, then I used data to Α. develop the allocators. The allocators I developed were very similar, if not the same, as the allocators utilized by Mr. Brubaker and Mr. Stowe. 16 So far as you know, those allocators at Q. 17 least are, would it be fair to say, in the mainstream of 18 how people do this kind of study? 19 Α. I would say they are utilized by many. 20 Ο. Okay. What other allocators were used? 21 You said some were developed in the course of the study 22 itself. 23 Α. Right. Like a rate base allocator when rate base is determined to -- as we talked yesterday about 24 25

12 13 14 15

income tax. We develop what our rate base is per class

based upon other allocators, and then there's an allocator 1 2 based upon what each class's responsibility is, and then 3 that is utilized to allocate the income tax, for instance. Okay. And did you develop that allocator? 4 Q. 5 Α. Like I said, the program, model that the 6 Staff has was developed before I started working there, so 7 it was developed within the model itself. I did not go 8 out and specifically develop that allocator. 9 Q. Would you -- would I be correct in 10 understanding that that particular allocator consists of 11 formulas which are already plugged into the spreadsheet? Α. 12 Yes. So that when you enter the data, the 13 Q. 14 spreadsheet automatically then spreads the data out and 15 creates that allocation? That is correct. 16 Α. Okay. And you do not know the source of 17 Q. those formulas? 18 19 No. I mean, I could go --Α. You said it was developed before you joined 20 Ο. the Staff? 21 22 Α. Yeah. Yes. I could go pull up the 23 spreadsheet and kind of go back and source back and figure out exactly how it was developed, but to know the exact --24 25 Q. All I want to know is whether you did it.

A. I did not do it. 2 You found it in the program? Q. 3 Α. It was in the program itself. Okay. Now, yesterday I asked Mr. Brubaker 4 Q. 5 to take a look at Exhibit No. 25 and offer me an opinion 6 as to how four different parties reached such different 7 results using the same starting data, the same billing 8 determinant. Did you hear that? A. I did. 9 10 Do you yourself have an opinion on that Ο. 11 question? I believe Mr. Brubaker said it was the way 12 Α. that production and transmission was allocated, and I 13 14 would -- from looking at the studies, that's what I found 15 out as well, that it was -- it was mainly that allocation 16 method. That was the difference. 17 Okay. And it looks like this case somewhat Q. turns on the allocation of those things, production and 18 19 transmission; is that correct? I would agree with that. 20 Α. 21 Is the time of use allocation method, is Q. 22 that the method Staff used to allocate production? 23 Α. Yes. And how did Staff allocate transmission? 24 Q. 25 Α. The time of use allocator.

1 Q. So both of those are allocated using that 2 same method? 3 Same method, yes. Α. Okay. And Mr. Brubaker used the average 4 Q. 5 and excess three --6 Α. NCP, yes. 7 Q. Okay. And Mr. Tracy used an average and 8 excess three non-coincident peak method? A. 3 CP. 9 Q. 3 CP? 10 11 Α. Yeah. 12 JUDGE THOMPSON: Thank you. Other 13 questions from the Bench, Commissioner Gaw? Commissioner 14 Appling? 15 COMMISSIONER APPLING: I have one, but I 16 haven't dug it up yet. So if you allow me a second. 17 COMMISSIONER GAW: I'll go ahead. 18 QUESTIONS BY COMMISSIONER GAW: 19 Q. Mr. Busch, forgive me if this is repetitive. If it is, maybe you can just reference that 20 21 and I'll look at that portion of your testimony. 22 I want you to justify for me the Staff's model and the use of it. 23 24 The model, the whole model? Α. 25 Q. Yes. Why is this model the appropriate

1 model in the Staff's opinion to use in order to determine
2 how to allocate costs?

A. I think Staff's model does a reasonable job of taking the accounting revenue data and developing that, and then, with the allocators that we utilize through the model, to give each class its responsibility. I just think it's a fair model.

Q. That's a good conclusion in the statement, but I need some analysis. What is it about this model that you find to be to make it a fair model? Because I'm going to then ask you how you compare this model in its -in its fairness as you put it to the other models that were utilized in this case.

14 A. I don't think --

15 Q. If you are not the right witness for Staff 16 to ask about that kind of an analysis, then I just need to 17 know who is.

A. Since I didn't develop the model, the model was developed well before I ever started working with the Staff, to get into that much detail, you probably should ask Mr. Watkins that question.

22 Q. All right.

A. I don't think that the model is that much dissimilar to the models that other parties utilize. I think it's when you get into the allocation is where you

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get the different results.
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 2
                    And Mr. Watkins would be the right person
             Q.
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     for me to inquire about that?
                    Yes, sir, he would be.
 4
             Α.
 5
             Ο.
                    So would it be -- would it be accurate to
 6
     characterize your involvement in regard to this case as
 7
     taking data and plugging them into the model that Staff
 8
     had used?
 9
             A. Basically, yes.
10
                    So your analysis really doesn't go into
             Ο.
     anything beyond I took the data, I plugged it into the
11
     model that Staff uses, and here's the results?
12
13
                    Basically in this case, yes.
             Α.
14
             Q.
                    Here are the results. Pardon me.
15
                   Here are the results.
             Α.
16
                    COMMISSIONER GAW: Okay. Thank you.
17
     That's all I have, Judge.
                    JUDGE THOMPSON: Thank you, Commissioner.
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19
     Commissioner Appling?
     OUESTIONS BY COMMISSIONER APPLING:
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21
                   Mr. Busch, just one question, I think. Do
             Q.
22
     you or do you not support the model in which the Staff has
23
     put forward? I have to make a decision on this model, one
     of the models that was made sooner or later here. So my
24
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question to you, do you or do you not support the model

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1 that Staff has put forth? 2 I do support the model. Α. Okay. Why? 3 Q. I think it's a fair and reasonable method 4 Α. 5 for determining each class's responsibility. 6 Q. But you say -- told us the only thing 7 you've done is just plugged in the numbers, and you didn't 8 develop the model and it was developed before you came 9 here. So you're confusing me. 10 It was developed before I came here, and Α. 11 it's similar to the model that I utilized with Public Counsel. It's not dissimilar to the model that was 12 utilized by the company. Like I said, I believe it's the 13 allocation, in this case the allocation of the time of use 14 15 allocator for production and transmission that causes the results to be different. So the model itself, I don't 16 17 have a problem with that model. It's that allocation 18 method. 19 COMMISSIONER APPLING: Thank you, sir. 20 JUDGE THOMPSON: Thank you, Commissioner. Other questions from the Bench? 21 Commissioner Gaw? 22 FURTHER QUESTIONS BY COMMISSIONER GAW: 23 Mr. Busch, you say it's the allocation 24 Q. 25 method; is that correct?

1 It's the time of use allocator that is used Α. 2 to allocate production and transmission. 3 Q. Well, I'm not -- what I'm trying to understand in your comment is are you criticizing the 4 5 Staff's model or the other models? 6 Α. No, I'm not criticizing anybody's model. 7 Q. All right. So the distinction between the 8 conclusions of the models you identified in regard to this 9 allocator, if I understand it correctly -- so help me to 10 understand whether your testimony -- is intended to 11 support Staff's method of allocation over the other 12 models? 13 I support what the Staff did. The main Α. 14 allocator that is causing the differences is the time of 15 use allocator versus the average and excess allocator 16 utilized by Mr. Brubaker and Mr. Stowe, which Mr. Watkins 17 will be happy to discuss with you. Q. 18 Okay. 19 But as far as the rest of it, I think for Α. the most part the allocation method that I utilize is very 20 21 similar to the allocation methods utilized by Mr. Stowe 22 and Mr. Brubaker, and the models I think are similar as 23 well. But you're not -- you're not here to 24 Q. 25 testify as to the appropriateness or the advantages of the

1 time of use allocator as a witness in this case?

2 A. No, I am not.

Q. And you don't have an opinion in regard to whether or not that particular allocator of Staff's is helpful in the Commission's determination of allocation of costs?

7 Α. From what I've been able to gather of the 8 time of use allocator that Mr. Watkins used, I agree with 9 that methodology. I think from what I can understand, it 10 takes -- it looks at the loads throughout the year. I 11 don't believe that the companies make determinations to 12 build more generation capacity based just on a peak day. They have to look at the loads in January, February, 13 14 March, April, May, all the months. I think that's what 15 the time of use allocator does, so that's why I support 16 that. But as far as getting into the details of it, I can't do that. 17 COMMISSIONER GAW: That's fine. I'll ask 18 19 Mr. Watkins. Thank you again, Judge. 20 Thank you, Mr. Busch. 21 JUDGE THOMPSON: Other questions from the

22 Bench?

23 (No response.)

JUDGE THOMPSON: Very well. Recross based on questions from the Bench, Mr. Mills?

1	MR. MILLS: No questions.
2	JUDGE THOMPSON: Major Paulson?
3	MR. PAULSON: No questions.
4	JUDGE THOMPSON: Thank you, sir.
5	Mr. Conrad?
6	RECROSS-EXAMINATION BY MR. CONRAD:
7	Q. Mr. Busch, very quickly, in response to
8	Commissioner Appling's questions, you indicated that the
9	model that you used was very similar to that that you had
10	used for Public Counsel; is that correct?
11	A. I did.
12	Q. Would you look, please, at your
13	Schedule JAB-1 with me?
14	A. I'm there.
15	Q. That's denominated cases filed testimony,
16	James A. Busch?
17	A. Yes.
18	Q. How many of those are electric?
19	A. ER-2001-299, Empire District Electric
20	Company would be one. ER-2001-672, UtiliCorp United.
21	EC-2001-1, Union Electric. ER-2002-424, Empire.
22	EF-2003-0465, Aquila. ER-2004-0034, Aquila. And
23	ER-2004-0570, Empire.
24	Q. How many did you list?
25	A. I wasn't counting when I read these. I

1 believe those are seven, and this would make eight.

2 Let's not talk about this one right now in Q. 3 the count. On those, what issues did you testify to? The ER cases and the EC case, those I 4 Α. 5 testified on natural gas prices to be utilized in the fuel 6 run. The EF case, I believe I did the -- I looked at the 7 cash working capital issue. 8 Q. Would it be fair to say that in none of 9 those cases you worked with a class cost of service model? 10 I do remember the Empire case. I did Α. help -- I again put the numbers into the model. I did not 11 12 file testimony on the class cost of service, but I did --Did you testify in any of those cases 13 Q. 14 regarding a class cost of service model? 15 I did not testify. I did assist. Α. 16 So this is the -- this is, in fact, the Q. first one of these that you've done; is that correct? 17 A. On the electric side, the first time I've 18 testified, yes. 19 20 Ο. Now, Mr. Busch, I want to distinguish 21 just -- Commissioner Gaw was asking you a question about 22 the scope of your involvement here. When you refer to the 23 model, you are, I believe, referring to what the 24 Administrative Law Judge or Regulatory Law Judge indicated 25 was -- or withdrew from you was an Excel spreadsheet; is

that correct? 1 2 That is correct. Α. And that is a computer program, in effect? 3 Q. Yes. 4 Α. 5 Q. That has formulas all in it? 6 Α. Right. 7 Q. And that's the model. When you use the 8 term model, that's what you're referring to? 9 A. That's what I am referring to, yes. 10 Ο. That Excel spreadsheet? 11 The Excel spreadsheet, yes. Α. And you did not have any involvement, then, 12 Q. with the development of the allocators which are embodied 13 in that model? 14 A. The ones that are embodied in it, no. 15 16 MR. CONRAD: Thank you. That's all. 17 JUDGE THOMPSON: Thank you, Mr. Conrad. 18 Mr. Swearengen? 19 MR. SWEARENGEN: No questions, thank you. JUDGE THOMPSON: Redirect? 20 21 MR. WILLIAMS: Thank you, Judge. REDIRECT EXAMINATION BY MR. WILLIAMS: 22 23 Q. Mr. Busch, I want to direct your attention 24 to Schedule JAB-1. 25 A. Yes, sir.

1 Do you recall Mr. Conrad asked you how many Q. 2 electric cases you filed --3 Α. Yes. -- class cost of service studies on? 4 Q. 5 Α. Yes. 6 Q. Looking at that entire list, how many of 7 those cases did you file class cost of service studies on? 8 Α. With all utilities? 9 Q. Yes. 10 I believe, let's see, ER-2000-512, Α. 11 WR-2000-844, GR-2001-292, GR-2001-629, GR-2002-356, WR-2003-0500, GR-2003-057, GR-2004-0072, and I believe 12 GR-2004-029. So I believe I've got nine. 13 Q. I believe you said GR-2003-057. Did you 14 15 intend to say GR-2003-0571? 16 Α. Yeah, I did. 17 And have there been other cases where Q. 18 you've done class cost of service studies in an assistive 19 fashion, as opposed to actually filing testimony? Yes. The last Empire case, ER-2004-0570, I 20 Α. 21 put in the accounting data at the OPC, and I think 22 Ms. Meisenheimer did the actual testimony in that case. Do you recall that Mr. -- or Major Paulson 23 Q. asked you some questions regarding the NARUC manual? 24 25 A. Yes, I do.

1 Q. Would you turn to page 51 of that manual? 2 Α. Okay. And there appears a Table 4-10B? 3 Q. 4 Α. Yes. 5 Q. And what does that table address? 6 Α. Class allocation factors and allocated 7 production plant revenue requirement using the average and 8 excess method single CP demand factors. 9 Q. Are there some notes associated with that 10 table? 11 Α. Yes, there are. 12 Q. Would you read the second sentence of the note? 13 Second sentence, this example shows all 14 Α. production plant classified as demand related. 15 16 And then read the following sentence. Q. 17 Α. Note that the total allocation factors are exactly equal to those derived using the single coincident 18 peak method shown in the third column of Table 4-3. 19 20 And where does Table 4-3 appear? Ο. 21 4-3 is on page 42. Α. And then what section of the manual in 22 Q. 23 terms of the types of methods does that table appear? 24 Α. If you go to page 41, it appears in the 25 peak demand methods.

1 MR. WILLIAMS: No further questions. 2 JUDGE THOMPSON: Thank you, Mr. Williams. You may step down, Mr. Busch. I'm not going to excuse you 3 at this time in case there's any questions from the three 4 5 Commissioners who aren't here. 6 Mr. Watkins? State your name, please. 7 MR. WATKINS: James C. Watkins, 8 W-a-t-k-i-n-s. 9 JUDGE THOMPSON: Very good. Raise your right hand, please. 10 11 (Witness sworn.) JUDGE THOMPSON: You may inquire, 12 Mr. Williams. 13 MR. WILLIAMS: Before I do, I'd ask that 14 the Commission take notice of some of its decisions. 15 JUDGE THOMPSON: Very well. 16 17 MR. WILLIAMS: And those are the same decisions that are cited to by the Staff in its prehearing 18 19 Brief. 20 JUDGE THOMPSON: Do you have a list of those? 21 MR. WILLIAMS: Yes. In the matter of 22 Arkansas Power & Light Company of Little Rock, Arkansas 23 for authority to file tariffs increasing rates for 24 25 electric service provided to customers in the Missouri

service area of the company, it's Missouri Commission Case 1 2 No. ER-81-364. The Report and Order that was decided April 20th of 1982, which is reported at 25 MoPSC new 3 4 series at page 101. 5 There's a case involving Kansas City 6 Power & Light Company that's Missouri Case No. E0-78-161. 7 It's a March 30th, 1983 Report and Order, which is 8 reported in Public Utility Reports 4th -- 53 PUR 4th at 9 315. I believe it's also reported in the MoPSC, but I 10 don't have that cite right here. 11 There's another case involving Union 12 Electric Company, which is Case No. EO-85-17 and ER-85-160, a March 29th, 1985 Report and Order that's 13 14 reported at 6 PUR 4th 202. And the last case is a case 15 involving a class cost of service and rate design case 16 involving St. Joseph Light & Power Company, which is reported at 1 MoPSC 3rd at 450. It's Missouri PSC Case 17 No. EO-88-158. It's a December 11th, 1992 Report and 18 19 Order. 20 JUDGE THOMPSON: Is that 1 MoPSC 3rd 450? 21 MR. WILLIAMS: Yes, sir. 22 COMMISSIONER APPLING: What was the company 23 again? 24 MR. WILLIAMS: That was St. Joseph Light & 25 Power Company.

1 JUDGE THOMPSON: Any objections to these 2 requests that the Commission take notice of four decisions 3 it issued in the past? 4 (No objections.) 5 JUDGE THOMPSON: Very well. The Commission 6 will take notice of those decisions. You may proceed. JAMES C. WATKINS testified as follows: 7 8 DIRECT EXAMINATION BY MR. WILLIAMS: 9 Q. Mr. Watkins, would you please state and 10 spell your name. 11 James C. Watkins, W-a-t-k-i-n-s. Α. 12 Q. Mr. Watkins, did you prepare some testimony that's been prefiled in this case, in fact three pieces, 13 14 one that was labeled direct testimony of James C. Watkins, 15 one that was labeled rebuttal testimony of James C. 16 Watkins, and one that was labeled surrebuttal testimony of 17 James C. Watkins, that have been marked as Exhibit Nos. 16, 17 and 18 respectively? 18 19 A. Yes, I did. Do you have any changes to any of those 20 Ο. exhibits? 21 22 Α. No, I do not. 23 Q. If I were to ask you the questions that are 24 contained in those exhibits, would your answers here today 25 be the same?

0321 A. Substantially, yes. 1 2 MR. WILLIAMS: I offer Exhibits No. 16, 17 3 and 18. JUDGE THOMPSON: Any objections? 4 5 (No response.) 6 JUDGE THOMPSON: Hearing no objections, 7 Exhibit 16, 17 and 18 are received and made a part of the 8 record of this proceeding. (EXHIBIT NOS. 16, 17 AND 18 WERE RECEIVED 9 10 INTO EVIDENCE.) 11 MR. WILLIAMS: Tender the witness. 12 JUDGE THOMPSON: Thank you. Mr. Mills? MR. MILLS: No questions. 13 JUDGE THOMPSON: Major Paulson? 14 15 MR. PAULSON: No questions. 16 JUDGE THOMPSON: Mr. Conrad? 17 MR. CONRAD: No questions, your Honor. JUDGE THOMPSON: Mr. Swearengen? 18 19 MR. SWEARENGEN: I have no questions, thank 20 you. JUDGE THOMPSON: Very well. Questions from 21 22 the Bench, Commissioner Gaw? QUESTIONS BY COMMISSIONER GAW: 23 24 Q. Mr. Watkins, I had my questions deferred to 25 you by Mr. Busch, so first I want you to tell me why the

Staff has chosen the methodology that it has in this case
 in regard to allocation of costs.

A. This goes back a long time, 20, 25 years ago when Mike Proctor, Dr. Mike Proctor, our chief economist now, was manager of the predecessor of the economic analysis section, right after the time of PURPA, the Public Utility Regulatory Policy Act of 1978, when folks began looking at how electricity should be priced and in providing service to customers.

10 Q. Would you mind getting a little closer to 11 the mike?

12

I'm sorry. I apologize.

13 Q. No problem.

Α.

14 Α. The allocation of -- certain of the costs 15 of the electric utilities are what economists call joint 16 costs. Those costs are incurred to serve everybody. Electricity utilities are required to provide what we call 17 18 flip the switch service. The customer flips the switch, 19 the appliance, the lights come on, the utility has to 20 stand by to serve whatever load exists at any point in 21 time.

In looking at how to price electricity, which was basically the focus of that section of the Commission Staff is how should electricity be priced, the focus is on -- basically on developing the tariffs that

1 are going to have the prices that are charged to the 2 customers on them. We wanted a cost allocation method 3 that would translate into tariffs in rates that would 4 properly price the electric service.

5 So that was really the focus of the 6 development of the timing of these allocators was how to 7 develop the proper summer/winter differentials in the 8 rates. Electricity costs more in the summer than it does 9 in the winter. Rates should be higher. We needed a 10 methodology which would allocate those costs properly 11 between the seasons.

The same thing is true within the rates. 12 Most, if not all, of the rates at least for the major 13 14 classes in Missouri have block rates of some kind. We 15 needed a methodology which would appropriately take the 16 costs that were allocated to a class and put them to those energy blocks by making some assumptions about what those 17 18 blocks represented. In most cases the initial block is 19 assumed to be on peak. The last block is assumed to be 20 off peak, and if there's a middle block, it's somewhere 21 between on peak and off peak. We needed a methodology to 22 get the costs to those blocks.

23 Q. All right. I want you to explain to me the 24 blocks so that it's clear what you're talking about. When 25 you say blocks, what do you mean?

A. For -- there's several different kinds of blocks. For a residential customer, the blocks would be on kilowatt hour usage. So, for example, in the -- in the wintertime, the initial block might be, say, at 1000 kilowatt hours. So the first 1000 kilowatt hours a customer uses would be assumed to be on-peak usage.

8 There would be another block which would be 9 between 1000 and something else or just over 1000, and 10 then typically, like in the space heating rate, there 11 would be another block which would represent that portion 12 of the time when space heating basically is coming on, 13 which would mainly be at night.

14 Q. Okay. So when you say blocks, are you 15 referring -- how does that fit into the methodology? I'm 16 not following.

17 A. Okay. Let's take an example of production18 capacity costs.

19 Q. Okay.

A. The question is, where should those go into the rates? If I use a method that allocates all those costs to one or two or three hours in the summer, and I want rate schedules that reflect how I allocated those costs, okay, then I would have no costs in the wintertime, I would only -- I would only have cost associated -- I

would have rates -- I'm sorry -- associated with those 1 costs only in the summertime. 2 3 Q. Okay. Now, does Staff's methodology help to avoid that situation, that problem? 4 5 Α. Yes. 6 Ο. Okay. How does it do that? 7 Α. First, let me say again that those are 8 joint costs. What they're caused by from a cost causation 9 standpoint is everyone's load. Okay. In terms of 10 pricing, what we look at is how that -- how electricity is 11 utilized throughout the year to make the pricing fair. 12 It's a reasonable method. It doesn't rely on cost causation because classes do not cause costs. Everybody 13 14 causes costs jointly, and it's a matter of how do you 15 divide it up. 16 So what we basically calculate with the time and use method is what the cost is for each increment 17 18 of load, determine how long during the year that 19 incremental load lasts, divide that cost, that total cost for serving that load increment by the number of hours, 20 and then allocate first to each hour of those an equal 21 22 share of those costs. 23 Then what we look at is each class's load 24 ratio share or class contribution to some of the loads in 25 each hour and allocate that to each class on an hourly

basis. So as their load varies throughout that entire time period, their share of the costs in hours varies, and we then aggregate across all of those hours to get the classes shared for that block. We do that for each increment of load or increment of capacity required to serve that load.

7 So the fundamental question is whether you 8 allocate those costs to all customer classes based on the 9 contribution to the summer peak or whether you charge 10 those customers for utilizing the system whenever they're 11 utilizing it. Is it free in the winter? No. They're 12 utilizing it in the winter. They ought to pay something.

Q. Now, I think you're making some assumptions in your statement that I need you to explain. When you say that, is it free in the winter, no, you should have something that tracks it more than that. Is that a criticism of the methodologies that are utilized by the industrials and Aquila in this case?

19 A.

Q. Okay. Explain how that criticism applies.
A. The -Q. I think you have done that --

23 A. At --

24 Q. -- basically already.

Yes.

25 I want you to specifically refer to their

1 methodologies in that explanation.

2 Α. The allocation procedures that have been 3 used by the industrials and Aquila are both average and excess methods, which were peak responsibility methods, 4 5 and in each case they rely on three summer peaks. In the 6 case of Aquila, they chose to use the coincident peaks, 7 which means whatever the system peak is, find that out and 8 then find out what each class's load is at that hour. 9 Okay. The industrials have chosen to use 10 class peaks, which means you look for the maximum demand 11 of each class during the month and sum those up to determine the allocation factors. But in each case there 12 is no allocation to any usage by any customer class other 13 14 than those three hours. 15 Ο. And so does that, in your opinion, skew the 16 result so that more of the costs are allocated toward residential customers as a general rule? 17 18 Α. I think that that's the case. To any -any customer -- let me put it this way: Since no costs 19 20 are allocated to those customers using the energy at other 21 times, it has basically the effect that the high load 22 customers, high load factor customers who are using energy 23 to a high degree in the off-peak periods and not allocated

25 that energy, so it does have the effect of skewing the --

in the costs associated with producing and transmitting

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it has the effect of allocating those customers less since
 the total is the same. It allocates more costs to those
 customers who are using energy on peak.

Q. Okay. And that tends -- as a general rule,
can tend to be residential customers that would have
perhaps more of an inconsistent load throughout the year?

7 A. I would say residential and small general8 service customers.

9

Q. Both of those classes?

10 A. Yes.

Q. Okay. Now, on the other hand, I would assume that the argument would be that when you've got consumers that are more inconsistent in their load, that you've got infrastructure that's out there that has to be available to use whenever there is someone ready to turn the light switch on, and that it has to be paid for whether it's being used or not.

So why shouldn't there be more of a -- of a measure of expense that is cost on those that are not using the system because it has to be available? How do you respond to that in regard to Staff's model? What does Staff's model do that takes some of that into account? You can challenge the assumption of my question, too, if you wish in your answer.

25

A. It's really impossible to take that into

account, I think, because what you're saying is, I 1 2 should -- I -- conceptually I should allocate some of 3 these costs to load that I -- that isn't measured as actually occurring but potentially could. I don't know 4 5 that we have a good way of figuring out what load 6 potentially could be served. So we can't directly take 7 that into account. 8 But certainly the effect of allocating 9 those costs throughout each hour of the year for those 10 co-- where the facilities are utilized has the effect of 11 accounting for it much better than had I just allocated 12 those costs to the summer peak. And you say that because you believe that 13 Q. 14 that is track -- is tracking what's actually occurring on 15 the system, you know, in a more accurate fashion? 16 It's tracking how customers are using the Α. system. There's two pieces to the costs. 17 Yes. Go ahead. 18 Q. 19 As an economist, the cost is always the Α. price times the quantity. 20 21 Q. Okay. 22 Α. The peak load certainly determines the 23 quantity of capacity that has to be available. Okay. But 24 the cost of that capacity is also affected by the capacity 25 mix and generation. So it's loads throughout the year

that are determining what that mix would be. So you have 1 2 to account for that as well.

3 Ο. Okay. Does Staff's methodology account for 4 both?

5 Α. Yes.

6 Q. Okay. Explain to me how it does that. 7 Just generally. I know you've already answered that to 8 some degree.

9 Α. Yeah. I think I've answered that in terms 10 of that generation capacity which is used, say, every hour 11 of the year, an equal portion of that is allocated to each 12 hour of the year. If you have generation capacity that's only used one hour on the peak, its entire capacity would 13 14 be calculated to that peak hour, and then the load ratio 15 shares on every hour throughout the year for each class 16 would allocate hourly to each class, and the annual 17 allocation would be the sum over all the hours.

If -- now, during times when there are 18 Q. 19 peaking events, if that requires the usage of more 20 expensive generation, gas-fired turbines, for instance, 21 does Staff's methodology take that into account in its 22 allocation on who is causing that cost? 23 Α. Yes, it does.

24 Q. Explain that to me.

Α.

25

Okay. For instance, for example, let's say

0331 this particular gas-fired unit only meets load in one 1 2 hour. Try to keep it as simple as possible. 3 Q. All right. What would be allocated to that hour is 4 Α. 5 that very high energy cost due to burning natural gas. On 6 the other hand, what would be allocated to the hour, that 7 hour for that unit would be the relative load capacity 8 cost of a gas-fired unit versus a base load unit. So it 9 takes both into account. It takes into account the lower 10 capacity costs and the higher running costs that's 11 assigned to that hour. Q. Okay. And when you say lower capacity 12 costs, you're referring to the expense of constructing and 13 14 maintaining that unit, and I don't know what else. Tell 15 me what else. Would you agree with that? 16 Α. Yes. 17 And when you're talking about the other, Q. the running costs you're talking about the fuel expense, 18 19 actually having the generation spin? 20 Α. That's correct. 21 And Staff's methodology takes both into Q. 22 account? 23 Α. Yes, it does. All right. Compare that to me -- for me to 24 Q. 25 the methods that are utilized by the industrials and by

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1 the -- by Aquila.

2	A. We've already talked about how they
3	allocate transmission and production capacity. On the
4	energy side, the cost of fuel and purchased power, they
5	allocate that on the basis of annual sales, which
6	basically means that there's only one price of
7	electricity. It's the average price. Everybody pays it
8	and they pay it all the time, whether it's on peak, off
9	week, midnight in the winter or four o'clock on the 4th of
10	July. Energy is all priced the same.
11	Again, that's not very helpful for us in
12	designing tariffs that try to price electricity
13	appropriately. Frankly, I don't think anybody believes
14	that electricity has the same average price all the time.
15	It just doesn't.
16	Q. That's not a reflection of what's going on
17	out there in the markets or on bilateral transactions that
18	are occurring?
19	A. Not at all.
20	Q. Give me an idea of what that range might
21	be, Mr. Watkins. You don't have to be exact.
22	A. I'm trying to think.
23	Q. Give me some examples.
24	A. I'm trying to think about kilowatt hours
25	and megawatt hours.

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1 Q. Okay. 2 Α. That's harder for me. I think -- I think 3 that it's possible that those energy costs could be under a dollar a megawatt hour at some times for some companies, 4 5 if they have a nuclear unit. If you have units -- this is 6 not on a normalized basis. If you have units down, you're 7 forced out of service and conditions have all -- sort of 8 the perfect storm kind of situation, you could find 9 yourself going from that dollar that you were paying to, 10 you know, 5,000, \$7,000 a megawatt hour. 11 Ο. Those are extreme examples. 12 Α. Oh, absolutely. Absolutely. We don't see that on a weather-normalized basis. We don't account for 13 that in the cost allocation method. 14 15 Ο. Right. But there are extreme ranges 16 possible? 17 Yes. Α. 18 Q. And there are significant ranges that occur 19 on a regular basis, depending upon the time of year, whether or not it's particularly hot that day, other 20 21 things that might come about in regard to units being up 22 or down, et cetera? 23 Α. That's correct. 24 Now, when you started out your testimony, Q. 25 you were describing to me how Staff came about to arrive

1 at this methodology. Has this methodology been adopted or 2 approved by the Commission since Staff's initial usage of 3 it in cases, or if you're aware of that?

4 Α. This is my impression and recollection, is 5 that this particular hourly time of use allocation has 6 never been approved by a Commission Order. The resource 7 requirements to develop it are fairly expensive. What has 8 been presented to the Commission for decision is -- is the 9 concept, and I believe what has been presented is the 10 hourly time of use allocation methodology as the concept 11 that's the ideal, but due to not having load research data 12 available in that particular case that wasn't settled and went to the Commission, an alternative, which generally 13 14 has been the 12 NCP average and peak method where -- as a 15 substitute for that, and the Commission has adopted that 16 specific methodology in that case as the appropriate allocation procedure among the alternatives that were 17 18 available.

Q. Okay. So the Staff's belief is that thisis the most accurate methodology to utilize?

A. Staff believes it's the most reasonablemethodology to utilize.

Q. Most reasonable. But it's not always
available because of resources to -- to use in particular
cases that have been before the Commission? Am I

1 following you?

2	A. That's correct. I believe earlier
3	witnesses, Matt Tracy, indicated that it's fairly
4	expensive to develop the to actually put out meters and
5	collect the information, and the more accurate you want,
6	the more it's going to cost. And so that's that's not
7	something that's done these days, at least on a continual
8	basis by the utilities. So it's kind of hit or miss
9	whether that information would be available.
10	I think that's why this case was originally
11	started was to say, okay, the company needs to collect
12	this data over a particular period of time so it will be
13	available to look at how costs should be allocated and how
14	rates should be designed.
15	Q. And that's what was done in this case?
16	A. The data was made available in this case.
17	Q. All right. And did Staff utilize that data
18	in the way that you've described Staff would like to use
19	the data if it had the time to do it?
20	A. For the cost of service study, yes, we did.
21	Q. All right. Compare what Staff has done in
22	this case for me to what's described in the NARUC I
23	don't know what to call it.
24	A. NARUC manual.
25	Q. Yes, the NARUC manual. Thank you.

1 The NARUC manual basically contains a Α. 2 description of several different types of allocation 3 factors. I hate to use -- maybe I -- some of those 4 allocation factors are fairly simple, like you find the 5 hour of the class peak and what each class's contribution 6 is to that and divide the class's contribution by the 7 total, and that gives you the allocation factor to the 8 class. So that's fairly easy to describe in the NARUC 9 manual as, okay, do this, this and this and that's your 10 allocation factor.

11 When you get to time of use type 12 methodologies, there are broader descriptions of how one 13 would approach the problem. There is no you do this, 14 this, this and this. So I believe -- I mean the NARUC 15 manual talks about the probability of dispatch method. 16 One of the problems with class cost of service and rate 17 design is everybody has their -- even among the analysts, 18 have their own names for a lot of different things.

So it's hard to know when they talk about, whether they're talking about four different things, they're all talking about the same thing using different words. So what the NARUC manual calls the probability of dispatch method is a fairly reasonable overall description of the Staff's time and use method.

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Q. So you don't necessarily accept the

1 criticism that Staff has done something different than
2 what is prescribed in the NARUC manual in regard to time
3 of use?

4

A. No, not at all.

5 Q. Can you give me an idea of your perspective 6 on what Public Counsel has done in this case in regard to 7 analyzing cost of service?

A. I know that their -- I know that there is one big issue, which is how to allocate production and transmission costs. There's a small issue on whether there's a link-related portion to the primary distribution system. And there may be other issues that I think are too small to mention regarding income taxes and maybe some allocation of some maintenance expenses.

15 What Public Counsel did for the production 16 and transmission allocations is, in principle at least, what the Staff would have done had load research data not 17 18 been available to do the hourly time and use method. 19 There's I believe a 12 NCF average in peak. I have not 20 looked at that in great detail. I believe that there is a 21 difference in the way they did it than the way Staff did 22 it, and it has to do with at some point I believe they 23 bring in the coincident peaks, which the Staff does not 24 bring in at all.

25

But basically --

1 When you say the Staff doesn't bring in at Q. 2 all, do you mean in the time of use methodology or the 3 methodology that you would have utilized if you would have not utilized the time and use? 4 5 Α. The latter. The latter. 6 Ο. Okay. So there would be perhaps some 7 issues in regard to the particular allocation that was 8 done within Public Counsel's method, but the umbrella 9 methodology is not something that's foreign Staff in 10 regard to what Public Counsel did in the case? 11 That's correct. Fundamentally the question Α. 12 is, do you allocate those costs throughout the year? Public Counsel's -- throughout the year, throughout the 13 14 time period. Public Counsel's method does that as opposed 15 to, do I allocate them all to one or two or three hours in 16 the summer. 17 Q. Okay. 18 Α. That's the big divide. 19 COMMISSIONER GAW: I see. And, Judge, I did not realize the time. I'm going to have to stop. I 20 21 don't know if I've got additional questions at this point, 22 but --23 JUDGE THOMPSON: The Chairman indicated that agenda will start at 9:45. 24 25 COMMISSIONER GAW: Okay. So maybe -- I'll

go ahead and defer over to Commissioner Appling in any 1 2 event. OUESTIONS BY COMMISSIONER APPLING: 3 4 Q. Good morning. 5 Α. Good morning, sir. 6 Ο. Do you have your direct testimony, I 7 believe it is? Yes, I do. 8 Α. 9 Q. Okay. I guess your direct. No. It's your 10 rebuttal testimony. I'm sorry. Let's go to page 1 and 2. 11 I think on page 1 you talk about your executive summary, and the question is, provide a brief summary of your 12 testimony. Are you with me? 13 14 Α. Yes, I am, sir. 15 Skip over to page 2, line 9, and you see Ο. 16 the Commission should reject any peak responsibility methodology allocating generation capacity costs because 17 18 they have no basis in reality and are therefore 19 unreasonable. Would you kind of frame that and help me understand that sentence a little bit better? What are 20 21 you saying there? 22 Α. What I'm saying there is that the peak 23 responsibility method claims to be a cost causation method because the amount of capacity that's required depends on 24

25 what the peak is, but it neglects the other factor that

determines what costs are. It neglects the fact that different generating units cost a different amount of money to build and maintain on a per megawatt basis than other generating units, depending on whether that's a base load unit, a peaking unit, an intermediate unit, for example.

7 The other thing it ignores is -- is 8 basically should the -- should any of the costs of that 9 unit -- or those generating units, say in the wintertime 10 and off-peak periods be recovered from customers that are 11 using that system at that point in time. Since these are 12 joint costs that are caused by everybody, the question is 13 how most reasonably to recover those costs.

14It's the Staff's belief that you recover15those costs as customers use those -- use that capacity.

16 Q. Is Mr. Tracy, is he al-- advocating that 17 this method should be used, the peaking method?

18 A. Yes.

19 Q. And you don't agree with that?

20 A. No, I do not.

21 Q. Okay. Skip down to page 15 -- line 15 on 22 that same page, page 2, and it says, rate structure 23 changes. Do you see that sentence in there? Rate 24 structure change can have significant impact on consumers. 25 Help me out a little bit with that sentence. Okay? Talk

1 to me a little bit about that.

Q.

A. Would you like to know what can cause thoseimpacts?

4

Yeah. Uh-huh.

A. Let's say, for example, I -- good question. As you think about what's been proposed in this case, we have the existing tariffs that have particular types of charges and values. We have some proposed rates from Aquila that have a different set of charges that have their own rates.

11 Now, if I'm a customer and I'm used to 12 being on the current rates where you bill me so much a 13 month as a customer charge, I may have a demand charge 14 that's based on maybe my maximum demand for the year 15 that's fairly small value because it only covers 16 distribution costs, and then I have some blocked energy 17 charges.

18 Now, if I go from from paying my bill based 19 on my usage on that rate, if you change the rate structure 20 on me and say, well, instead of that, I'm going to charge 21 you for different things in a different way, okay. I'm 22 not going to charge you on your maximum demand and a small 23 amount for facilities. I'm going to put some production 24 and transmission demand-related costs in there, too. And 25 I'm going to charge you a fairly -- charge an amount per

megawatt, but I'm going to base it on your monthly demand instead of your highest demand for the year. And then I'm going to collect the other costs in the energy charges.

Now, it may be that because of the way I use electricity, I'm going to pay a lot more for the same usage I had based on this new structure of the rates and what charges. The way the components of the rate are now divided in a different way than they used to be, it could cost me a lot more money.

And that was the caution there is, if you want to know what happens to customers when you change the rate structure, what you have to do is look at how much customers -- how much a customer will be billed under what set of rate structures and compare that same customer's bill under a different set of rate structures so I can see whether he's paying more or he's paying less.

Okay. The company has not done that and presented that for the actual customers that they have. They have not done it even on a typical basis to say, well, if I have a residential customer, he uses 1000 kilowatt hours a month, uses that in every month, here's what his bill is on the current rate structure, here's what his bill is on the proposed structure.

They have not even done that for a typical customer basis, let alone going through to see how each of

their actual customers', you know, bills would be if they 1 rebilled them under their new rate structure. 2 3 COMMISSIONER APPLING: James, thank you. COMMISSIONER GAW: I'm going to have some 4 5 more questions. 6 JUDGE THOMPSON: I understand that you are. 7 It's about time to recess. 8 COMMISSIONER GAW: Do you want to go ahead and do that? That will be fine. 9 10 JUDGE THOMPSON: We're going to go ahead 11 and recess now for the agenda meeting. We will reconvene 12 when the agenda meeting is over. What I would suggest is that we meet back here in an hour, and I will give you a 13 14 report at that time as to when I believe we will be ready 15 to start. So we are in recess, then, until let's say 16 10:45. 17 (A BREAK WAS TAKEN.) JUDGE THOMPSON: Let's go back on the 18 19 record. You may inquire, Mr. Commissioner. You're still 20 under oath. FURTHER QUESTIONS BY COMMISSIONER GAW: 21 22 Q. Mr. Watkins, there's an Exhibit A, a comparison of recommendations that was given to the 23 24 Commission I believe during opening statements of Aquila. 25 Have you seen that? And I can show you.

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1	JUDGE THOMPSON: Exhibit 25.
2	THE WITNESS: Yes, I have.
3	BY COMMISSIONER GAW:
4	Q. Earlier you were discussing that there had
5	been no comparison of impact on ratepayers, and I'm trying
6	to reconcile that statement against this exhibit. And if
7	you could explain what you were meaning with those general
8	statements as it relates to what's contained on this page
9	in general.
10	A. Are you referring to my discussions with
11	Commissioner Appling regarding
12	Q. At some point in time I thought that you
13	suggested that there had never been a comparison it may
14	have been with Commissioner Appling there had never
15	been a comparison done about how these proposed changes
16	impact ratepayers. Do you recall that?
17	A. Yes. I wanted to make sure I we were
18	recalling the same thing. I believe that had to do with
19	the changes in the rate structures that the company has
20	proposed.
21	Q. Okay.
22	A. And that was what that discussion was
23	linked to.
24	Q. All right.
25	A. What this exhibit shows is the average

impact on a customer class of strictly the revenue shift. 1 2 In addition to this impact, if the rate structures were 3 changed, individual customers within that class, some would win and some would lose, so there would be a more 4 5 severe impact than the average impact on some customers. 6 Q. And that is the portion that you're 7 suggesting has not been done? 8 Α. That's correct.

9 Q. How difficult is it to do that analysis?
10 A. I don't know exactly how to judge that. I
11 mean --

Is that something that you could do? 12 Q. Is that something that the company would be able to do? 13 14 Α. I think most any of the analysts could do 15 it on a typical customer basis, say, well, I'll just make 16 up some kind of customers and see what happens to them. I 17 think the company's probably all set up to do it because 18 they have a data set of individual customer records for 19 this period that they use to generate the billing units. 20 So they could probably go through on those actual 21 customers and tell you what would happen to each one. 22 Q. So is that -- is that something that Staff 23 is recommending that the Commission be able to see? 24 I would think that if the Commission were Α.

25 considering changes in rate structures, they'd want to

know what would happen if they did that. 1 2 So what does it take for me to get to see Q. 3 that? Probably all you'd have to do is ask and 4 Α. 5 someone will produce it for you. 6 Q. Oh, good. A. I think that's usually the way that works, 7 8 isn't it? JUDGE THOMPSON: Consider yourself asked. 9 10 COMMISSIONER GAW: Well, I'm trying to 11 figure out who should best provide that information and who's in the best position to do it as well. Thank you, 12 13 Judge. THE WITNESS: Well, I think the company 14 15 would if you want to know about real customers. 16 BY COMMISSIONER GAW: 17 Are you talking about breaking it down to Q. every single customer, or are you talking about breaking 18 19 it down to average, average customers in a particular 20 class? 21 Α. The company would be able to do it on actual customers, every individual one. 22 23 Q. Okay. Well, that would be terribly 24 voluminous.

25 A. Well, you have to check with them to see

how -- well, it's voluminous, but it's also just done on 1 2 their computer. So it's a question of whether they've got 3 it set up just to run that or not. I'm not sure why that hasn't been presented, whether they didn't think it needed 4 5 to be or because they hadn't done it, but you could check 6 with them about it. What the Staff could do is make up some hypothetical customers in each class. 7 8 Q. Yes. 9 Α. And bill them on each of the proposed 10 rates. 11 Okay. How long would that take Staff to do Q. 12 that? 13 If we didn't have anything else to do, Α. 14 probably a couple of days, but it would probably take a 15 couple of weeks. 16 How long do you -- do you have any concept Q. of how long it would take the company to provide that 17 information? 18 19 Α. I really hate to speak for them. That's okay. I can ask them. 20 Ο. 21 Well, they should have it to you by three Α. 22 o'clock. No. I really don't know how far they are in 23 that process, whether that requires, you know, a whole set of programming before they can even get started or what 24 25 their other obligations would be, so I'd hate to speak for

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1 them.

2	COMMISSIONER GAW: I'd like to ask, Judge,
3	if you could make further inquiry on my behalf about how
4	to get that information.
5	JUDGE THOMPSON: The impact of the proposed
6	changes to customers?
7	COMMISSIONER GAW: Yes. And at a minimum I
8	think I need some sort of average customer within the
9	classes or at least some range of typical customers. If
10	there's something more specific than that, I'd like every
11	single customer that strikes me as being a lot of
12	material. That might be difficult for the Commission to
13	analyze on its own.
14	BY COMMISSIONER GAW:
15	Q. So I'm not sure. Mr. Watkins, I would ask
16	you to give feedback on how important that amount of
17	information is from your standpoint in understanding the
18	impact that this has on the ratepayers.
19	A. In terms of the amount of information, I'm
20	sure you don't want to know what happened to every
21	individual customer, but when the Staff
22	Q. It just may be so voluminous as to be
23	difficult to process in the time that we have. But go
24	ahead.
25	A. What the Staff has done in the past when we

did it would be to summarize the results and say, okay,
 10 percent of the customers are going to get impacts
 bigger than this.

5 A. 20 percent are going to get impacts bigger 6 than this number, but not as large as this. So it's sort 7 of a frequency distribution kind of thing.

Okay. That's helpful to me.

8 Q. Yes.

Q.

9 Α. So you don't have to look at each customer. 10 You say, well, there's only 2 percent of the customers 11 that are getting an impact bigger than 5 percent. You 12 say, well, I won't worry about that. You say, there's half of them getting an additional impact of 30 or 13 14 40 percent, you know. That's a problem. But you didn't 15 have to look at every one of them. They're summarized. 16 COMMISSIONER GAW: Okay. And, Judge, did you catch that? If you can make inquiry for me about how 17 difficult that is, how much time it would take to get 18 19 that.

JUDGE THOMPSON: Well, if you don't mind, we can make that inquiry right now. Mr. Swearengen? MR. SWEARENGEN: I don't know that all of my folks have heard all the questions that Commissioner Gaw had about the information he wants. I do know we have something like 400,000 customers. If we're talking about

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analyzing them for 12 months, that's 12 times 400,000. 1 2 That's a lot of information and a lot of work. I don't 3 know how long it would take to do that. MR. TRACY: I'm not sure how much I can 4 respond without testifying. 5 6 JUDGE THOMPSON: If you need to, you can 7 come up here and sit in the hot seat. 8 MR. SWEARENGEN: You're still under oath. 9 THE WITNESS: Okay. I'm a swearing kind of 10 quy. 11 I would argue that the residential 12 customers, there is no change in structure. There's still a customer charge, so an energy charge, ultimately that's 13 14 just going to go up or down by a level. There's some 15 blocking differences, but ultimately the residential 16 customers, the percentage change you see in the cost of 17 service is, by and large, the percentage change they would 18 see. 19 JUDGE THOMPSON: So in other words, I'm looking now at Exhibit 25, and it tells me that for 20 21 residential space heating customers, you're proposing a 22 reduction of 3.93 percent in the MPS service area of the 23 company; is that accurate? Am I understanding this 24 correct? 25 MR. TRACY: If I'm allowed to stand here?

1 JUDGE THOMPSON: You're allowed to stand. 2 In fact, I urge you to. 3 MR. TRACY: What a deal. They've done this 4 to me again, let me talk. No. 5 Yes. For the residential customers, the 6 percentages you see here are largely what those customers 7 would see. Ultimately, only two classes of customers are 8 seeing restructuring, and that's the small general service 9 and the large general service. 10 JUDGE THOMPSON: Well, let me ask you this: 11 For the customers in each class in each service area, are 12 you able to produce an average or typical customer, whether or not such a thing actually exists? 13 14 MR. TRACY: We could, I mean, just 15 mathematically. The numbers you see here reflects the 16 average. JUDGE THOMPSON: Okay. Well, I guess what 17 18 I understand the Commissioner wants is a chart showing 19 what's going to be the dollar impact on the customers in 20 each class for each one of these changes that's proposed 21 by the four different parties who have proposed changes. 22 In other words, percentages are great. We've got the 23 percentages here, and thank you, Mr. Swearengen for this chart. It's very helpful. 24 25 Now let's see dollars for a monthly bill.

For a typical customer in each class, in each service 1 area, what's the change to the monthly bill? 2 MR. TRACY: Okay. I think I'm confused 3 in -- we can do that, too. I think you were asking for 4 5 the -- you described it as a distribution curve basically, 6 is --7 JUDGE THOMPSON: He can tell you best what 8 he wants. I'm not saying it right. 9 MR. SWEARENGEN: Could I just interject 10 here? I think what the witness was concerned about is 11 where we're proposing structure changes, that we hadn't 12 provided information, and that's not all of the classes, that's only two of the classes; is that right? 13 14 MR. TRACY: Only two are changing. 15 MR. SWEARENGEN: And so how difficult will 16 it be to provide that information for just those two classes? 17 MR. TRACY: Excuse me while I ask. 18 19 MR. SWEARENGEN: We're not talking about the residential piece. 20 21 COMMISSIONER GAW: I want to go back here 22 and get some feedback on that, but if you could answer 23 that question --24 MR. TRACY: I'll go ask the guy who's going 25 to do that.

1 BY COMMISSIONER GAW:

2 Mr. Watkins, do you -- do you think that Q. 3 it's helpful to do other classes besides those two? 4 Α. There are changes being proposed to the 5 residential rate. There's -- I know there are changes to 6 the blocking in the summertime, and I don't know if the 7 seasonal differential has been changed in the general use 8 rate. There are a lot of residential customers. It may 9 be that using a set of hypothetical customers, customers 10 with, say, high summer usage, low winter, like the sample 11 is stratified to get the load research data, basically 12 there would be a group that would be high usage in the summer with low usage in the winter, high usage in the 13 14 winter, a low usage in the winter, high usage in the 15 winter, low usage in the summer, high in both summer and 16 winter, low in both summer and winter. We could probably make up some hypothetical customers based on what we know 17 18 about the data.

To try and tell you what those impacts would be for the residential class, as Mr. Tracy said, the changes are much more dramatic for the small general service and large general service classes, and it probably would be worthwhile to get more information on that.

24 Q. Would it be possible -- this is -- I'm only 25 asking if it's possible -- to have the parties to have a

discussion about producing something that would be helpful
in that regard and then getting us that information about
how possible that is back here? I mean, an hour or two?
Not the information, but the possibility of having some
agreement about producing it?

A. I would think we would have those
discussions. I would mention one other piece to it.
While the changes are fairly dramatic for large general
service and small general service --

10 Q. Yes?

11 -- most everyone pretty much agrees that Α. 12 under most circumstances they should be getting a rate reduction out of this. So those rate structure changes 13 14 are not going to have a high positive impact on them. 15 They may reduce the amount that their rates are reduced. 16 But I'm not so concerned about the folks that are getting rate reductions as the ones increasing. We could probably 17 18 get that.

19 Q. If the parties wouldn't mind discussing 20 that -- it's kind of difficult for me to know what's the 21 most helpful at this stage -- and then give me some idea 22 later, give the Judge some idea later in the afternoon 23 about whether something could be produced that would be 24 more along the lines of what you described earlier, 25 without creating a burden that is too difficult to

overcome in the period of time we have to hear this case. 1 2 I think I can speak for all the analysts Α. 3 that we'll do that. COMMISSIONER GAW: All right. And just to 4 5 the extent that you-all can report back, I would 6 appreciate it. Now the only -- I'm going to have to stop 7 here. The only other thing I would like to give you an 8 opportunity to do, there was an extensive discussion by 9 Mr. Tracy about these exhibits on the graphs which, Judge, 10 I don't know if there's an exhibit number for those or if they were just discussed as attachments. 11 12 JUDGE THOMPSON: They were discussed as attachments. I don't think they have separate exhibit 13 14 numbers. 15 COMMISSIONER GAW: Okay. They're showing 16 load factors for the different classes of customers. Mr. Tracy, if I recall correctly, was utilizing it to 17 18 demonstrate where their methodology was more appropriate 19 than Staff's. Do you want to -- do you want to respond to 20 any of those -- any of that in regard to what's contained 21 in the graphs and how those graphs -- how important these 22 graphs are or are not and how they relate to Staff's 23 methodology? 24 I can pass those around to you if you want

25 to see them.

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1 MR. CONRAD: Excuse me. Were those the 2 things that were filed with Mr. Tracy's direct testimony? 3 JUDGE THOMPSON: I believe they are. MR. WILLIAMS: Is that rebuttal 4 5 Schedule JMT-2? 6 COMMISSIONER GAW: They were handed to me 7 separately, so I'm --8 JUDGE THOMPSON: Rebuttal Schedule JMT-2, 9 pages 1 through 7. It's the mountains and valleys showing 10 the different loads for the different classes, right? See, I listened and understood. Do you have these? 11 THE WITNESS: I have seen that. 12 13 JUDGE THOMPSON: Do you need them to answer 14 questions about them? 15 THE WITNESS: I don't, no. 16 BY COMMISSIONER GAW: I realize I gave you an open-ended 17 Q. 18 question, but Mr. Tracy had a very open-ended discussion 19 as a result of one of my open-ended questions that went on 20 for some time. So I'll give you the opportunity, if you 21 have any response to that, to do so. 22 Α. Well, there were -- there were two pieces, 23 as I recall, of what Mr. Tracy had to say about the 24 graphs. One of them attempted to describe why their 25 production allocator was the appropriate one based on what

0357 all those graphs look like. I totally disagree with that. 1 2 3 When you look at the convolutions in all 4 those loads, I think you can see why the Staff's allocator 5 would be better because it accounts for all those 6 convolutions and all those hours in ascribing costs to the 7 customer classes. 8 The other portion of this discussion was 9 about good load factors and bad load factors, and my 10 perception of that is entirely different than his. 11 Ο. Okay. Explain. A load factor is something you calculate. 12 Α. It's the average usage divided by the peak usage, and it 13 14 gives you a number. Numbers aren't good, they aren't bad. 15 But it has to do with your philosophy about providing 16 service. And I think I mentioned earlier, electrical utilities provide flip the switch service. Whoever wants 17 18 electricity just uses whatever they want to any time they 19 want to. You flip the switch, turn things on. You flip 20 it off, it goes off. You can calculate at the end, you 21 know, what the load factor was for people doing what they 22 wanted all the time with their electricity. 23 Now, to say that it's good or bad doesn't 24 make a bit of sense to me. It is what it is. A lot of 25 that discussion is how you could -- you could serve

customers at a lower average price if they just would
 change when they wanted to use electricity. Well, I don't
 know that you want to change when people use electricity.
 Let them use it whenever they want to.

5 But the other problem is, you do design 6 your system for what exists out there, and frankly, if you 7 were to increase Aquila's load factors, well, then they'd 8 have a bunch of combustion turbines that they don't really 9 need. And what they need is a whole bunch more expensive 10 base load coal units to meet that off-peak load.

Any time you change the system load factor from approximately what you have your system built to handle, then you find out you don't have the right fix to serve that load in a least cost manner.

You should have had more peakers if you go to a peak year system. You should have had more base load units if you go to a higher load factor system. I don't think load factor's good or bad. It just exists. And you design your system to meet it in the least cost way.

Now, it may be that your average cost of producing electricity is higher than somebody somewhere else, and if you look at national statistics and you say, well, in this ranking I have higher cost electricity than this guy does, well, if you -- I'd say the casual observer or you take a look at that statistic and you say, well, it

is higher, but if you think deeper about why that could 1 2 be, it could be because they run the -- they can't run the 3 company, their overheads are really high, you know, they 4 make bad decisions and that causes it to be high, or it 5 could be that the customers are predominantly residential 6 and small general service, which have a typically low load 7 factor, and it costs more to serve them because it's peak 8 year.

9 It's -- to me it's not good or bad. That's 10 what I'd say about those graphs.

11 Q. Well, in regard to the very last part of 12 your statement, when you say that it costs more to serve 13 the residential and other customers, is that not -- how is 14 that reflected in Staff's methodology?

A. That's reflected in Staff's methodology by charging higher price -- by allocating -- allocating costs, charging prices, I think. When I think of the cost allocation, you can think of a lump of dollars, and then you have the contribution of each class to the total load, so you calculate percentages by which to allocate that lump of dollars.

Frankly, as an economist, I think of it the other way, which is I could take that lump of dollars and divide it by the total load and calculate a price. Then I could calculate out each class's load. In the Staff's

methodology, it is -- when I measure costs, and I say on 1 2 an average cents per kilowatt hour basis, that method does 3 yield higher cost, higher production costs for residential customers because it is peak year use, and lower cost for 4 5 the high load factor customers, on an average cents per 6 kilowatt hour basis. 7 Ω. So you're saying the Staff's methodology 8 does take that into account? 9 A. Absolutely. 10 Ο. What it does -- what it does not do, if I'm understanding you correctly, is ignore the usage that 11 occurs the rest of the time? 12 13 Α. That's correct. 14 Q. I used two negatives. I apologize. In 15 other words, it also takes into account the usage that occurs the rest of the year? 16 17 Α. Yes. COMMISSIONER GAW: Okay. And, Judge, I 18 19 apologize. I'm going to have to stop. Thank you, sir. 20 JUDGE THOMPSON: Yes, sir. Additional 21 questions from the Bench, Commissioner Appling. 22 COMMISSIONER APPLING: No questions. QUESTIONS BY JUDGE THOMPSON: 23 Q. Mr. Watkins? 24

25 A. Yes, sir.

1 Am I correct in believing that there was a Q. 2 team of Staff members who worked on developing the methodology that was used and has been presented in this 3 4 case? Well, that's correct in two ways. 5 Α. 6 Q. Okay. What are the two ways? 7 Α. One is there was a team of Staff members 8 who have been working on this allocator for the last 9 20 years or so. 10 Ο. Okav. 11 And then there's the other team that put Α. together the study in this case, so yes, it's been a team 12 effort all along. 13 Now, the team that put it together in this 14 Q. 15 case, that consists of the three witnesses that Staff has 16 indicated it's going to present? 17 That's correct. But in addition, we had Α. some additional work done by a former Staff member, Hong 18 19 Hu, that we hired back on a temporary basis to help us crunch some -- crunch them numbers and get them in the 20 spreadsheet. Her temporary employment expired the first 21 22 of November. 23 Q. But she worked on this case? 24 Α. She assisted, yes. 25 Q. And did I hear earlier that Mr. Bender also

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1 worked on this case?

2 Yes. Mr. Bender did a fuel run for us. Α. 3 Ο. Was there anyone else in addition to Hong Hu and Mr. Bender? 4 5 Α. I don't recall anyone else. 6 Ο. Okay. Now, who was the supervising member 7 of this team? 8 Α. That would be me. 9 Q. Okay. And what I want to know is what all 10 the steps were that Staff went through in preparing this 11 analysis. For example, Mr. Busch when he was testifying 12 talked about receiving cost data from a previous rate case and load information from Ms. Pyatte and entering data 13 14 into a spreadsheet and coming out with receiving an 15 allocation from you. 16 There were other allocations that he perhaps developed himself or that the spreadsheet 17 developed automatically, all of which was used to produce 18 19 the class cost of service study, which was only one part of this analysis, correct? 20 21 That's correct. Α. 22 Q. Then that was taken back, and at some point 23 I assume someone took the billing determinants and the class cost of service study and developed from that an 24 25 idea of exactly how you were going to have to bill the

different classes to get to the revenue requirement; is 1 that right? 2 3 Α. Only -- no, it is not entirely correct. Q. Well --4 5 Α. Because --6 Q. Here's your opportunity to set me straight. 7 Α. We did not redesign the rates. 8 Q. Okay. 9 Α. The company produced billing units on their 10 rate structures, and we did not attempt to redesign the 11 rates for them to correct any problems that were in those. 12 We didn't see any reason to have rates more like the rates they charge in Colorado than the ones they already have in 13 14 Missouri. We're happy with the ones they have in 15 Missouri. 16 Q. So you just took the rate structure as a 17 given? 18 Α. The current rate structure is a given. 19 That was fine with us. We don't see any reason to change 20 it. In other words, when I look here at 21 Q. 22 Exhibit No. 25 and I see in this second vertical column 23 from the left the figures that summarize Staff's proposal as far as changes in interclass responsibilities for 24 25 costs, that's assuming the existing rate structure?

0364 1 The rate structure doesn't affect those Α. 2 numbers. 3 Ο. Okay. 4 Α. But if you assume the existing rate 5 structure and you adjust each of the rate components, as 6 we have recommended, by a percentage factor, those numbers 7 would be the impact on every customer in that class. 8 Q. Okay. So tell me about the part that you 9 personally did. What did you personally do? 10 Α. In this case? 11 Ο. Yes, sir. I had general leadership of the team. In 12 Α. addition to that, I calculated the time use allocator, 13 14 allocators. I'm sorry. There's one for transmission, one 15 for production capacity and one for energy. 16 One for transmission, one for production Q. capacity, one for energy. Did I hear that right? 17 That's correct. The -- the hourly 18 Α. 19 allocators are the same. It's just class contribution to hourly load, but when you sum those applied to the prices 20 21 in each hour across the year, you get a different 22 distribution of costs about those categories to the 23 classes, and the way those allocators were applied are to sum total that's determined -- in this case it was 24 25 determined in the last rate case, is the total dollars

that that allocator gets applied to. 1 2 So when you talk about allocation factors, 3 the percent going to each class, Staff has three time and use allocators. 4 5 Ο. Okay. And they're applied to different 6 things, right? 7 Α. Right. 8 Q. Now, you heard the criticism that was made 9 by Mr. Brubaker and Mr. Tracy of Staff's allocation 10 method? 11 Α. Yes. 12 Q. And do you have a response to that? Well, it's certainly not a common allocator 13 Α. 14 to use everywhere, but I -- I would describe it as more 15 cutting edge than anything else. I mean, Dr. Proctor and 16 I and a number of other people have worked a good amount 17 of time developing this to be able to present to the Commission this type of cost information in these cases. 18 19 I think the Missouri Commission in this area is truly at the leading edge. 20 21 We don't -- we don't use a back of the 22 envelope approach where I can calculate this allocation 23 factor without even using a calculator, which would be simple and save a lot of time, but we don't think that's 24

25 the right way to do it.

1 Q. So do you use software in calculating it? 2 Yes, we do. Oh, sure. Α. What kind of software? 3 Q. Excel spreadsheet. 4 Α. 5 Q. So this is another spreadsheet product? 6 Α. Yes. 7 Q. Okay. Now, help me to understand exactly 8 how these allocators work. 9 Α. Okay. 10 Moment by moment or hour by hour through Ο. 11 the year, the allocator takes account of the changing 12 responsibility of the different classes for what, the peak at that hour? 13 For the load at that hour. 14 Α. 15 Ο. The load at that hour? 16 There's only one demand at that hour. Α. 17 Okay. So whatever the load happens to be, Q. 18 at that given moment through the whole year, 365 days, 19 24 hours a day, what you do is you measure the responsibility of each of these classes for that load; is 20 21 that correct? 22 Α. That's correct. 23 Q. And you do that using what? I mean, how how do you do that? Do you use, for example, the load 24 25 data that the company collected?

1 A. Oh, certainly. I'm sorry. I was trying to 2 understand your question. Yes, it's --And I equally am trying to understand your 3 Ο. 4 testimony. 5 Α. The hourly load data was provided by the company. That was the -- that was the basic data that was 6 developed for this case. 7 8 Q. All right. And those charts that 9 Commissioner Gaw was referring to earlier, the ones that 10 came out of the rebuttal testimony of Mr. -- I think it 11 was JMS, wasn't it? That would be Mr. Stowe, I believe? 12 A. I think those were in Matt Tracy's rebuttal. 13 14 Q. Whoever's, the ones that look like mountain 15 ranges? 16 Α. Those are. 17 And those are depictions, graphic Q. depictions of that data that the company collected, 18 19 correct? That's correct. 20 Α. 21 Q. And the data the company collected 22 originally had all the groups together, right, or no? I 23 guess they would know the different ones, because they know whose meter they put a measuring device on, right? 24 25 Α. Well, they know exactly which customers

they put metering devices on. They know to which subgroup 1 those customers belong. So, for example, for each 2 3 residential group, there would typically be say four strata, stratified customers, high, low, summer, winter. 4 5 Then they'd know based on the populations what the total 6 number of customers was in each group, and they'd expand 7 that sample up to the class -- load research class level. 8 In some cases you would then combine those 9 load research -- load research classes into customer 10 classes for the cost of service study, depending on how 11 you thought those should be aggregated, but that's the fundamental data. 12 Q. And then from your point of view, what you 13 14 did is you entered that information into the spreadsheet 15 for each class, for each day, for each hour? 16 Yeah. Α. 17 The demands. So how many cells would that Q. 18 be? 19 Well, there are 8,760 hours in a year, and Α. there were a bunch of classes. Residential, small general 20 21 service, large general service, large power, lighting. 22 This is just for MoPub, a couple of special guys 23 individually. 24 Ο. So for each of two service areas? 25 Α. Yes.

1 Q. There were literally thousands and 2 thousands of values that were entered into the 3 spreadsheet? Α. That's correct. 4 5 Ο. And those values were reflective of the 6 measurement the company took in its load study? That's correct. 7 Α. 8 Q. And I assume that the company's 9 measurements were, in fact, hour by hour? 10 Α. Yes, they were. 11 Ο. Through the year? I -- I hesitate. I suspect that their 12 Α. 13 measurements, the load research meters are interval meters, and I think -- I'm not positive, but I think that 14 15 it's more like 15-minute intervals, and then those are 16 aggregated into hours to produce not quite the basic data 17 but the understandable data is on an hourly basis. 18 And that aggregation was done by the Q. company or did you do it? 19 20 The company. Α. 21 The company. So the information the Q. company gave you was hour by hour? 22 23 That's correct. Α. 24 Okay. And did you accept that as the Q. 25 company had aggregated it or did you disassemble that and

make any adjustments or changes? 1 2 We did not make any -- we did not examine Α. 3 the fundamental data, didn't make any recommendations about changing. That data was weather normalized. 4 5 Q. Weather normalized at the company level or 6 by you? 7 Α. At the company level. And we did review 8 that and make recommendations regarding that, and that 9 took a few rounds back and forth, as I recall. 10 Ο. Okay. And the weather normalization 11 basically is a process of what, taking out the peaks and 12 valleys that represent abnormal weather? I think -- I think that's a good overall 13 Α. 14 description, basically taking out any anomalies that are 15 occurring because of variations from normal weather. 16 Q. Okay. And that has to do with basically shifting 17 Α. 18 them up or shifting them down for the most part. 19 Right. And where do you go to get this Ο. 20 normal year that you standardized the data to? I mean, 21 has such a year ever occurred or was that something the 22 parties have agreed to? 23 Α. I don't know that there was any disagreement about how to determine a normal year's worth 24 25 of weather data.

1 Q. Okay. So there was no disagreement? 2 I don't believe so. Α. As far as you know. So the data was 3 Ο. collected, the data was then aggregated. The data was 4 5 normalized? 6 Α. That's correct. 7 Q. And the data was then -- the normalized, 8 aggregated data was then handed over to you. Was there 9 any other manipulation? 10 Α. There was some -- some manipulation in 11 terms of aggregating classes together and putting loads into chronological order, beginning and ending at a 12 13 certain point. That was done by Janice Pyatte before I 14 got them. 15 Ο. Okay. But in other words, after the 16 company had finished doing what it did, and I think you 17 told me the weather normalizing was done at the company 18 level? 19 Α. Yes, it was. Then the information was passed to 20 Ο. 21 Ms. Pyatte. She then did some additional things to it before you got it? 22 23 Α. Yes. 24 And those things had to do with the Q. 25 composition of the classes, basically?

1 Α. Yes. 2 Okay. So then when you got that Q. information, then you inputted it into Staff's 3 spreadsheet? 4 5 Α. When I got the load information from 6 Ms. Pyatte, I created a spreadsheet based on the 7 spreadsheet she gave me with the loads in it. 8 Q. Okay. 9 Α. To do the time of use allocators. 10 Ο. So you had to actually create the 11 spreadsheet? 12 Α. I had to create that one from scratch in this case, yes. 13 Okay. And then you entered the data into 14 Q. 15 it or were you able to just --16 Well, luckily --Α. 17 Q. -- dump hers into it kind of? 18 Α. -- the spreadsheet she sent me had the data 19 in it, and I worked to develop the formulas, et cetera, that I needed with that data already in there so that I 20 21 wouldn't have to copy it or input it somewhere else, yes. 22 Q. That must have saved many hours. 23 Α. It would have if I'd have had to type them 24 in. 25 Okay. So then you had the formula to Q.

relate the different cells to one another, right --1 2 Correct. Α. -- to produce results, and basically what 3 Ο. you then produced was -- was what, a value for each class 4 5 for each hour? 6 Α. That's correct. 7 Q. Was that a percentage? 8 Α. Oh, theoretically, it could have been. I 9 did the alternative approach, which was I determined 10 hourly prices, so I could just multiply by the loads that 11 I had instead of determining each class's percentage share of load in each hour. 12 13 Q. So instead of doing percentage, you did what? 14 15 Α. Okay. In each hour, there would be a set 16 of costs. 17 Right. Q. And there's also a total load in that hour. 18 Α. 19 Right. Q. Okay. So I took the costs and divided by 20 Α. 21 the total load to find out what the price was per kilowatt 22 hour. 23 Q. Okay. Okay. Then I multiplied that by the 24 Α. 25 kilowatt hours -- the kilowatt hour load in that hour for

each class to determine what their share of the cost was. 1 2 Q. Okay. 3 Α. The result is identical to had I calculated 4 each class's percentage share of the load in that hour and 5 applied it to the total cost. I chose to do it as price 6 times quantity. 7 Q. Okay. So then after you finished that, is 8 that then the information that you provided to Mr. Busch? 9 Α. No. 10 Ο. Keep going. In addition to that data, I had the fuel 11 Α. 12 run results that Mr. Bender ran for me that gave me hourly fuel costs for -- they gave me hourly fuel costs, hour by 13 14 hour. 15 Q. For the whole year? 16 For the whole year. Α. Okay. And was this a historic year? 17 Q. 18 No, it wasn't a historic year. It was --Α. it was -- it was a year that we had the loads for. 19 20 Ο. Okay. So it was the test year, if that's 21 the right word? 22 Α. Yes, it would have been the test year for 23 the rate design case. 24 Okay. And how did you then relate that Q. 25 fuel run data to the load data that you had so laboriously

1 created? 2 Well, I had to put the load -- the fuel run Α. data in the same order as the load data, because the fuel 3 run has to run January through December. 4 5 Q. Okay. 6 Α. And I will admit that I fouled that up, and 7 Matt Tracy caught that on a portion of it, because I -- I 8 thought I was using one sequence when I got to the 9 transmission allocator and I was really using the other 10 one. He pointed it out and I fixed that. 11 Q. Okay. Because basically then what I have is I 12 Α. have the hourly cost from the fuel run. 13 14 Q. Right. 15 Α. Okay. So in each hour I can convert that 16 to an hourly price. 17 Q. Right. And price out each class's load. 18 Α. 19 Q. Okay. Aggregating over the year gives me the 20 Α. 21 energy cost allocator or the energy cost assigned to --22 allocated to each class. That's one piece of it. 23 Q. That's just cumulative for all the hours in 24 the year? 25 Α. Yes. You allocate based on load ratio

0376 shared in each hour, accumulate over the years, And that's 1 2 it. You wind up with a final number? 3 Q. 4 Α. Yeah. 5 Q. Okay. So then what? What's the next step? 6 Α. The next step was interchangeably to do 7 production or transmission. I did production. Based --8 Q. In effect, you've got three of these, 9 right? 10 That's right. Α. 11 Ο. Okay. Based on the results of that fuel run, I 12 Α. have the hourly fuel costs and the loads they have with 13 14 them. Okay. So what I did is I looked and -- I looked at 15 the loads with the longest duration, okay, and I said, 16 okay, there's the fuel costs for that. I looked at the load with the next longest duration to find out how the 17 cost increased with that increase in load. 18 19 Q. Okay. I determined that increase in fuel 20 Α. 21 that was due to the increase in the load, and I used the 22 relationships that Mr. Brubaker shows, I believe in his 23 rebuttal testimony, in his example that says that if this 24 system is designed correctly, if I take that increase in 25 the fuel cost from that additional load, multiply it by

the number of hours that's paying that fuel cost throughout the year, that that amount should exactly be equal to the difference in the capacity costs of the units that produce that fuel.

5 Okay. So for each load increment, I 6 derived from the hourly production cost, the fuel costs, 7 the hourly fuel costs, what the associated change in the 8 capacity cost had to have been to produce that change in 9 fuel cost. That gave -- that gave me the capacity cost to 10 spread equally to each of those hours when that increment 11 of generation was running.

I can calculate a price for that and price that out. I did essentially the same thing with transmission capacity, except transmission capacity has -there is no difference in price. There's no running costs for transmission. So basically what I took was every load increment of transmission, I took -- let me give you a for example.

For example, there's 100 -- 100 megawatts of transmission capacity. If I find that 10 megawatts is the lowest load of the year and it ran for 8,760 hours, then I would take 1/10 of the total cost and spread it over those 8,760 hours equally to get that first block and so on. Then I calculated a price in each hour, priced out each of the hourly loads and that gives us our

transmission allocator, which can then be applied to the 1 2 functionalized total of transmission costs. 3 Ο. So you went through a similar process in each of these areas, transmission, production capacity and 4 5 energy? 6 Α. That's correct. 7 Q. And then that was -- those were the 8 allocators you then passed on to Mr. Busch? 9 Α. That's correct, and I passed to him percentages for each class. 10 11 Okay. Okay. Which was the result of the Ο. calculations you had done? 12 13 Α. That's correct. 14 Q. Okay. Now, in doing those calculations, 15 would you agree it was your intent to model the way the 16 costs were actually being caused in a historical sense during the years when that load data was collected? 17 No, I wouldn't say that at all. I would 18 Α. 19 say that -- and I have said, I think, before that there's a couple of causes for how much -- the total amount of 20 21 production capacity cost. One is the peak load that has 22 to be served, and the other is the mix of generation. 23 When we go to the allocations, I don't think there's any relationship between the load in this hour causing those 24 costs of that hour. I think we do that because we believe 25

1 it's a fair way to price out those costs.

2	But that if you use it in that hour, you
3	ought to pay for it, and the amount you ought to pay for
4	it using capacity in that hour is the same amount you
5	ought to pay no matter when you use that block of
6	capacity. So the cost causation I don't think is there at
7	that point. I mean, it does account for the fact that
8	there is a capacity mix that's determined by loads
9	throughout the year, but I don't think, you know, this
10	load and this hour caused those costs.
11	JUDGE THOMPSON: Okay. That's all the
12	questions I have for you. Any further questions,
13	Commissioner?
14	COMMISSIONER APPLING: No questions.
15	JUDGE THOMPSON: Recross, Mr. Mills?
16	MR. MILLS: No questions.
17	JUDGE THOMPSON: Major Paulson?
18	MR. PAULSON: No questions.
19	JUDGE THOMPSON: Mr. Conrad?
20	MR. CONRAD: No questions.
21	JUDGE THOMPSON: Really? I'm surprised by
22	that. Mr. Swearengen?
23	MR. SWEARENGEN: Well, I have one or two.
24	RECROSS-EXAMINATION BY MR. SWEARENGEN:
25	Q. Good afternoon, Mr. Watkins.

1 Good afternoon, Mr. Swearengen. Α. 2 Do you have Exhibit 25 in front of you? Q. It's the document --3 Yes, I do. 4 Α. -- that Commissioner Gaw asked you some 5 Ο. 6 questions about. 7 There the second column, I think, shows the 8 results if the Staff's cost of service proposal is 9 implemented in this case; is that right? 10 Α. That's correct. By column you mean the 11 third or the second set of columns that's got three columns in it? 12 13 Q. It says staff. 14 Α. Yes. 15 Ο. And one of the concerns that you raised in 16 your testimony and in response to a question from 17 Commissioner Appling this morning was that because Aquila hadn't quantified the impact of its proposed rate 18 19 structure changes, that you thought they should be rejected. Is that a fair statement of your testimony? 20 21 Α. I think my testimony stated that was --22 that they should be rejected, and that was one of the 23 reasons. 24 I'm looking at your rebuttal testimony. If Ο. 25 you have that in front of you, take a look at page 2.

1 I'm at page 2. Α. 2 Starting on line 15 you say, rate structure Q. 3 changes can have significant impacts on consumers, and Aquila has not quantified the impacts of its proposed rate 4 5 structure changes. Aquila's proposed rate structure 6 changes should be rejected. Is that still your testimony? 7 Α. That's what it says. Are there -- is the Staff proposing any 8 Q. 9 rate structure changes in its cost of service study and 10 recommendations in this case? 11 We are not proposing any rate structure Α. 12 changes, although we have indicated that we do not oppose the combining and eliminating of certain of the rate 13 14 schedules that has been proposed by Aquila. 15 So I'm assuming that, for that reason, Ο. 16 since you're not proposing any rate structure changes, the Staff has not obviously tried to quantify the impacts of 17 18 any such proposed changes because there aren't any; is 19 that a fair statement? 20 Α. Yes. There are none from our proposal or lack thereof. 21 22 Q. Now, I think in response to a question from 23 Commissioner Gaw, you suggested that in each of its rate 24 classes Aquila is proposing rate structure changes. Is 25 that true? Is that your understanding of what Aquila is

0382 1 proposing? 2 Α. No. 3 Q. Okay. I believe they're proposing changes to 4 Α. 5 residential, small general service, large general service, 6 but none to large power. I don't know of any to lighting. 7 I think there may be a proposal about one of the contract 8 customers being merged into the standard rate schedule. 9 Q. Well, if you look -- once again, referring 10 to Exhibit 25, and now look at the first column where 11 Aquila proposals are listed. 12 Α. Yes. Is it your understanding that Aquila is 13 Q. proposing rate structure changes for the SGS and LGS  $% \left( {{{\rm{LGS}}}} \right)$ 14 15 classes? 16 Α. Yes. 17 Is it also your belief that Aquila is Q. proposing rate structure changes with respect to the 18 residential class? 19 20 Α. Yes. 21 And what are those rate structure changes? Q. 22 Α. The one that comes to mind is to have a three-block summer rate for both Light & Power and 23 24 Missouri Public Service.

25

Q. Okay. When you use the term rate structure

or rate structure changes, what are you talking about? 1 2 What's the definition of that? I would define it in a practical sense that 3 Α. it would be any change that would require you to make 4 5 changes to the existing tariff other than changing the 6 rate values on that sheet. 7 Q. Okay. So rate values or charges --8 Α. Yes. 9 Q. -- would be something different than rate 10 structures, in your judgment; is that right? 11 Α. That's correct. Would a rate structure be something like a 12 Q. customer charge? Would that be a rate structure concept? 13 14 Α. Yes. Q. Or a demand charge? Would that also fit 15 that category or definition? 16 17 Α. Yes. And an energy charge, would that be a rate 18 Q. 19 structure component? 20 Α. Yes. 21 And are those three components that we just Q. 22 mentioned or that you just mentioned fairly typical 23 components, rate structure components of electric utility companies that are regulated by this Commission? 24 25 Α. That there would be customer charges,

demand charges and energy charges, yes, sir. 1 2 Also referring to page 2 of your rebuttal Q. 3 testimony, I think this morning in response to a question from Commissioner Appling, you noted that, as your 4 5 testimony states, the Commission should reject any peak 6 responsibility methods of allocating generation capacity 7 costs. Do you recall when Commissioner Appling asked you 8 about that statement? 9 Α. Yes. 10 In connection with the cost of service Ο. 11 study that the Staff has performed in this case, did the 12 Staff use any type of a peak allocator for allocating any of the costs that Aquila experiences? 13 14 Α. Oh, yes. 15 Q. And can you give some examples of that, 16 please? 17 I believe we used some kind of a peak Α. allocator for most of the demand-related portions of the 18 19 distribution system. 20 Ο. And anything else? 21 Any expenses that followed that plan. Α. 22 Q. Anything else beyond that? 23 Α. I don't believe so. Are you familiar with what account the 24 Q. 25 company's poles would be in, for example? If I said

1 Account 364, would that sound right?

A. That's in the right numerical area, and Ibelieve that's probably it.

Q. What type of an allocator would the Staff
have used or did the Staff use in this case for allocating
the costs associated with poles?

7 A. We would have functionalized the cost of 8 poles into primary and secondary customer and demand, 9 which would be four categories. The demand pieces would 10 have been allocated on some notion of a peak of some type 11 of demand. The customer piece would have been allocated 12 on density weighted customers.

Q. With respect to those accounts or those categories of property that you use some sort of a peak allocator to allocate for purposes of this case, do you have any idea what order of magnitude all of those accounts together would represent in terms of the investment Aquila has in providing service in Missouri? Do you have any idea at all?

A. You mean as -- let me make sure I
understand the terms, or at least let me answer in terms
that I understand.

23

Q. That's fine.

A. Which is I know what the -- the annualized
costs are that are -- that are in the cost of service

study. I understand what those are, but when you start 1 2 talking about investments and those kind of things, then I 3 get lost. 4 Q. Let's talk about it in terms of costs. 5 Α. As a part of the total, those are not 6 insignificant, but fairly minimal. It's a small 7 percentage of total costs. 8 Q. When you say small percentage, what are you 9 talking about? 10 I don't really know the total. They're Α. totally swamped by transmission and production. 11 12 These peak allocation methods that you did Q. utilize in this case, are they included in the NARUC 13 14 manual that you referred to earlier? 15 Certainly the allocations using class peak Α. 16 are. We also use a further diversified demand that was a combination of class peak and customer maximum demand. I 17 18 think that's likely not in the NARUC manual. 19 Do you know for sure one way or the other? Q. 20 Α. I don't know. 21 Finally, you had -- Commissioner Gaw asked Q. 22 you some questions about Mr. Tracy's rebuttal testimony 23 and the load shapes that were a schedule attached to that 24 rebuttal testimony, and he asked you your views about 25 those load shapes. Do you recall that question?

1	A. Yes, I do.
2	Q. And do you recall your response to his
3	question, which included some criticisms of the use of
4	those load shape curves? Do you recall your response to
5	his question?
6	A. I think I do, yes.
7	Q. And you recall what I would characterize as
8	criticisms of Mr. Tracy's use of those load shape curves
9	for purposes of supporting the company's class cost of
10	service study in this case?
11	A. Yes.
12	Q. Were those criticisms that you indicated to
13	the Commission this afternoon contained in your
14	surrebuttal testimony?
15	A. I'd have to quickly review that, but I
16	suspect so.
17	Q. You think they were?
18	A. The criticisms of the peak responsibility
19	methods, yes.
20	MR. SWEARENGEN: Thank you. That's all I
21	have.
22	JUDGE THOMPSON: Thank you. Redirect?
23	REDIRECT EXAMINATION BY MR. WILLIAMS:
24	Q. Mr. Watkins, do you recall in part of your
25	response to some questions from Commissioner Gaw, you

1 indicated that the Staff was able to do its time of use 2 method in this case when it was unable to do so in the past because it had data available to it? 3 Α. That's correct. 4 5 Ο. What data was that? 6 Α. That was the load research data that was 7 collected by Aquila and expanded into hourly close loads 8 for this case. 9 Q. That's the data you spoke of in response to 10 questions from Mr. Thompson that you felt probably had 11 been collected in 15-minute increments? 12 Α. That's the ones. 13 MR. WILLIAMS: No further questions. JUDGE THOMPSON: Thank you. You may step 14 15 down, Mr. Watkins. Thank you very much for your 16 testimony. 17 (Witness excused.) JUDGE THOMPSON: Ms. Pyatte, state your 18 19 name for the reporter, please. 20 MS. PYATTE: Janice Pyatte. 21 JUDGE THOMPSON: Spell your last name. 22 MS. PYATTE: P, as in Peter, y-a-t-t-e. 23 JUDGE THOMPSON: Raise your right hand, 24 please. 25 (Witness sworn.)

1 JUDGE THOMPSON: Please take your seat. 2 Mr. Williams, you may inquire. JANICE PYATTE testified as follows: 3 DIRECT EXAMINATION BY MR. WILLIAMS: 4 5 Q. Would you please state and spell your name. 6 Α. Janice Pyatte, P-y-a-t-t-e. 7 Q. And, Ms. Pyatte, did you prepare what you 8 labeled as direct testimony of Janice Pyatte and 9 surrebuttal testimony of Janice Pyatte that have been 10 marked for identification in this case as Exhibits No. 19 11 and No. 20? 12 Α. Yes. 13 Do you have any changes to those exhibits? Q. 14 Α. No. 15 Ο. If I were to ask you the questions that are contained in what's been marked as Exhibit No. 19 and 16 17 Exhibit No. 20 here today, would your answers be the same? Α. 18 Yes. 19 MR. WILLIAMS: I offer Exhibits No. 19 and No. 20. 20 21 JUDGE THOMPSON: Any objections to the 22 receipt of Exhibits 19 or 20? 23 (No response.) 24 JUDGE THOMPSON: Hearing none, the same are 25 received and made a part of the record of this proceeding.

1	(EXHIBIT NOS. 19 AND 20 WERE RECEIVED INTC	)
2	EVIDENCE.)	
3	MR. WILLIAMS: Tender the witness.	
4	JUDGE THOMPSON: Thank you, Mr. Williams.	
5	Mr. Mills?	
6	MR. MILLS: No questions.	
7	JUDGE THOMPSON: Major Paulson?	
8	MR. PAULSON: No questions, sir.	
9	JUDGE THOMPSON: Mr. Conrad?	
10	MR. CONRAD: No questions.	
11	JUDGE THOMPSON: Mr. Swearengen?	
12	MR. SWEARENGEN: I have a few.	
13	CROSS-EXAMINATION BY MR. SWEARENGEN:	
14	Q. Good afternoon, Ms. Pyatte.	
15	A. Hello, Mr. Swearengen.	
16	Q. How are you today?	
17	How long have you been with the Commission	1?
18	Since 1977; is that right?	
19	A. Correct.	
20	Q. And in your testimony, you say your primar	У
21	role with the Commission Staff has been to perform	
22	analysis in the areas of rate design, class cost of	
23	service, rate revenue and billing units for the regulated	ł
24	electric utilities in Missouri, and that continues to be	
25	your primary area of responsibility; is that not correct?	,

1 Α. That's correct. 2 And I looked at Schedule 1. You've been in Ο. a lot of electric utility cases starting back in EO-77-56 3 with the St. Joseph Light & Power Company, and most 4 5 recently the 2004 rate case involving the Empire District 6 Electric Company; is that right? 7 Α. I don't believe that there's been a rate 8 design case that I haven't been involved in. 9 Q. And these are the rate design or rate 10 cases. You're fairly familiar then I guess with the 11 tariffs of all of these electric utilities that are under the jurisdiction of the Commission? 12 13 I have some knowledge of them. Α. 14 Q. Okay. Looking at your surrebuttal 15 testimony, do you have a copy of that in front of you? 16 Yes, I do. Α. Over on page 3, at the bottom of page 3, 17 Q. 18 you begin your surrebuttal to the testimony of company 19 witness Tracy; is that correct? 20 Α. Correct. 21 And over on page 4, at line 7, is this Q. 22 question: How does Staff respond to Mr. Tracy's arguments 23 that Aquila's proposed rate structure, paren, and rate 24 values, paren, provide better price signals to customers? 25 And my question to you is, you heard

Mr. Watkins testify here just a few minutes ago that 1 2 there's a difference in his mind between rate structures 3 on the one hand and charges, costs or rate values on the other hand. Do you recall --4 5 Α. Yes. 6 Q. -- hearing him say that? 7 Would you agree with that? 8 Α. Yes. 9 Q. And would you also agree that the -- that 10 the testimony that the company has provided with respect 11 to what you call rate values or charges appears in the company's direct testimony, specifically the testimony of 12 the company's witnesses Gray and Tracy? 13 14 Α. That's correct. 15 Okay. So to the extent you are responding Ο. 16 to that direct testimony, isn't that something that should have been done in your rebuttal as opposed to your 17 18 surrebuttal testimony? 19 I suspect that's a legal question. Α. Okay. But, in fact, you did not respond to 20 Ο. it -- to those issues? 21 22 Α. I did not file rebuttal in this case, no. 23 And if I look at your testimony back on Q. 24 page 4, line 7, at that point you started talking about 25 rate values. In line 10 you use the phrase proposed

rates, line 13, rate values, line 17, proposed rates, and 1 2 then if you turn over to page 5, starting on line 10, 3 you're talking about proposed rate schedules, which I assume again were contained in the company's direct 4 5 testimony. Is that true? 6 Α. That's correct. 7 Q. And then the bullet points that follow that 8 answer on page 10 all concern higher rates, customer 9 charges, energy charges. If you turn over to page 6, the 10 bullet points down to the last one appear to concern 11 rates; is that not true? They -- actually, they concern a mixture of 12 Α. all three, because to analyze like, for example, 13 14 relationships between rates, you need to know the values, 15 you need to know the structure, as well as the -- the 16 schedules. 17 Well, I guess my question to you is, the Q. 18 information concerning the rate levels or the charges or 19 the values were all provided in the company's direct 20 testimony, and I think you indicated that you did not file 21 any rebuttal testimony, but now you have said for 22 surrebuttal to bring those matters to the attention of the 23 Commission and the other parties; is that not true? 24 I did not file rebuttal testimony in this Α. 25 Aquila case, that's correct.

1 Q. If you turn to page 7, at the top there's a 2 -- you have a statement, one, eliminate the facilities charge. Would I be correct in saying that the facilities 3 charge was something that was contained in the company's 4 5 direct testimony? 6 Α. Probably. 7 Q. And if you turn to page 10, at the top, 8 there's a word that says current proposed discount, 9 discount. Are those value or charge issues that were 10 raised in the company's direct testimony? 11 One has to compute those based on the Α. tariffs that were proposed. 12 13 And those tariffs that were proposed were Q. 14 contained in the company's direct testimony; is that not 15 true? 16 Α. That's correct. 17 MR. SWEARENGEN: Your Honor, with that, I'm 18 going to move that all the references to rate values, 19 charges, what have you, be stricken from this testimony. It really should have been in the witness's rebuttal 20 21 testimony so that the company could have had an 22 opportunity to respond to it. That's not happened here. 23 She said she did not file any rebuttal. It was not a 24 topic of our rebuttal. It was something that should have 25 been dealt with in that fashion.

1 I've tried to identify to the best of my 2 ability here where those areas fall, and if the Commission 3 asks, I can try to refine that so we're talking about lines and so forth, but I would like to move that that be 4 5 stricken at this time. 6 JUDGE THOMPSON: Mr. Williams? 7 MR. WILLIAMS: Judge, the testimony has 8 already been offered and admitted into evidence. 9 MR. SWEARENGEN: I don't believe it's been 10 admitted. 11 MR. MILLS: Your Honor, if I may? JUDGE THOMPSON: Mr. Mills? 12 MR. MILLS: From Ms. Pyatte's testimony, 13 14 it's quite clear that she's responding to Mr. Tracy's 15 rebuttal testimony in her surrebuttal testimony. In fact, 16 she's responding to portions of his rebuttal testimony, pages 13 to 14, in which testimony Mr. Tracy -- this 17 18 is rebuttal testimony in which Tracy talks about his 19 change -- proposed changes in rate structures and defends 20 them, and that's precisely what Ms. Pyatte is responding to in her surrebuttal. 21 22 MR. SWEARENGEN: Well, that's absolutely 23 incorrect, your Honor. There's a difference between rate

structures and rate charges, and Mr. Watkins said so.

25 Ms. Pyatte said she agrees with him. They're two

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different things. Certainly anything that she has in here 1 2 that pertains to rate structures is appropriate 3 surrebuttal, but anything that she has in here that goes beyond that and addresses rate charges is inappropriate. 4 5 JUDGE THOMPSON: Well, first of all, it has been offered and received. 6 7 MR. SWEARENGEN: I was not aware it had 8 been received. 9 MR. SWEARENGEN: It was received. I called 10 for objections and there were none. So I'm going to overrule the objection. 11 MR. SWEARENGEN: I will move on then. 12 BY MR. SWEARENGEN: 13 14 Q. Let me ask you about your testimony 15 concerning the rate structure question. Is it not true in 16 your surrebuttal, at several points you indicate that -and characterize the proposals of the company as hybrid? 17 I believe I use that term. 18 Α. 19 And what's the definition of that term? Ο. 20 Α. What I meant by that is that the company is 21 not proposing to put L&P customers on the MPS rate 22 structures, and it is not proposing to put the MPS customers on the L&P rate structures. 23 24 Ο. What are the rate structure changes that

the company is proposing, according to your understanding?

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1 The company is proposing to keep the large Α. 2 power for each of the divisions the same, same in the 3 sense of unchanged, even though the structures are different. The company is proposing to change the 4 5 residential general rate schedule and structure for L&P to 6 look like MPS, which gives you an inverted rate in the 7 summer. They're proposing to, I believe, do the same 8 thing for both L&P and MPS for the residential with 9 electric space heating.

10 They are proposing to eliminate for both 11 divisions the rate structures for the small general 12 service and replace them with something different than each one of them currently have. They're -- they intend 13 14 to do the same thing with large general service. They 15 intend to eliminate the way in which the rate schedules 16 currently reflect losses in transformer ownership, to reflect voltage levels. They are proposing to 17 eliminate -- let's see. What else? 18

19 The facilities charge, which is of course 20 one of my favorite charges, the customer charge that's 21 customer-specific, and replace it with one that's based on 22 the average size of the customer in the class. They're 23 proposing to eliminate the basic seasonal structure of the 24 demand metered rates, except for the large power, of the 25 demand charge that gives a -- an incentive for customers

```
to set their peak demands in off-peak seasons.
1
 2
                   Those are all I can think of off the top of
 3
    my head.
                   Are all of those what you would
 4
            Q.
 5
     characterize as rate structure changes?
 6
            Α.
                 Yes, because each of them has a different
 7
     impact on a customer -- one customer in the class from
 8
     another customer class.
9
            Q. Are any of those proposed structure
10
     changes -- do any of them exist in current tariffs for any
11
     of the other electric utilities regulated by this
     Commission?
12
                   The broad general statement I would make is
13
            Α.
14
     that Aquila's MPS rates, particularly the base and the
15
     seasonal structure with the hours used blocking of energy,
16
     was to designed to look extremely similar to Ameren's
     current structure, and the L&P structure looked very, very
17
18
     like Kansas City Power & Light's.
19
                 So to that extent, it wouldn't really be
            Ο.
     fair to characterize what Aquila is proposing as hybrid
20
     then, would it?
21
22
            Α.
                  Well, what I'm saying is they're proposing
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23 something that's different than either one of what they 24 got. And let me explain that a little bit more. We've 25 been talking about changing rates in this case like

1 forever, and last night I pulled out my file, and I found 2 five different proposals from this company on rate 3 structure.

4 One was, we're going to put everybody on 5 MPSs. Another one was, oh, no, no, no, we're going to go 6 to market-based pricing. Another one was the one that's 7 been filed in this case. Another one was just some blah, 8 blah stuff that says, well, we don't really know because 9 we've got L&P up for sale.

10 So what I'm saying is hybrid, what I'm 11 saying is from looking back over the years, the 12 discussions usually centered on, are we going to put 13 everybody on MoPUB rate structures? And then sometimes 14 there was a case where, well, we really like L&P's. That 15 was more the Staff's position than the company's position. 16 So when I say hybrid, what we now have is

So when I say hybrid, what we now have is the company's in the position of saying, I don't like either one of them, I want to make this new one, which I did not realize until I read your statement of position you got from Colorado. That was news to me.

21 So I mean, it doesn't matter. It's just --22 I thought, oh, that's where that came from. I guess for 23 some reason we want Missouri rates to look like Colorado 24 rates, and I guess --

25

Q. Did I understand you to say earlier,

though, with respect to the structure question, it looks a 1 2 lot like something that KCPL has now and something that 3 Ameren has? 4 Α. Yes. That's how they were designed. 5 Ο. Does it have any comparability to what 6 Empire has, to the other electric utility company? 7 Α. Let's see. Empire has customer charge, 8 seasonally differentiated demand charge and an hour's use 9 energy charge, so it's kind of in between. It doesn't 10 have the base and seasonal that Aquila objects to. And 11 let's see, what else does Aquila object to? It doesn't 12 have the facilities charge yet. We are working on that. 13 Now, what doesn't have the facilities Q. 14 charge, what tariff? 15 Α. Empire's tariffs at this point don't have a 16 facilities charge in it. We're working on that for the 17 next case. For Empire? 18 Q. 19 For Empire. Α. 20 MR. SWEARENGEN: Thank you. That's all I have. Thank you very much. 21 22 JUDGE THOMPSON: Thank you, Mr. Swearengen. 23 Questions from the Bench, Commissioner Appling? 24 COMMISSIONER APPLING: You might come back 25 to me.

1 JUDGE THOMPSON: Well, I don't have any 2 myself, but we can keep her from leaving in case you come 3 up with any before the end of the hearing. COMMISSIONER APPLING: I don't want to -- I 4 5 don't want to hold her around just for -- just to be 6 holding her. 7 QUESTIONS BY COMMISSIONER APPLING: 8 Q. Janice, how you doing? I'm fine. 9 Α. 10 Good. Would you just contrast for me just Ο. briefly the proposal that Aquila has put forth and OPC? 11 Just tell me, why do you think Staff's proposal is much 12 13 better? For rate design? 14 Α. 15 Ο. Yes. 16 There are three distinct proposals. Well, Α. no. Two and a half. Aquila wants --17 Who has the half? Is that OPC? I was 18 Q. 19 looking for a little humor here today. Everybody seemed to be going to sleep. 20 21 OPC and the Staff are both taking the Α. 22 position that the rate design that Aquila has for 23 MoPub -- I'm sorry -- MPS and for Light & Power work perfectly fine and don't need to be changed. The 24 25 difference between Staff and OPC is that we are not

objecting to a number of housekeeping details that the 1 2 company has proposed in terms of cleaning up, you know, 3 tariffs that are duplicated and stuff like that. OPC is. I'm sorry. I've forgotten the question 4 5 now. What's the difference? Oh, the company is proposing 6 to change those things, and in addition to the Staff 7 saying, we don't think you need to because what you have 8 is fine, we have also pointed out that their proposals, 9 what they've actually proposed really needs a lot of work. 10 It looks -- it has a lot of flaws in it, it has a lot of 11 defects in it that really need to be worked out to make 12 something that's even okay. 13 So Staff would be saying, one, what they 14 have is -- is fine. Even if they worked out the problems 15 with what they're proposing, it still wouldn't be as good 16 as what they already have. So that's -- that's kind of our position. 17 18 Q. Mr. Tracy was in here yesterday, and he 19 was --He's much more entertaining than I am. 20 Α. 21 I was waiting to see if you were going to Q. 22 get up to his speed there. 23 Α. No. But anyway, he was very critical of Staff's 24 Q. 25 recommendation overall yesterday when he was in this room.

1 What do you say to that?

2 Well, up until the last hour, what we've Α. 3 been talking about is how one changes the total revenues that are collected by each class of customers based on the 4 5 costs. Now what we're talking about is we're talking 6 about, given that you've already decided that question, 7 how do we collect rates that recover the right costs from 8 the right customers and also have the characteristic that 9 the class of customers in total generate the revenue that 10 you folks have decided is the right revenue. 11 So one is, how do you price individual customers? That's what I'm concerned with. I'm not 12 really a witness that's concerned with how do we decide 13 14 how much revenue these customers should be collecting in 15 total. That's what Mr. Watkins and Mr. Busch do. 16 COMMISSIONER APPLING: Okay. Thank you very much, ma'am. Appreciate you. 17 JUDGE THOMPSON: Thank you, Commissioner. 18 19 Recross based on questions from the Bench, Mr. Mills? 20 MR. MILLS: Just briefly. RECROSS-EXAMINATION BY MR. MILLS: 21 22 Q. Can you go over again the response you gave 23 to Commissioner Appling about what it was that we opposed that you didn't oppose? 24 25 A. There's a list of issues that I would

characterize as cleaning up the tariffs. They want to 1 like, for example, consolidate like the residential water 2 3 heat rate with the residential general rate. They want to consolidate some non-demand-billed rates, there's 4 5 multiples of them, into a single rate. There's a list of 6 them and -- there's a list of them, I believe, in our 7 prehearing brief, but it's a section called combination, 8 elimination or addition of rate schedules. 9 They want to add a small general service 10 short-term service rate schedule. They want to do another 11 one for L&P. They want to freeze the availability of the SGS primary rate to existing customers. It's -- it's what 12 I would call housekeeping. 13 14 Q. And where in the testimony did we oppose 15 that? 16 I don't think it was in the testimony. I Α. think it was -- I don't have it with me. I think it was 17 18 in your statements of position. 19 MR. MILLS: That's all I have. Thank you. JUDGE THOMPSON: Major Paulson? 20 21 MR. PAULSON: No questions, your Honor. 22 JUDGE THOMPSON: Mr. Conrad? 23 MR. CONRAD: Nothing, your Honor. Thank 24 you. 25 JUDGE THOMPSON: Mr. Swearengen?

1	MR. SWEARENGEN: No, thank you.
2	JUDGE THOMPSON: Redirect?
3	MR. WILLIAMS: Thank you, Judge.
4	REDIRECT EXAMINATION BY MR. WILLIAMS:
5	Q. I just want to make sure something's
6	pointedly clear. Whenever you were talking about Aquila's
7	rate structures being similar to Union Electric's and
8	KCP&L's, were you speaking of the current rate structures?
9	A. Yes. Aquila, MPS's are like Ameren's
10	current rate structures. Also, they're the rate
11	structures Ameren has had for at least a decade. Aquila
12	L&P's rate structures were similar to those that Case
13	Pinell has currently and has had since '90 mid '90s.
14	Q. And again you're referring to Aquila
15	Networks MPS and Aquila Networks L&P current rate
16	structures?
17	A. Yes.
18	MR. WILLIAMS: Thank you. No further
19	questions.
20	JUDGE THOMPSON: You may step down,
21	Ms. Pyatte. I'm not going to excuse you yet because I
22	think Commissioner Gaw will be returning at some point
23	this afternoon and may have some questions for you.
24	Same thing to you, Mr. Watkins. You note I
25	did not excuse you.

0406 1 Barbara Meisenheimer, step up and take your 2 seat. 3 MS. MEISENHEIMER: I'm ready. 4 JUDGE THOMPSON: State your name, please. MS. MEISENHEIMER: Barbara Meisenheimer, 5 6 M-e-i-s-e-n-h-e-i-m-e-r. 7 (Witness sworn.) 8 JUDGE THOMPSON: Thank you. Mr. Mills, I 9 hope you're not going to ask her to state her name and 10 then spell it as your first questions on direct. 11 MR. MILLS: No, we don't want to take that 12 much time. Your Honor, as a housekeeping matter, when we were marking exhibits yesterday morning, I had marked 13 14 Ms. Meisenheimer's surrebuttal testimony. That's been 15 entirely superseded by her amended surrebuttal testimony 16 which was filed moments later, so I don't plan to offer the original. 17 18 JUDGE THOMPSON: I was wondering that at 19 the time. Very well. BARBARA MEISENHEIMER testified as follows: 20 DIRECT EXAMINATION BY MR. MILLS: 21 22 Q. We'll go briefly through the formalities, since the judge has already asked you to state your name 23 24 and spell your name. Are you the same Barbara 25 Meisenheimer who has filed testimony in this case that's

direct, rebuttal, surrebuttal and amended surrebuttal? 1 2 Yes, I am. Α. Okay. Do you have any corrections or 3 Ο. additions to any of that testimony? 4 5 Α. Yes, I do. I'd like just to take out 6 something that's redundant in the direct testimony. 7 Page 5, line 22, I'd like to strike the number 1 in 8 parentheses and replace it with A. And then on line 23, 9 I'd like to end the sentence at allocator, and strike the 10 rest of that sentence. 11 Could you read the sentence as it should Ο. 12 read now, beginning on line 21? I allocate the production plan according to 13 Α. 14 a 12-month non-coincident peak, NCP average and peak 15 allocator. 16 Q. Okay. Go on. 17 In rebuttal testimony, the amended rebuttal Α. testimony -- surrebuttal. I'm sorry. On page 6, there is 18 19 a question and answer that, sitting here today, I would not give the same answer as I had given at the time I 20 21 wrote the testimony. 22 JUDGE THOMPSON: Well, in that case let's 23 have Mr. Mills ask the question and you can give whatever 24 answer it is you would give if asked that question today. 25 MR. MILLS: I think the question would be

1 the same. The answer is going to change somewhat.

2		JUDGE THOMPSON:	That's what I thought.	Go
3	ahead and read	the question and	you can go ahead and giv	ze
4	your answer.			

5 MR. MILLS: If that's the way you want to 6 do it, that's what we'll do.

7 BY MR. MILLS:

8 Q. Ms. Meisenheimer, on page 7, lines 4 to 5, 9 Maurice Brubaker argues that Accounts 502, 504, 505, 506, 10 509, 512, 513, 514, 553, 556 and 557 should be allocated 11 based on class demands rather than on class energy. On 12 page 8 he argues that various A&G expenses, Accounts 920 through 923, 927 through 931 and 935, should be allocated 13 14 based on factors such as plant investment or payroll. 15 Have you considered the impact that such changes would 16 have on your study results?

## 17

JUDGE THOMPSON: That's your cue.

THE WITNESS: Yes. Although I continue to 18 19 believe it is appropriate to allocate some of the accounts 20 in the manner I did in my study, with the exception of 21 Accounts 504, 512, 513 and 514, I've recalculated revenue 22 neutral using my demand allocator rather than the energy 23 allocator for the listed accounts in the 500 series, and of payroll allocator for the 900 series. I did not alter 24 25 the allocator for Accounts 504, 512, 513 and 514 because

an energy allocator is specifically referenced for these 1 2 accounts in the NARUC manual. I did -- I did recalculate including 3 account 509, which is emission allowances. However, I 4 5 believe that should be allocated based solely on energy. 6 It is not included in the NARUC manual, the 1992 NARUC 7 manual which I had available to me. 8 JUDGE THOMPSON: Is that the end of your answer? 9 10 THE WITNESS: No. 11 JUDGE THOMPSON: Keep going. THE WITNESS: Okay. The overall aggregate 12 impact of changing all the allocation factors would result 13 14 in only minimal changes to the revenue neutral shifts. 15 Suggested by my studies for residential customers, the 16 change was less than 1 percent for each service area. 17 BY MR. MILLS: 18 Q. So given that modification of that one 19 answer, would your testimony here today be the same as it was when you prefiled it? 20 21 Yes, with the -- with the changes that I Α. 22 discussed throughout my testimony, yes. 23 MR. MILLS: I have no further direct. I offer Exhibits 21, 22 and 24 and tender the witness for 24 25 cross-examination.

1 JUDGE THOMPSON: Okay. Let's go ahead and strike the original answer, since she's replaced it with 2 3 the one she just gave that's now recorded in the 4 transcript. 5 MR. MILLS: That would be fine. 6 JUDGE THOMPSON: And what page and lines 7 would those be? 8 MR. MILLS: That was the amended 9 surrebuttal testimony, which is Exhibit 24, page 6, and 10 the answer -- the question begins on line 10 and continues 11 through line 16. The answer begins on line 17 through 12 line 24 on that page and continues on to lines 1 and 2 of 13 page 7. JUDGE THOMPSON: Very well. So we will 14 15 strike page 6, lines 17 through 24 and page 7, lines 1 and 2 in Exhibit 24. With that noted, do I hear any 16 objections to the receipt of Exhibits 21, 22 or 24? 17 18 (No response.) 19 JUDGE THOMPSON: Hearing none, the same are received and made a part of the record of this proceeding. 20 (EXHIBIT NOS. 21, 22 AND 24 WERE RECEIVED 21 22 INTO EVIDENCE.) 23 MR. MILLS: Thank you. 24 JUDGE THOMPSON: Thank you. Mr. Williams? 25 MR. WILLIAMS: No questions.

1 JUDGE THOMPSON: Major Paulson? 2 MR. PAULSON: Yes, your Honor. JUDGE THOMPSON: Step on up. 3 CROSS-EXAMINATION BY MR. PAULSON: 4 Good afternoon. How are you? 5 Q. 6 Α. Good afternoon. I'm fine. How are you? 7 Q. Fine, thank you. I just have one item for 8 you. 9 Α. Great. 10 Do you have a copy of SIEUA and AGP DR 13 Ο. 11 with you? 12 No, I don't. Α. 13 MR. PAULSON: May I approach? JUDGE THOMPSON: You may. 14 15 Okay. We'll go ahead and mark this as 16 Exhibit 33. I assigned exhibit numbers to the four items 17 we were asked to take notice of. That helps me to keep track of them. 18 (EXHIBIT NO. 33 WAS MARKED FOR 19 IDENTIFICATION BY THE REPORTER.) 20 21 JUDGE THOMPSON: Some looked stunned, even 22 surprised when I announced that this would be Exhibit 33, 23 thinking perhaps that it should be Exhibit 29. I then explained when you asked the Commission to take notice of 24 25 four reports and orders in previous cases, that I have

assigned them for my own recordkeeping purposes exhibit 1 2 numbers so that I can keep them straight in my head as to 3 what I've done and what I haven't done, who's objected to what. Do you see? And so Nos. 29, 30, 31 and 32 have 4 5 already been used. 6 MR. WILLIAMS: Thank you, Judge. I just 7 missed the exhibit number. JUDGE THOMPSON: Therefore, this will be 8 9 Exhibit 33. You may proceed. 10 BY MR. PAULSON: 11 Q. Having had an opportunity to review this 12 DR, did you sign this DR? Α. Yes, I did. 13 14 Q. And if I read it correctly, the DR asked 15 you to identify all commissions of which you were aware 16 that utilize the generation allocation method that OPC has proposed in this case. Provide a copy or citation to any 17 18 case approving the use of such method. Your answer to 19 that is, I am not aware of any; is that correct? A. That's correct. 20 MR. PAULSON: Your Honor, I offer the 21 22 exhibit. 23 JUDGE THOMPSON: Do I hear any objections to the receipt of Exhibit 33? 24 25 MR. MILLS: No objection.

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1 JUDGE THOMPSON: Hearing none, the same is received and made a part of the record of this proceeding. 2 (EXHIBIT NO. 33 WAS RECEIVED INTO 3 EVIDENCE.) 4 5 MR. PAULSON: That concludes my questions, 6 your Honor. 7 JUDGE THOMPSON: Thank you, Major Paulson. 8 Mr. Conrad? 9 MR. CONRAD: No questions. 10 JUDGE THOMPSON: Mr. Swearengen? 11 MR. SWEARENGEN: No questions, thank you. JUDGE THOMPSON: Questions from the Bench, 12 Commissioner Appling? 13 QUESTIONS BY COMMISSIONER APPLING: 14 15 Q. Barb, how you doing today? 16 A. I'm doing fine. We do this a lot, don't 17 we? It's always good to see you. How about 18 Q. 19 helping me out just a little bit and just briefly tell me why you think that your recommendation for the CCOS is the 20 21 one that this Commission should adopt? Briefly now. 22 Don't take me up to Kansas City and down to Springfield. 23 Α. I've never done that before, have I? 24 Q. A couple times, but that's okay. I still 25 like you. But anyway, tell me -- give me your thoughts on 1 that, and also tell me why you -- after you've heard the 2 criticism and anything else in here the last couple days, 3 tell me why we ought to stick with your recommendation.

A. Okay. First of all, with respect to the production allocator, the method that we used is a method that I believe approximates a time of use method. You heard Mr. Watkins describe that, in fact, the Staff, when they hadn't done a complete time of use study, would have done something I think akin to it.

To be quite honest with you, if Public Counsel had had the resources, we would have likely preferred to do a time of use study. I think that in a number of ways it is superior to what -- obviously what the company and the industrials did, but also superior to what I did. So let me be up front about that. I like the Staff's time of use allocator.

With respect to this issue of splitting primary and secondary distribution, you'll find that's one of the other big areas of difference. I think we're right on that. I don't think that the primary system of distribution should be allocated to customers. It's not like that money isn't allocated somewhere and recovered. That needs to be dispelled.

24 The issue is who is it recovered from in 25 terms of the causation concept. So it's not an issue of

we're not going to let them recover everything. It's an 1 issue of to what cause do we associate that, and I think 2 3 that we are correct on that. You heard the company's own engineer say that residential customers aren't connected 4 5 to primary. 6 JUDGE THOMPSON: Even indirectly? 7 THE WITNESS: Indirectly, they are served 8 with facilities that are primary facilities, but I don't 9 think that the -- that the purpose of those facilities 10 is -- I'm sorry. I'm not sure which question I'm 11 answering. 12 JUDGE THOMPSON: Answer his, please. 13 THE WITNESS: Okay. So with respect to the 14 primary/secondary issue, I think that we're correct on 15 that issue. And then you asked me one more thing, and I 16 was --17 BY COMMISSIONER APPLING: 18 Q. That's enough on that one. But were you 19 present yesterday when Mr. Tracy and Mr. Brubaker testified? 20 21 I was here for part of Mr. Tracy. I was Α. 22 not -- or I was listening. I was not -- I didn't hear 23 Mr. Brubaker most of his testimony, I don't think. Q. He was a little critical of Staff's and 24 25 OPC's method. Do you have any comment to that?

1 I would simply support what you heard from Α. 2 Mr. Watkins regarding the thoroughness of what the Staff 3 did in terms of determining cost based on the hours when those costs are incurred. So I think that the method that 4 5 Mr. Brubaker used is not as thorough as what the Staff 6 used in developing theirs, in the sense that it doesn't 7 talk about during what hours are the costs determined 8 instead with respect to production.

9 It takes a total pot of dollars and divvies 10 it up based on an average use and then additionally some 11 peak periods. It doesn't do it as extensively in terms of 12 all peaks throughout the year or at all times throughout 13 the year. Staff's takes that analysis to the greatest 14 level of detail.

15 COMMISSIONER APPLING: Thanks, Barbara.
16 Thank you.

JUDGE THOMPSON: We're overdue for a break for the reporter, so we're going to take a 15-minute recess at this time, and then we'll return and finish with You. Very well. We're in recess.

21

(A BREAK WAS TAKEN.)

22 QUESTIONS BY JUDGE THOMPSON:

23 Q. Now, Ms. Meisenheimer, so you used the time 24 of use method similar to that used by Staff; is that what 25 you testified?

1 I did not use the time of use method. I Α. 2 used a method which we've used in the past that is 3 intended to mimic the results of a time of use study. 4 Q. You used a method that mimics a time of 5 use? 6 Α. It is not as -- it is not as precise in 7 terms of the level of detail, the work that you heard 8 Mr. Watkins describe in terms of costing out each hour of 9 every day of the year. It doesn't go into that detail. 10 Instead --11 Believe me, I'm still astonished at that Ο. 12 level of detail. Keep going. Tell me more about your method. 13 14 Α. Okay. The method that I used uses 15 annual -- average energy that is weighted by the load 16 factor and a peak which is calculated from weightings associated with each month's non-coincident peak for each 17 18 customer class to allocate the coincident peak. 19 So what's the name of your method? Ο. 20 Α. I'd say it's an average and peak method. 21 The -- it would, I think, fall under customer weighting. 22 It's not specifically described as one of the methods in 23 the NARUC manual. However, the NARUC manual never claims

to be exhaustive on the types of methods that might be

25 used.

24

1 Q. So it's an average and peak method. Is 2 that different from an average and excess method? Yes. And it may, in fact, be different 3 Α. than other average and peak methods. 4 5 Ο. Okay. Where did you find this method? 6 Α. This method was originally developed, I 7 think, when Public Counsel had an engineer on staff. 8 Q. So it's Public Counsel's own method? You didn't find it in a textbook? 9 10 Α. Well, the concepts I believe are similar to 11 what you might find in a description of calculating like an average or a peak. In terms of how exactly it -- the 12 13 concept of exactly how we stack increments, I -- I haven't 14 seen it elsewhere. Thank you. You have not seen it elsewhere? 15 Ο. That's true. And that's what I said in 16 Α. response to a Data Request. 17 Q. So it is a method not used by anyone else, 18 19 to your knowledge? 20 Not in the exact way that we did it, not to Α. my knowledge. 21 22 Q. Okay. What I'm trying to understand is, 23 how different is it from things that other people do? Is it utterly different? Is it sort of the same, nearly the 24 25 same?

1 The average portion takes annual -- annual Α. 2 energy and I think -- I think that the average piece of it 3 is commonly used. 4 Q. Okay. So the average part of it is similar 5 to what other people do. What all other people do or just 6 what some other people do? 7 Α. No. What some other people do. 8 Q. Okay. For example, of the other parties in 9 this case, which of them, if any, used an average method 10 similar to the average part of yours? 11 I think that the company may have used an Α. 12 average in terms of the -- you know, a class's total share of the average. I think it's common to use the -- or not 13 14 always use, but not infrequently use the load factor and 15 one minus the load factors, the weighting elements. I 16 think that the Staff in the past has used something 17 similar, most similar to what -- to what I actually used, 18 both in terms of the average piece and the demand 19 component. The demand component that I use is significantly different in terms of how it's determined 20 21 than what the company and the industrials used in this 22 case. 23 Q. Okay. The goal -- I could explain a little bit. 24 Α. 25 Please, anything you can tell me that will Q.

1 help me understand.

2	A. Okay. The goal of the allocator is to base
3	in part on average energy use throughout the year and part
4	on peaks, and as or based on load reflected in demand,
5	I guess you would say. And that piece of it is done as
6	kind of a stacking method. Now, it is not as exact as
7	what you heard the Staff describe as a stacking method
8	that occurs for every hour of every day throughout the
9	year. Ours is a stacking method that stacks increments of
10	peak based on monthly. So only 12 points out of a year,
11	if you will.
12	Q. Instead of 8,000?
13	A. Yeah.
14	Q. Okay.
15	A. And the company uses a three peak or
16	three months for the peak. Okay. So I mean, I'd like to
17	leave you with a sense of how much different are the
18	points over which these costs are distributed.
19	Q. That would be very helpful.
20	A. Okay. And that's what I tried to do. The
21	company uses an average, and I believe a three I
22	three-peak method for demand.
23	Q. So they have an average of three peaks,
24	right?
25	A. They have an average and three peaks to do

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1 the demand peaks.

2 Q. Okay. And what about Mr. Brubaker, what 3 does he use? Mr. Brubaker's is one that I understand, I 4 Α. 5 must admit, less. 6 Q. You're bound to understand it more than I 7 do. 8 Α. Well, my understanding is that Mr. Brubaker 9 picks the non-coincident peaks of different classes from 10 different months out of the year, and I'm -- personally, I'm at a loss for what in terms of appropriate allocation 11 method. 12 Okay. Fair enough. And then Staff uses 13 Q. 14 8,000 peaks? 15 Α. Well, it's not a -- theirs, instead of 16 focusing on the peaks to pick out where the highest loads are, instead theirs mirrors where the actual loads occur 17 at all times of the year. So they don't just pick out a 18 19 few of the highest points and allocate the demand piece 20 according to that and then the energy based on some 21 average. Instead, they say literally at every hour in the 22 year, what's going on with the use of the facilities and 23 allocate cost according to that.

Q. So they're not even so much using a model as they're just plotting what actually is measured? 1 Yeah. The concept of using a model, I Α. 2 mean, lots of us use spreadsheets, and I heard yesterday, 3 I believe it was Mr. Stowe describe his use of models, and 4 I would agree that part of his stuff used a model and part 5 of it just simply used an Excel spreadsheet and some of 6 the normal functions that any of us could rely from there. 7 So when you talk a model, you have to be careful in terms 8 of is it a model in some cases that was pre-done or one 9 that you build into a spreadsheet yourself?

And most ev-- and the analysts here are capable of designing models to run in the spreadsheets. And so in this sense, I think that on a theoretical basis, the Staff took information that they had, used spreadsheet analysis and the model that was developed through the formulas that Mr. Watkins described that he wrote to come up with this every hour of every day of the year.

Q. Okay. Now, other than the allocators that were used, did you do your study in the same way that the other parties did their studies or were there other differences besides the allocators?

A. Besides the production allocator?
Q. Well, I understand there's at least three
allocators, transmission, production and energy, and
perhaps even more.

A. Okay. I think that the primary areas where

there were differences and disagreements had to do with the production allocator, and I've just discussed that one.

4 Q. Okay.

5 Α. Generally, an energy allocator just takes 6 each class's share of the total energy used throughout the 7 year. So there's not as much disagreement on that. The 8 company and the Staff and, in fact, the industrials to a 9 lesser extent, our office participated in working group 10 meetings where a lot of this data was developed. It was 11 my intention to the greatest extent possible to rely on 12 that common data to help make it easier to make these studies comparable. 13

Q. Okay. So did you use the same load study data that we've heard discussed by the other witnesses that was measured by the company during I think it was calendar year 2002?

18 A. I used the same data that was taken by the19 Staff and aggregated by Ms. Pyatte.

20 Q. So you took it -- who did you get it from? 21 A. I got the -- I got the non-coincident peaks 22 that were used in my study, that were used in developing 23 my allocators, I got them directly from the Staff, grouped 24 in the manner that our customer classes were, that ours 25 were the same as the Staff's with the exception of

lighting. So I got that information directly from Staff. 1 2 And in her --3 Ο. And was that data originally based on that load study data that I mentioned? 4 5 Α. It would have been based on common 6 information about the -- the use during each time period 7 developed by the company and the total use in the year. 8 Q. That's the load study data, yes or no? 9 Α. Well, the load study may be specifically a 10 piece that talks about for each hour how much was used, as 11 opposed to --Q. I think the data, in fact, was each 12 15 minutes, right? 13 That's what Mr. Watkins described. What 14 Α. 15 I'm suggesting is there may have been a greater total 16 amount of data collected, but I used the same common data for peaks as did the Staff in terms of non-coincident 17 peak. Coincident peak, which Staff didn't produce, I went 18 19 to the company's work papers and got it. So I used -- for non-coincident, I used the Staff's that was in their work 20 21 papers. For the coincident I used the company's. 22 Q. Okay. And did you use the cost data that 23 Mr. Busch referred to from the last rate case ER-2000 -- I 24 lost my note as to what rate case, but do you recall the 25 one he referenced?

1 A. Yes. I did use the same or intended to use 2 the same account values as the other parties. 3 Q. Okay. 4 Α. As I've been trying to describe, the 5 primary difference is with respect to the allocators, what 6 do you do with all that information. 7 Q. That's what I'm trying to understand is 8 what were the differences. You're telling me the main 9 differences were the allocators. 10 Α. And -- the production allocators, which 11 I've already talked about, this difference in the average 12 and peak versus the Staff's which does the, you know, time of use. Then in addition, one of the primary differences 13 14 is with respect to the treatment of primary and secondary 15 distribution, whether a piece of it should be allocated as 16 a customer-related cost. 17 And I have a note here to talk to you about Q. that. So that's how you differed in the transmission 18 19 area? In distribution. I don't think there was 20 Α. 21 any significant issue with transmission, except for with 22 respect, you know, to did they like the way I did my 23 allocator or not. And we've already talked about that. Okay. So you've talked about coincident 24 Ο. 25 peaks and non-coincident peaks. For the interested

layman, could you give me a definition what each of those 1 2 is? Okay. A coincident peak is -- what is --3 Α. you're looking for what is each class's use of the 4 5 system's highest use, if you will. 6 Ο. Okay. And what's a non-coincident peak? 7 Α. A non-coincident peak is, what is the 8 maximum use by each customer class. So in that case, they 9 may not occur all at the same time. In one you're looking 10 for at this hour, what does each class use of that maximum 11 system use? In the other you're looking for, in whatever time period you choose, what is residential's highest 12 versus another class's highest, if you will? 13 14 Q. I see the difference. And what is the time 15 period you chose? 16 I used monthly, so like 12 months. Α. 17 Okay. So you looked at the peak for each Q. class in each month for your non-coincident peaks? 18 19 Α. Yes. And for coincident peaks, did you look at 20 Ο. 21 the moment of highest usage for each month and determine 22 the share of each class in that peak? 23 Α. I -- I used the coincident peak for a 24 slightly different purpose, but yes, I did look at 25 12 months.

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What was the slightly different purpose? 1 Q. 2 The way that I used the coincident peak was Α. 3 to determine what increment, what addition to coincident peak, so what addition to the actual maximum use of the 4 5 system occurs each subsequent month, and then I allocated 6 that increment based on those classes' maximum use during 7 that month with the non-coincident peaks. 8 Q. Okay. And this is how you did production? 9 Α. Yes. 10 And it was intended to mimic a time of use Ο. study like Staff's? 11 12 Α. Yes. Okay. So now that Staff has done a time of 13 Q. 14 use study, do you believe you should redo yours using 15 their allocator? 16 I would not be uncomfortable using the Α. 17 Staff's time of use allocator in our study. 18 Q. Do you think your results would be 19 different than the results you've presented here that are summarized on Exhibit 25? 20 21 I think they would be somewhat higher. Α. 22 Q. When you say somewhat higher --23 Α. In terms of the residential class. 24 Q. Meaning what, that --25 The percent increase to the residential Α.

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1 class would be somewhat higher.

2 Well, in fact, on your Exhibit 17 for MPS, Q. 3 YOU have a reduction for the residential class; isn't that 4 correct? 5 Α. That's true. And when I mean somewhat 6 higher, you could -- based on those numbers, you could go 7 from a negative to a positive. 8 Q. Okay. So perhaps they would lose that 9 suggested reduction? 10 And in addition, I'd like to just remind Α. everyone that at the beginning of this testimony, I said 11 12 there were some accounts that Mr. Brubaker had pointed out should be allocated in a different way. I agreed with 13 14 some of them. Didn't agree with all of them, based on the 15 NARUC manual. And so I took some of those concessions, 16 and I think it might alter the results a little bit as 17 well. I don't think it's going to have a huge effect. 18 Q. So you're telling me that Exhibit 25 no 19 longer represents your professional opinion of what the Commission should do? 20 21 I think that it does not represent an Α. alternative that I think the Commission could do. 22 23 Q. State that again. 24 Α. Does not represent an alternative that they 25 can do. I think it represents -- I think it still

represents an alternative that they could do. And the 1 2 concept of cost of service studies, they are a guide. 3 Q. I understand it's a guide. And so when --4 Α. 5 Q. And you understand this case is separate 6 from the rate case. So whatever happens in this case is 7 not going to directly set anyone's rate; isn't that 8 correct? 9 Α. I hope not. 10 In fact, the results of this case will just Ο. 11 be one of the things the Commission considers when it does set rates in the rate case; isn't that true? 12 13 That is our position about how the Α. 14 Commission should treat the outcome of this case. 15 Ο. Is there some other position? 16 Α. I think that there are alternatives --17 Okay. Q. -- that could arise. 18 Α. 19 I think that there are some in this case who want the Commission to pick the shifts that will occur 20 21 and set them in this case, and then when you get to the 22 rate case, implement them together with or stack on top of 23 that then any increase that you determine as a system-wide increase that comes out of that case. 24 25 Q. I see.

1 I don't think it's -- I don't think Α. 2 everybody here is saying, just look at these numbers and 3 see what you think later. That is our position that you should -- or the Commission should take into account the 4 5 total impact of a revenue increase at the same time that 6 it looks at these cost studies that come out of this case. 7 And, in fact, I think you'll -- in the 8 other case, I know that I actually filed my cost study 9 results that I had from rebuttal. I'll likely update 10 those in the next case, and I think that the Staff has 11 filed a cost study in that case, and I haven't reviewed all the materials that's been filed in direct yet in that 12 case, so others may have as well. 13 14 Q. Okay. 15 Α. So --16 Why are your results so different from the Q. results proposed by the other parties? 17 18 Α. I think that there are a few reasons. One 19 of the reasons is the production allocator, and I think 20 that would change things by a few percent, move me closer 21 or my study closer to the Staff's results. 22 Q. Okay. 23 Α. Okay. I think that this issue of primary 24

24 and secondary customer allocations, whether there should 25 be customer allocations based on primary and secondary is

another reason on that one, unlike production, I just -- I 1 2 disagree with the Staff's conclusion. I don't think that 3 they gave adequate argument about why I wouldn't be correct. I think they simply relied on what the company 4 5 did. And I relied in some part on what the company did in 6 terms of the distribution allocations. But with respect 7 to the customer piece, the treatment, whether primary 8 should have a customer piece or not, I think that that's 9 one we just disagree on and it has an impact. 10 In terms of why am I substantially 11 different from some of the other parties, I think that 12 other parties' use of a less disaggregated look at how costs are incurred for production causes them to result in 13 14 a substantially higher allocation to residential and lower 15 to other classes, some of the other classes. 16 Okay. So your third reason, could you Q. restate that again for me? I did not follow. 17 Well, you asked me why do I think that I'm 18 Α. 19 substantially different than other classes. Right. And you said one production 20 Ο. 21 allocator, another is the primary/secondary distinction? 22 Α. And those are the two that I think 23 primarily keep my study results different than the Staff's. 24 25 Q. And then you mentioned a third thing?

1 A. And there I was trying to go a little 2 farther and explain to you why am I farther away from say 3 the industrials, the company.

And as I said, I didn't follow what you 4 Q. 5 said in that third thing, so could you restate it? 6 Α. Just like my allocator takes me to one side 7 of what the Staff's results came out to, the method that 8 the company and the industrials used takes them to the 9 other side of where the Staff's outcome is. Okay? 10 Ο. I follow that. 11 Α. And in cross-examination yesterday, 12 Mr. Mills specifically asked Mr. Stowe with respect to the average and excess allocator that the company used, hadn't 13 14 he also run an average and peak, which he said yes, he had 15 also run an average and peak. And then Mr. Mills asked

him, well, if you had used that instead, would it have changed your study results, you know, by roughly -- it was like three and a half to four and a half percent, somewhere in there. And my memory is failing me at this moment.

21 Well, I had actually taken the peak 22 allocator, looked at the difference between it, and the 23 average and excess allocator that they had developed, and 24 then compared their end results with respect to some 25 allocations. And that's really where that question came

from. I think that their choice of an allocator moves
 them a number of points, basis points above the Staff's
 outcome or a number of points above the Staff's outcome in
 terms of percent.

5 I think that the industrials, the reason 6 that they're substantially higher, once again, is probably 7 primarily due to the production allocator and that the 8 method that they used with picking various non-coincident 9 peaks for classes from different months is probably a 10 primary driver.

11 Q. Okay. Now, with respect to the primary and 12 secondary distribution matter, that has to do -- primary 13 distribution, would that not refer to the large 14 transmission lines that carry electricity at very high 15 voltage?

16 A. Well, from the -- from generation, then 17 voltage is stepped up, carried across huge lines up on big 18 steel poles. That's transmission.

19 Q. Okay.

20 A. Okay.

21 Q. And how did you allocate transmission?22 A. In the same way as generation.

23 Q. Very good. Okay. Keep going.

A. Then that is taken to substations, whichserve a more localized area. That's stepped down through

1 transformers, and then distributed throughout a service --2 the service territory, and it can -- the concept of primary is almost -- I think a good way to describe it as 3 like a feeder line. 4 5 Ο. Okay. So transmission to substation to 6 primary? 7 Α. Yes. 8 Q. And then to secondary? 9 Α. Yeah. The primary serves as a feeder that 10 does, I think, really two things. Primary is at higher 11 voltage. 12 Q. Okay. 13 And so it allows power to be sent further Α. at less loss. 14 15 Ο. I understand. Okay. The other thing that I believe 16 Α. primary does is it provides kind of a backbone to the 17 secondary that's distributed around it, and that that 18 19 allows the voltage support for, if you will, what's drawn off the secondary system. 20 21 So some large power service users and maybe Q. 22 large general service are connected to what, primary? 23 Α. Some might be connected to primary. And others would be connected to secondary? 24 Q. 25 Α. Yes.

1 Q. Are there any customers connected directly 2 to transmission, if you know? 3 Α. I don't know that. Okay. What about residential customers, 4 Q. 5 are they connected to primary or secondary or indeed to 6 something else? 7 Α. Well, they take from -- from secondary 8 voltage, I think is what you heard. 9 Q. So your answer is secondary? 10 Α. Yes. 11 Okay. I guess what I'm trying to Q. 12 understand, to cut to it, you're not allocating -- as I understand you, you're not allocating any of the costs of 13 14 primary distribution to residential class; is that 15 correct? 16 A. No, that's not. 17 Q. That's not correct? That's not correct. 18 Α. Well, please enlighten me as to what it is 19 Q. you're proposing. 20 21 Α. Okay. The primary is allocated to the 22 residential class. However, the share that residential 23 gets that -- the share that all those classes get is given to them as a demand-related component. So I still 24 25 allocate the full amount of primary to customer classes.

I still allocate -- as do the other parties, I still 1 allocate the full amount of dollars of secondary. 2 3 Q. Okay. Α. 4 It's a matter of on what basis do you 5 allocate it. 6 Q. And you're allocating on the basis of 7 demand? 8 A. Demand only. 9 Q. And how are they allocating? 10 Both a customer component and a demand Α. 11 component. And a customer component is simply for 12 Q. being attached to it, right, flat rate? 13 14 Α. A customer component, if we look at the 15 NARUC manual, what it instructs us with respect to what 16 does it mean to be a customer-related component -- I actually cited that in my testimony for you. It's on 17 page 12 -- or 20 of the NARUC manual, and I can read it to 18 19 you. It's short. Q. Just give me your answer. I don't need to 20 have you read it. 21 22 A. Okay. It's customer related if it is 23 directly related to the number of customers. That's different than is it used to serve customers. That's 24 25 a -- those are two different things. Certainly it's used

to serve customers. The system is used to serve 1 customers. The issue is, is it directly related to the 2 number of customers, and in this case, it is not. 3 Q. But the other parties have taken a 4 5 different view of that? 6 Α. Yes. And the other parties, and in fact, I 7 too, use some of the results that were derived by 8 Mr. Stowe in his zero intercept method. I agree that a 9 portion of secondary should be allocated based on a 10 customer basis. 11 Q. Using demand? Well, the demand portion based on a demand 12 Α. allocator and the customer portion based on a weighted 13 14 customer component, secondary. Secondary both customer and demand related. 15 16 But primary only demand? Q. 17 Only demand. Α. Okay. Everyone else, both demand and 18 Q. 19 customer? 20 Α. Right. 21 JUDGE THOMPSON: Thank you. I think that's 22 all the questions that I have for you. 23 THE WITNESS: Okay. JUDGE THOMPSON: Recross, Mr. Williams? 24 25 MR. WILLIAMS: No questions.

1	JUDGE THOMPSON: Major Paulson?
2	MR. PAULSON: No questions, sir.
3	JUDGE THOMPSON: Mr. Conrad?
4	MR. CONRAD: No questions.
5	JUDGE THOMPSON: Ms. Wheeler?
6	MS. WHEELER: No questions.
7	JUDGE THOMPSON: Redirect?
8	MR. MILLS: Actually, I have just a few.
9	REDIRECT EXAMINATION BY MR. MILLS:
10	Q. One of the very first questions you were
11	asked had to do with what has been marked and admitted, I
12	believe, as Exhibit 33, SIEUA and AGP's Data Request
13	No. 13 to Public Counsel. And the question was,
14	essentially, what other commissions you were aware of that
15	utilize Public Counsel's method, and your answer was, I'm
16	not aware of any. Do you recall those questions?
17	A. That's correct, yes.
18	Q. Do you know of any commissions that have
19	specifically rejected this method?
20	A. No.
21	Q. Given the time constraints of this case and
22	the other workload you're involved in, how much time were
23	you able to devote to researching what other commissions
24	do with respect to your method?
25	A. I did not have the time to do that

1 research.

2 So you didn't go out and find that no other Q. commissions have ever done this, you just on the basis of 3 the question, you said, well, I don't know of any; is that 4 5 correct? 6 Α. Right. That's -- that's correct. 7 Q. Okay. Now, with respect to a question from 8 the Bench, I believe, in which you were talking about I 9 believe it was your average and peak method, I think Judge 10 Thompson referred to it as Public Counsel's own method. 11 Would it be more accurate to call it Public Counsel's 12 variation of a standard average and peak method, rather than Public Counsel's own method? 13 Yes. I do think that it mirrors 14 Α. 15 conceptually things that the NARUC manual does allow for. 16 It's not specifically one in all its detail that's set forth in the NARUC manual, but I don't think it's beyond 17 the bounds conceptually from what's covered in the NARUC 18 19 manual for an average and peak. 20 MR. MILLS: That's all the questions I 21 have. Thank you. JUDGE THOMPSON: Okay. Thank you. At this 22 23 time I will excuse you and all of the other witnesses. 24 (Witnesses excused.) 25 JUDGE THOMPSON: I have Exhibits 1 through

22, 24 through 33, counting as I said those four items 1 that the Commission was asked to take notice of as 2 3 exhibits. I have Exhibit 23 was not offered nor received. MS. WHEELER: Judge, as a matter of final 4 5 housekeeping, there were a few questions posed to 6 Commissioners by Aquila, in particular, a question 7 regarding the mountains and valleys graphs that were a 8 part of the rebuttal testimony, and I have that for the 9 Commission today. 10 JUDGE THOMPSON: Please, step up to the podium and let us have it. 11 MS. WHEELER: I didn't know if you wanted 12 to mark it as an exhibit. 13 14 JUDGE THOMPSON: I'll be happy to mark it 15 as an exhibit. What should we call this? 16 MS. WHEELER: Well, it's the L&P. JUDGE THOMPSON: Okay. He originally just 17 18 ran the MPT, right? 19 MS. WHEELER: Right. And this the L&P. Very good. This will be Exhibit 34. 20 (EXHIBIT NO. 34 WAS MARKED FOR 21 22 IDENTIFICATION BY THE REPORTER.) 23 MS. WHEELER: And, Judge, I believe there 24 was also a question regarding total energy that was put 25 forth by Chairman Davis, and we will have that just as

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soon as we get it all furnished and put together. 1 2 JUDGE THOMPSON: Did you want to offer 3 Exhibit 34? MS. WHEELER: We will offer it at this time 4 and ask it be admitted. 5 6 JUDGE THOMPSON: Any objections? 7 (No response.) 8 JUDGE THOMPSON: Hearing no objection, 9 Exhibit 34 is received and made a part of the record of this proceeding. 10 11 (EXHIBIT NO. 34 WAS RECEIVED INTO EVIDENCE.) 12 13 JUDGE THOMPSON: Now, there were various 14 Commissioner questions addressed to various parties during 15 the course of the case, and I hope that you all took note 16 of them because I did not. So when you get your homework done, submit it, please. Everyone will have an 17 18 opportunity then to -- when you receive it, you'll have 19 the standard ten days within which to file objections. Okay. What about post-hearing Briefs? We 20 21 have not -- I believe the transcript is on the standard 22 time; is that correct? THE REPORTER: Yes. 23 24 JUDGE THOMPSON: What do you want, 30 days 25 after the transcript? 30 days after the transcript?

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1 MR. MILLS: That's fine. 2 MR. CONRAD: We can probably go less. 3 JUDGE THOMPSON: Okay. Less? Well, it's 4 getting too close to Christmas for me to tell you. 5 MR. CONRAD: I don't know where it falls, 6 but I'd throw out two weeks, 15 days. It's helpful for 7 us, Judge, to have something fall on Monday. 8 JUDGE THOMPSON: Okay. That makes sense. 9 MR. CONRAD: This is two days of hearing, 10 so --11 JUDGE THOMPSON: So, Kellene, when will the 12 transcript be due? THE REPORTER: The 29th. 13 14 JUDGE THOMPSON: The 29th, okay. So do you 15 want to say December 15, or let's see what the closest 16 Monday is. My calendar isn't coming up. So the 19th? Very well. Post-hearing 17 Briefs will be due December 19th. Okay. I'll send a 18 19 notice. Is there anything else anybody wants to bring to my attention at this point before we end? 20 21 MR. CONRAD: Counsel raises the question, 22 which I think has been raised before, page limit. We have had, I think it's fair to say, a considerable amount of 23 24 Commissioner questions and responses, and Bench questions, 25 which none of us have seen and none of us could probably

have briefed. I have personally the legal issues that 1 remain that I had mentioned in the original submission, 2 3 which seemed to have been pushed aside at this point, and perhaps they will never come up, but certainly --4 5 JUDGE THOMPSON: I understand. 6 MR. CONRAD: -- certainly it's going to 7 take more than ten pages to almost identify the witnesses 8 here. 9 JUDGE THOMPSON: My personal preference is to not have page limits. 10 11 MR. CONRAD: Let's go with that. 12 JUDGE THOMPSON: That is not, however, the preference of the Commissioners. What about 30 pages? Do 13 14 you think that would be sufficient or not, 30? 15 MR. CONRAD: It's a little hard to know 16 right now, but what I would maybe ask your consideration of is if we could within the next -- let's see, this is a 17 Tuesday. If we would by the end of the week be able to 18 19 have some indication from the reporter -- perhaps she can 20 give that to us fairly quickly -- of the number of pages 21 of transcript that this will boil down to, less the part 22 that I'm contributing to right now. 23 And we would maybe submit a motion either to your Honor or to the Commission as the case may be and 24

suggest a page limit there. I'm not suggesting that 30 is

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unreasonable. It just might -- the prehearing we did was 1 2 I think pushing around 35, and that was partly to kind of 3 lay out a background. Could we do it that way and reserve judgment on it until we kind of have an idea how big the 4 5 transcript is? 6 JUDGE THOMPSON: That's fine with me, 7 unless someone has an objection to that. 8 MR. CONRAD: Perhaps your Honor could 9 inquire of the court reporter whether she has a sense of 10 how many pages there are. 11 JUDGE THOMPSON: Ms. Reporter, do you have 12 a sense of how many pages we're at? 13 THE REPORTER: I can tell you today is 143, 14 and after we finish I can look up the other part. 15 JUDGE THOMPSON: You're probably looking at 16 3 or 400. You spent a lot of time today just standing around. Yesterday might have been quite a bit longer. 17 18 I'm perfectly willing to entertain a motion after you've, 19 you know, got an idea how big the transcript's going to 20 be. 21 MR. WILLIAMS: I'd point out that Friday's 22 a holiday. 23 MR. CONRAD: I'm sorry. Today's Tuesday. 24 If we find out this evening, we can probably do something 25 by Thursday or Monday at the latest.

JUDGE THOMPSON: I was going to say, you can have 'til next Tuesday. All right. Take a week. Anything else? (No response.) JUDGE THOMPSON: Very good. Thank you very much. As you know, we still have local public hearings that are going to be part of the record of this case being held concurrent with the local public hearings in the two rate cases, and so we are not closing the record at this time, but we are adjourning this evidentiary hearing. Thank you very much. We are adjourned. WHEREUPON, the hearing of this case was concluded. 

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