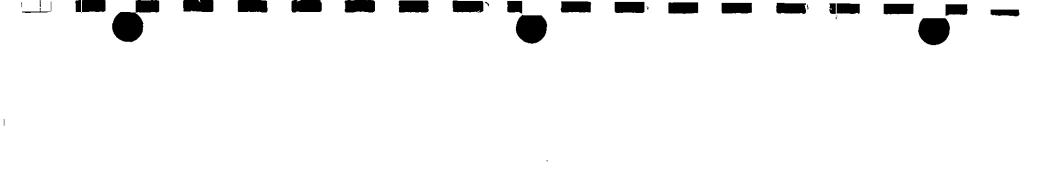
Services Chrispielic Connection

## DEPOSITIONS OF ALAN J. BAX



## BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

THE STAFF OF THE MISSOURI

PUBLIC SERVICE COMMISSION,

Complainant,

Vs.

UNION ELECTRIC COMPANY d/b/a

AMERENUE,

April 24, 2002

Respondent.

Description:

April 24, 2002

Respondent.

Description:

April 24, 2002

Description:

April 24, 2002

Description:

April 24, 2002

DEPOSITION OF ALAN BAX



## **ASSOCIATED COURT REPORTERS**

714 West High Street • Jefferson City, MO 65109 1.573.636.7551 • 1.888.636.7551 • 1.573.636.9055 (Fax) Jefferson City • Columbia • Rolla • St. Louis • Clayton • St. Charles www.missouridepos.com

spherion.

| 1  | BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI                          |
|----|--|
| 2  |  |
| 3  | THE STAFF OF THE MISSOURI ) PUBLIC SERVICE COMMISSION, )                               |
| 4  | Complainant, ) Case No. EC-2002-1  |
| 5  | vs.  |
| 6  | UNION ELECTRIC COMPANY d/b/a ) AMERENUE, )   |
| 7  | ) April 24, 2002<br>Respondent. ) Jefferson City, Mo.                                  |
| 8  |  |
| 9  |  |
| 10 | DEPOSITION OF ALAN BAX,  |
| 11 | a witness, sworn and examined on the 24th day of April,                                |
| 12 | 2002, between the hours of 8:00 a.m. and 6:00 p.m. of that                             |
| 13 | day at the offices of the Public Service Commission, in the                            |
| 14 | City of Jefferson, County of Cole, State of Missouri, before                           |
| 15 |  |
| 16 | TRACY L. CAVE  Certified Shorthand Reporter  |
| 17 | ASSOCIATED COURT REPORTERS 714 West High Street  |
| 18 | JEFFERSON CITY, MO 65101<br>(573) 636-7551   |
| 19 | (573) 442-3600   |
| 20 | ;<br>:   |
| 21 |  |
| 22 | within and for the State of Missouri, in the above-entitled                            |
| 23 | cause, on the part of the Respondent, taken pursuant to                                |
| 24 | notice and agreement.  |
| 25 |  |
|    | 1 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO |

| 1  | APPEARANCES  |
|----|--|
| 2  | FOR THE COMPLAINANT:   |
| 3  | STEVEN DOTTHEIM, Chief Deputy General Counsel                                      |
| 4  | DENNY FREY, Senior Counsel<br>200 Madison Street<br>Jefferson City, Missouri 65102 |
| 5  | 573-751-7489   |
| 6  | FOR THE RESPONDENT:  |
| 7  | VICTOR J. WOLSKI, Attorney at Law<br>COOPER & KIRK                                 |
| 8  | 1500 K Street, N.W. Washington, D.C. 2005  |
| 9  | 202-220-9644   |
| 10 | FOR THE STATE OF MISSOURI:   |
| 11 | RONALD S. MOLTENI, Assistant Attorney General Broadway State Office Building       |
| 12 | P.O. Box 899  Jefferson City, Missouri 65102                                       |
| 13 | 573-751-3321   |
| 14 | FOR THE OFFICE OF PUBLIC COUNSEL AND THE PUBLIC:                                   |
| 15 | MICHAEL DANDINO, Senior Public Counsel P.O. Box 7800                               |
| 16 | Jefferson City, Missouri 65102<br>573-751-5559                                     |
| 17 |  |
| 18 | ALSO PRESENT: Lena Mantle, Gary S. Weiss, Richard Kovach                           |
| 19 | SIGNATURE INSTRUCTIONS:  |
| 20 | Presentment waived; signature requested.   |
| 21 | EXHIBIT INSTRUCTIONS:  |
| 22 | None marked.   |
| 23 | INDEX  |
| 24 | Direct Examination by Mr. Wolski 3   |
| 25 |  |
|    | ASSOCIATED COURT REPORTERS   |

| Ī  |  |
|----|--|
| 1  | that you understood the question as it was phrased.        |
| 2  | And I think before we start, we probably                   |
| 3  | should go around the room just to get everyone's presence  |
| 4  | noted for the record. So we can start with the man to your |
| 5  | left.  |
| 6  | MR. DOTTHEIM: Steven Dottheim, I'm an                      |
| 7  | attorney with the Missouri Public Service Commission.      |
| 8  | MS. MANTLE: Lena Mantle with the Commission                |
| 9  | Staff.   |
| 10 | MR. MOLTENI: Ronald Molteni, Attorney                      |
| 11 | General's Office.  |
| 12 | MR. DANDINO: Michael Dandino, senior public                |
| 13 | counsel.   |
| 14 | MR. WEISS: Gary Weiss, supervisor, regulatory              |
| 15 | accounting, Ameren.  |
| 16 | MR. KOVACH: Richard Kovach, manager of rate                |
| 17 | engineering, Ameren Services.                              |
| 18 | MR. WOLSKI: Victor Wolski, from Cooper and                 |
| 19 | Kirk representing AmerenUE.                                |
| 20 | MR. FREY: Dennis Frey, attorney with the                   |
| 21 | Staff with the Missouri Public Service Commission.         |
| 22 | BY MR. WOLSKI:   |
| 23 | Q. Mr. Bax, could you explain the steps you've             |
| 24 | taken to prepare for today's deposition?                   |
| 25 | A. Yes. I reviewed the documentations that were            |
|    | ACCOCTATED COLLDE DEDORTED C                               |

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573-636-7551 JEFFERSON CITY, MO
573-442-3600 COLUMBIA, MO

| 1  | filed.   |
|----|--|
| 2  | Q. And that would be your testimony from July and            |
| 3  | the work papers and schedules and the testimony for March    |
| 4  | and the work papers and the schedules?                       |
| 5  | A. As yes. As well as the previous                           |
| 6  | deposition.  |
| 7  | Q. Okay. And did you speak with anyone on Staff              |
| 8  | other than legal counsel to prepare for the deposition?      |
| 9  | A. Yes.  |
| 10 | Q. And who would that be?                                    |
| 11 | A. Lena Mantle and Greg Meyer.                               |
| 12 | Q. Okay. And what were the nature of those                   |
| 13 | discussions?   |
| 14 | A. Nature of the discussions were basically to               |
| 15 | prepare for the deposition, go over some possible questions  |
| 16 | Q. Okay. At the end of the deposition will you               |
| 17 | let me know if I got to all the questions they alluded to?   |
| 18 | A. Okay.   |
| 19 | Q. No, you don't have to do that.                            |
| 20 | Now, do you know how the numbers you're                      |
| 21 | proposing in your March testimony, the system energy loss    |
| 22 | number and the jurisdictional allocator, compare to what the |
| 23 | numbers were in the previous testimony?                      |
| 24 | A. Yes, I do.  |
| 25 | Q. And have they changed?                                    |
|    | 5  |

573-442-3600 COLUMBIA, MO

| 1  | takeover by another company?                                |
|----|---|
| 2  | A. No.  |
| 3  | Q. On economic development in the state of                  |
| 4  | Missouri?   |
| 5  | A. No.  |
| 6  | Q. Okay. Now, I realize that you're in the                  |
| 7  | engineering area and not the accounting area, but I want to |
| 8  | throw out a few terms that are used in connection with      |
| 9  | revenues and expenses in a rate-making just to see if you   |
| 10 | have a particular definition or understanding of those      |
| 11 | terms.  |
| 12 | Would the word "abnormality" mean anything to               |
| 13 | you in the context of a rate-making concerning expenses or  |
| 14 | revenues?   |
| 15 | A. An abnormality I would consider a nonrecurring           |
| 16 | event.  |
| 17 | Q. And would that be determined based on whether            |
| 18 | it has occurred at any other time?                          |
| 19 | A. Not necessarily, no.                                     |
| 20 | Q. Is there a particular way to determine, that             |
| 21 | you know of, whether something is an abnormality or not?    |
| 22 | A. Nothing specific.  |
| 23 | Q. And how about an extraordinary expense? Does             |
| 24 | that have any particular definition as far as you know?     |
| 25 | A. No.  |
|    | 7   |

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573-636-7551 JEFFERSON CITY, MO
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| _  |  |
|----|--|
| 1  | Q. An usual item, would that mean anything that              |
| 2  | · you know of?   |
| 3  | A. I an abnormality, but a nonrecurring                      |
| 4  | event.   |
| 5  | Q. Okay. Now, there are some differences in your             |
| 6  | testimony of March 1st, 2002 compared to the testimony that  |
| 7  | you filed last July. And I wondered if you could give me an  |
| 8  | overview, as you're sitting here, of what those differences  |
| 9  | happen to be?  |
| 10 | A. The loss the loss factor and the demand                   |
| 11 | allocation factor are different based on the different test  |
| 12 | year   |
| 13 | Q. Okay.   |
| 14 | A associated with the corresponding testimony                |
| 15 | on July 2nd and March 1. In addition, I calculated energy    |
| 16 | allocation factor in my March 1st testimony.                 |
| 17 | Q. Did anyone on the Staff calculate one in the              |
| 18 | July filings?  |
| 19 | A. The energy allocation factor was included in              |
| 20 | Staff Witness Jim Schwieterman's testimony.                  |
| 21 | Q. And do you know how he derived that number?               |
| 22 | A. No.   |
| 23 | Q. So this was something that was assigned to you            |
| 24 | because Mr. Schwieterman is no longer with the Staff?        |
| 25 | A. It was thought that I would be able to                    |
|    | 8 ASSOCIATED COURT REPORTERS 573-636-7551 JEFFERSON CITY, MO |

573-442-3600 COLUMBIA, MO

| 1  | figure calculate the factor.                                 |
|----|--|
| 2  | Q. System energy losses were calculated based on             |
| 3  | a 12-month period; is that correct?                          |
| 4  | A. Yes.  |
| 5  | Q. And what would be the 12-month period of that?            |
| 6  | A. Is this for the March 1st                                 |
| 7  | Q. I'm sorry. I should clarify. For the March                |
| 8  | testimony.   |
| 9  | A. Yes. As shown on Schedule 1, I calculated a               |
| 10 | system energy loss factor for the period October 2000 to     |
| 11 | September 2001.  |
| 12 | Q. Okay. Now, would that factor, the system                  |
| 13 | energy loss factor that is, be a different number if you had |
| 14 | calculated it based on the 12 months ending June 30th, 2001? |
| 15 | A. Most likely, yes.   |
| 16 | Q. Okay. Do you know how the system energy loss              |
| 17 | factor that you've calculated is used by other Staff         |
| 18 | witnesses in this case?                                      |
| 19 | A. No, I don't. I provided it to Staff Witness               |
| 20 | Lena Mantle.   |
| 21 | Q. Do you know if Ms. Mantle applied that factor             |
| 22 | to data that was derived by looking at 12 months ended       |
| 23 | September 30th, 2001   |
| 24 | A. No, I don't.  |
| 25 | Q or applied to earlier periods?                             |
|    | 9  |

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- A. No, I don't.
- Q. Okay. But the loss factor that's calculated on the basis of a 12-month period ending September 2001 would be appropriate for use when looking at kilowatt hour data that is also based on 12 months ending September 30th, 2001. Correct?
  - A. I'll have to have that repeated.
- Q. Actually, I might be able to phrase it in a more artful manner. You'd indicated that the system energy loss factor would have been -- it would likely have been different if you used the 12 months ending June 30th, 2001 rather than the 12 months ending September 30th, 2001 in order to calculate it.

So, to your view, would it be inappropriate to use a system energy loss factor that was calculated based on 12 months of data that ended September 30th, 2001 and apply it to data that was for a different time period than the 12 months ending September 2001?

- A. Not necessarily.
- Q. And why would it not be inappropriate given that the number would be different if you had calculated it based on a different 12-month period?
- A. This is an average -- this is an average system loss factor. AmerenUE -- it was calculated using the test year, so the other -- the other analyses done, if it

| 1  | was if losses if this loss factor was used in it,         |
|----|---|
| 2  | would be most appropriate used in the same time frame.    |
| 3  | Q. Okay. And the test year in this case was the           |
| 4  | 12 months ended June 30th, 2001. Correct?                 |
| 5  | A. Yes. With an update through 12 months ending           |
| 6  | September update period.                                  |
| 7  | Q. Okay. Now, Schedule 5 of your testimony show           |
| 8  | the calculation for the demand allocation factor?         |
| 9  | A. Schedule 5 of the March 1st testimony?                 |
| 10 | Q. Yes. March 1st testimony. Now, this appears            |
| 11 | to also have been calculated based on the 12-month period |
| 12 | ended September 30th, 2001?                               |
| 13 | A. Yes.   |
| 14 | Q. Do you know if this number would be different          |
| 15 | if you calculated it based on the 12-month period ending  |
| 16 | June 30th, 2001?  |
| 17 | A. I don't know whether it would be different.            |
| 18 | Q. Is it likely to be different?                          |
| 19 | A. It's likely to be, yes.                                |
| 20 | Q. And this number is different than the number           |
| 21 | you calculated for the 12 months ending I believe it      |
| 22 | was was it through December of 2000 in your July          |
| 23 | testimony?  |
| 24 | A. Yes. That's December December 2000.                    |
| 25 | Q. And the number you got for the Missouri                |
|    | 11  |

| 1  | A. Not a wholesale customer of AmerenUE.                     |
|----|--|
| 2  | Q. Would Rolla then still be receiving its energy            |
| 3  | from AmerenUE?   |
| 4  | A. The City of Rolla was was no longer the                   |
| 5  | contract existing contract expired December 2001 with        |
| 6  | the AmerenUE did not AmerenUE did not renew that             |
| 7  | contract.  |
| 8  | Q. Okay. And do you know if this contract                    |
| 9  | expiration is used by or the fact of this contract being     |
| 10 | expired is used by other Staff members in making adjustments |
| 11 | in their particular subject matters?                         |
| 12 | A. I don't know.   |
| 13 | Q. Okay. Now, you said that the contract the                 |
| 14 | Rolla contract expired at the end of 2001; is that           |
| 15 | A. I'm sorry. If I said 2001, I was mistaken.                |
| 16 | It was the end of 2000.                                      |
| 17 | Q. Okay.   |
| 18 | A. As I  |
| 19 | Q. But is the service provided the wholesale                 |
| 20 | energy provided to Rolla still reflected in the demand       |
| 21 | allocation factor data that you used for Schedule 5?         |
| 22 | A. It is not included in the AmerenUE                        |
| 23 | information.   |
| 24 | Q. And that would be true even for the months                |
| 25 | falling in the year 2000?                                    |
|    | 17   |

ASSOCIATED COURT REPORTERS

573-442-3600 COLUMBIA, MO

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- Q. Okay. Do you think it would be a more accurate method of determining the Missouri demand allocation factor if you were to determine the system energy loss factors associated with each of the jurisdictions and apply that to the load, to the data that you're using for the allocation factor in order to adjust for differing system energy losses?
  - I'm sorry. I'll have to have that repeated.
- Okay. Maybe I can say it more accurately. If Q. you were to -- if you could determine -- and I suppose that one can determine a system energy loss factor for the Illinois jurisdiction compared to the Missouri retail jurisdiction compared to the wholesale jurisdiction. And I assume that that sort of calculation can be done, I quess, can it not?
  - In theory. Α.
- Okay. Well, if you were to calculate a Q. different energy -- the energy loss factor for each of those jurisdictions and then apply that to the retail usage kilowatt hours, wholesale usage kilowatt hours and Illinois usage kilowatt hours data that you used to determine the energy allocation factor, would that give you a more accurate energy allocation factor than the approach that you used?

| 1  | A. I didn't I did not consider that in my                 |
|----|---|
| 2  | analysis.   |
| 3  | Q. Well, sitting here today, do you think that            |
| 4  | that would result in a more accurate factor if one takes  |
| 5  | into account the differing energy losses?                 |
| 6  | A. I would have I would have to do perform                |
| 7  | an analysis on that.                                      |
| 8  | Q. And to perform that analysis, what would you           |
| 9  | do? Would you consult any textbooks or treatises?         |
| 10 | A. Perhaps.   |
| 11 | Q. Have you consulted any prior to doing the              |
| 12 | allocation calculations for this case?                    |
| 13 | A. Did I consult  |
| 14 | Q. Any textbooks or treatises?                            |
| 15 | A. Well, I said earlier we I had looked at a              |
| 16 | NARUC manual.   |
| 17 | Q. Now, I think on page 3 of your testimony, you          |
| 18 | had said that the net system input rather, the system     |
| 19 | energy losses number was calculated based on total sales. |
| 20 | If you look at Schedule 1 of your testimony, your system  |
| 21 | energy loss calculation                                   |
| 22 | A. Schedule 1?  |
| 23 | Q. Yes.   |
| 24 | A. Of the March?  |
| 25 | Q. Of the March, yes. Is the loss factor that             |
|    | 33  |

573-636-7551 JEFFERSON CITY, MO 573-442-3600 COLUMBIA, MO

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| 1                    | near the bottom left corner should instead be "allocation                              |
|----------------------|--|
| 2                    | factor."   |
| 3                    | Q. Okay. Thank you.  |
| 4                    | MR. WOLSKI: I have no further questions,   |
| 5                    | unless anyone else has questions for you here.   |
| 6                    | THE COURT REPORTER: Signature?   |
| 7                    | MR. DOTTHEIM: Yes.   |
| 8                    | MR. WOLSKI: How about presentment?   |
| 9                    | MR. DOTTHEIM: Why not?   |
| 10                   | MR. WOLSKI: I would urge you to waive that.  |
| 11                   | MR. DOTTHEIM: Yeah. We will submit   |
| 12                   | correction sheets.   |
| 13                   | MR. WOLSKI: Very good.   |
| 14                   | (PRESENTMENT WAIVED; SIGNATURE REQUESTED.)   |
| 15                   |  |
| 16                   |  |
| 17                   |  |
| 18                   |  |
|                      |  |
| 19                   | ALAN BAX   |
| 19<br>20             | ALAN BAX subscribed and sworn to before me this day of                                 |
|                      | ALAN BAX subscribed and sworn to before me this day of , 2002.                         |
| 20                   | subscribed and sworn to before me this day of  |
| 20<br>21             | subscribed and sworn to before me this day of , 2002.                                  |
| 20<br>21<br>22       | subscribed and sworn to before me this day of , 2002.                                  |
| 20<br>21<br>22<br>23 | subscribed and sworn to before me this day of , 2002.  Notary Public in and for County |

ASSOCIATED COURT REPORTERS
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## CERTIFICATE 3 STATE OF MISSOURI SS. COUNTY OF BOONE I, Tracy L. Cave, Certified Shorthand Reporter with the firm of Associated Court Reporters, do hereby certify that pursuant to notice and agreement there came before me, ALAN BAX, at the law offices of the Public Service Commission, in the City of Jefferson, County of Cole, State of Missouri, on the 24th day of April, 2002, who was first duly sworn to testify 9 to the whole truth of his knowledge concerning the matter in controversy aforesaid; that he was examined and his 10 examination was then and there written in machine shorthand by me and afterwards typed under my supervision, and is 11 fully and correctly set forth in the foregoing 40 pages; and 12 the witness and counsel waived presentment of this deposition to the witness, by me, and that the signature may be acknowledged by another notary public, and the deposition 13 is now herewith returned. 14 I further certify that I am neither attorney or counsel for, nor related to, nor employed by, any of the 15 parties to this action in which this deposition is taken; and further, that I am not a relative or employee of any 16 attorney or counsel employed by the parties hereto, or financially interested in this action. 17 18 Given at my office in the City of Columbia, State of Missouri, this 24th day of April, 2002. 19 20 Certified Shorthand Reporter 21 22 23 24 25 41

## **ERRATA SHEET**

| Deposition | of: |
|------------|-----|
| - +P       | ~ . |

Alan Bax

Case Caption:

EC-2002-1

Date Taken:

November 28, 2001

| Page | Line      | Correction   | Reason           |
|------|-----------|--|------------------|
| 11   | 6         | Remove comma after "distribution".   | Clarification    |
| 12   | 18        | Should read, "invest in new generation".   | Transcript error |
| 14   | 3         | Should read, "What do you understand".   | Clarification    |
| 14   | 5         | Add comma after "considered".  | Clarification    |
| 14   | 7         | Should read, "mentality, a neutral position".  | Туро             |
| 20   | 19        | Delete the word "was".   | Clarification    |
| 20   | 21        | Add "generator unit ratings" following the word "those".   | Clarification    |
| 21   | 20        | Add "the unit maintenance history information contained in" following the word "discussed".  | Clarification    |
| 22   | 6         | Remove the word "there".   | Clarification    |
| 23   | 1         | Change the answer to: "Yes, I prepared the calculations used in the Direct Testimony of Dr. Eve Lissik in the Empire District Electric Company rate case ER-2001-299". | Correction       |
| 26   | 23-<br>24 | Should read, "On Page 2 of my direct testimony, line 15, I have defined".  | Clarification    |
| 27   | 14        | Add a period after "In part".  | Clarification    |

Man & Bay

## ERRATA SHEET

| Deposition of: | Alan Bax          | _ |
|----------------|-------------------|---|
| Case Caption:  | EC-2002-1         | _ |
| Date Taken:    | November 28, 2001 |   |

| Page_ | Line    | Correction   | Reason                                       |
|-------|---------|--|--|
| 27    | 16-     | Should read, "being the difference between what is net generation plus what is the net interchange, and what is company use and what is total sales".  (System energy losses = net generation + net interchange - company use - total sales) | Completion of Partial Answer / Clarification |
| 28    | 2       | Change "Ameren" to "AmerenUE".   | Clarification                                |
| 29    | 7       | Should read, "Most likely yes.".   | Clarification                                |
| 31    | 24      | Should read, "Most likely yes".  | Clarification                                |
| 32    | 8       | Should read, "Most likely yes".  | Clarification                                |
| 32    | 18      | Should read, "customer, most likely yes.".   | Clarification                                |
| 33    | 2       | Should read, "so thus, most likely yes".   | Clarification                                |
| 33    | 13      | Should read, "Theoretically, yes".   | Clarificaton                                 |
| 34    | 8       | Should read, "I have taken a number of graduate-level courses, but have not received any advanced degrees".  | Clarification                                |
| 35    | 2-3     | Should read, "load? One of the factors in losses is the square of the current.".   | Clarification                                |
| 37    | 17      | Should read "generation and transmission assets".  | Clarification                                |
| 37    | 24      | Place a colon following "testimony" instead of period.   | Туро   |
|       | <u></u> |  |  |

Olan Bax Signature

## **ERRATA SHEET**

| Deposition of: | Alan Bax          |  |
|----------------|-------------------|--|
| Case Caption:  | EC-2002-1         |  |
| Date Taken:    | November 28, 2001 |  |

| Page  | Line | Correction   | Reason        |
|-------|------|--|---------------|
| 45    | 2    | Remove the word "points".  | Clarification |
| 45    | 7-8  | Should read, "individual months' coincident peaks".  | Clarification |
| 46    | 2-3  | Should read "The ratio of August's peak to December's peak? The difference".                             | Туро          |
| 48    | 15   | Should read, "No, a little greater than 40".   | Clarification |
| 50    | 6    | Add "roughly a" before "2 1/2".  | Clarification |
| 60-61 | 25-1 | Should read "witnesses Lena Mantle and Greg Meyer, and I provided what they thought was support for it". | Clarification |
| 61    | 11   | Change "file" to "filed".  | Туро          |
| 61    | 12   | Add "and" following the word "methodology".  | Clarification |
|       |      |  |               |
|       |      |  |               |
|       |      |  |               |
|       |      |  |               |
|       |      |  |               |

alan Bax Signature

| STATE OF MISSOURI COUNTY OF COLE   | )<br>) ss.<br>)    |                   |         |        |
|--|--------------------|-------------------|---------|--------|
| I, Alan J. Bax, do hereby cert   | tify:              |                   |         |        |
| That I have read the for   | oregoing de        | eposition;        |         |        |
| That I have made such as might be necessary to rend  That having made such | ler the same       | e true and corre  | ct;     |        |
| Executed this 2  at  | 9TH                | day of<br>Missour | MARCH   | , 2002 |
| My Commission Expires:  Notary Public:                                     | STATE OF<br>COLE C | : - Notary Seal   | Alanf 6 | (Name) |

(This is the signature page to the deposition of Alan J. Bax taken on November 28, 2001.)

STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION vs. UNION ELECTRIC CO., d/b/a AmerenUE, CASE NO. EC-2002-1

| 1   | BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION           |
|-----|---|
| 2   | MISSOURI PUBLIC SERVICE COMMISSION                      |
| 3   | THE STAFF OF THE MISSOURI ) PUBLIC SERVICE COMMISSION,) |
| 4   | )   |
| 5   | Complainant, ) )  |
| 6   | vs. (ase No. EC-2002-1                                  |
| 7   | UNION ELECTRIC COMPANY, ) CONFIDENTIAL d/b/a AMERENUE,  |
| 8   | Respondent. ) November 28, 2001<br>) Jefferson City, MO |
| 9   | ,   |
| 10  | DEPOSITION OF ALAN J. BAX,                              |
| 11  | a witness, sworn and examined on the 28th day of        |
| 12  | November, 2001, between the hours of 8:00 a.m. and      |
| 13  | 6:00 p.m. of that day at the offices of Governor        |
| 14  | Office Building, Room 510, in the City of               |
| 15  | Jefferson, County of Cole, State of Missouri,           |
| 16  | Defore ORIGINAL   |
| 17  |   |
| 18  | MELINDA ADOLPHSON, CSR ASSOCIATED COURT REPORTERS, INC. |
| 19  | 714 West High Street<br>Jefferson City, Missouri 65102  |
| 20  | (573) 636 <b>-</b> 7551                                 |
| 21  |   |
| 22  | within and for the State of Missouri, in the            |
| 23  | above-entitled cause, on the part of the                |
| 2 4 | Respondent.   |
| 25  |   |

| 1  | APPEARANCES                                     |
|----|---|
| 2  |   |
| 3  | FOR THE COMPLAINANT:                            |
| 4  | STEVEN DOTTHEIM Chief Deputy General Counsel    |
| 5  | Governor Office Building<br>200 Madison Street  |
| 6  | P.O. Box 360<br>Jefferson City, MO 65102        |
| 7  | 573-751-7489                                    |
| 8  |   |
| 9  | FOR THE RESPONDENT:                             |
| 10 | VICTOR J. WOLSKI<br>Attorney at Law             |
| 11 | COOPER & KIRK<br>1500 K Street, N.W., Suite 200 |
| 12 | Washington, D.C. 20005<br>202-220-9644          |
| 13 |   |
| 14 | ALSO PRESENT:                                   |
| 15 | Richard J. Kovach<br>Lena Mantle                |
| 16 | Greg Meyer<br>Ryan Kind                         |
| 17 | SIGNATURE INSTRUCTIONS:                         |
| 18 | Presentment waived; signature requested.        |
| 19 | · · · · · · · · · · · · · · · · · · ·           |
| 20 | EXHIBIT INSTRUCTIONS:                           |
| 21 | None marked.                                    |
| 22 | ·   |
| 23 | INDEX   |
| 24 | Direct Examination by Mr. Wolski 3              |
| 25 | ,   |

| 1  | ALAN J. BAX, being first duly sworn, testified as   |
|----|---|
| 2  | follows:  |
| 3  | DIRECT EXAMINATION BY MR. WOLSKI:                   |
| 4  | Q. Welcome, Mr. Bax: I think what we should         |
| 5  | first do is go around the room to get everyone's    |
| 6  | name who is in attendance on the record, and if you |
| 7  | could state your full name and address?             |
| 8  | A. It's Alan John Bax, Missouri Public              |
| 9  | Service Commission, P.O. Box 360, Jefferson City,   |
| 10 | Missouri 65102.                                     |
| 11 | Q. Okay. And give the names of everybody            |
| 12 | else.   |
| 13 | MR. DOTTHEIM: Steven Dottheim, Staff of             |
| 14 | the Missouri Public Service Commission, Post Office |
| 15 | Box 360   |
| 16 | MR. WOLSKI: We don't need that. We know             |
| 17 | where to find you.                                  |
| 18 | MR. DOTTHEIM: All right.                            |
| 19 | MS. MANTLE: I'm Lena Mantle, with the PSC           |
| 20 | Staff.  |
| 21 | MR. MEYER: Greg Meyer, with the PSC                 |
| 22 | Staff.  |
| 23 | MR. KIND: Ryan Kind, with the Office of             |
| 24 | Public Counsel.                                     |
| 25 | MR. KOVACH: Richard Kovach, with Ameren             |
|    |   |

Services.

Cooper an

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MR. WOLSKI: And I'm Victor Wolski, with Cooper and Kirk. We represent Ameren.

BY MR. WOLSKI:

- Q. Now, I take it Mr. Dottheim is representing you today? He's your counsel today?
  - A. Uh-huh.
  - Q. Have you ever been deposed before?
  - A. No.
- Q. Well, then just to make sure that there's no misunderstanding on what we're doing, I'll go through and explain a little bit of the ground rules for what we're doing here, just to make sure that you understand since this is your first deposition.

The deposition is a procedure for taking your testimony under oath in connection with a pending legal action. And even though we're here today in an informal setting here in the conference room in your offices, your testimony is being given under penalty of perjury just as if you were testifying in a court of law. Do you understand that?

- A. Yes.
- Q. As you can see, the court reporter is

taking down everything that's being said during the course of the deposition. And after the deposition, she will prepare a written transcript of the deposition, which you can read and sign and that will be testimony in this case. Do you understand that?

A. Yes.

Q. And I will be asking you questions in this deposition, and your counsel, Mr. Dottheim, occasionally might or frequently, depending on the case, might object to the form of the question that I pose just for the purposes of getting an objection on the record, but you are still to answer the question that I ask unless Mr. Dottheim instructs you not to answer that. Do you understand that?

A. Yes.

Q. Okay. And please feel free if you don't understand my question, to ask for a clarification. You can also ask, if you want, the court reporter to read back the question. If you don't ask for a clarification, I'll assume that you understand the question as it was phrased. Do you understand that?

A. Yes.

| 1  | Q. Mr. Bax, there may be times when you don't       |
|----|---|
| 2  | know an exact answer to one of my questions, but    |
| 3  | you have some information on the subject where you  |
| 4  | can make some reasonable approximation or estimate, |
| 5  | and if that's the case, please provide the          |
| 6  | information that you do have; is that clear?        |
| 7  | A. Yes.   |
| 8  | Q. And a few mechanical issues before we            |
| 9  | start the real questions, the court reporter can't  |
| 10 | transcribe two people talking at the same time, so  |
| 11 | it's important that you wait until I finish my      |
| 12 | question before you attempt to answer it. And I'll  |
| 13 | also endeavor to not interrupt your answer with the |
| 14 | next question until you're finished, so we should   |
| 15 | work to try to avoid talking over each other.       |
| 16 | Also the court reporter can't transcribe            |
| 17 | non-verbal responses, such as a nod or shake of the |
| 18 | head, so that it's important that you give a verbal |
| 19 | response to all of my questions. Do you understand  |
| 20 | those instructions?                                 |
| 21 | A. Yes.   |
| 22 | Q. That's when you're suppose to just nod.          |
| 23 | A. Oh, I'm supposed to just nod. Okay.              |
| 24 | Q. Okay. Now, a few questions that we ask           |

all witnesses, so don't be offended. Is there any

25

| 1  | reason at all why you would not be able to give     |
|----|---|
| 2  | truthful and accurate testimony to the best of your |
| 3  | recollection at today's deposition?                 |
| 4  | A. No.  |
| 5  | Q. Do you have any medical condition or             |
| 6  | problems that might interfere with your ability to  |
| 7  | give truthful and accurate testimony at today's     |
| 8  | deposition?   |
| 9  | A. No.  |
| 10 | Q. Are you currently taking any drugs or            |
| 11 | other medication that might interfere with your     |
| 12 | ability to give truthful and accurate testimony at  |
| 13 | today's deposition?                                 |
| 14 | A. No.  |
| 15 | Q. What steps have you taken to prepare for         |
| 16 | today's deposition? Could you explain what you did  |
| 17 | in preparation?                                     |
| 18 | A. In preparation for today's deposition, I         |
| 19 | reviewed the documents in the case                  |
| 20 | Q. And that would be?                               |
| 21 | A for my testimony.                                 |
| 22 | Q. And which documents do you recall                |
| 23 | reviewing?  |
| 24 | A. My review my direct testimony and a              |
| 25 | number of the data requests that I sought.          |

| 1   | Q. Those are the ones that you requested?        |
|-----|--|
| 2   | A. Yes.  |
| 3   | Q. Did you review any other documents?           |
| 4   | A. Did I review any other documents?             |
| 5   | Q. In addition to your prefiled testimony and    |
| 6   | the data requests that you had submitted, and I  |
| 7   | presume the responses to the data requests?      |
| 8   | A. I reviewed other testimony I had written.     |
| 9   | Q. Okay. And that was for other cases or         |
| 10  | A. Yes.  |
| 11  | Q. Which cases do you recall the testimony       |
| 12  | was for?   |
| 13  | A. I reviewed my testimony on the rate case      |
| 14  | for the Empire District Electric Company.        |
| 15  | Q. What were the subjects of that particular     |
| 16  | testimony? What subjects did you cover? Was that |
| 17  | a jurisdictional allocator and system energy     |
| 18  | losses?  |
| 19  | A. Yes.  |
| 20  | Q. And was there any other testimony that you    |
| 21  | reviewed prior to the deposition?                |
| 22  | A. No.   |
| 23  | Q. And did you confer with anyone to prepare     |
| 2 4 | for the deposition?                              |
| 25  | A. Yes. I conferred with general counsel.        |

| 1  | Q. Okay. Anybody else?                              |
|----|---|
| 2  | A. And with Lena Mantle and Greg Meyer.             |
| 3  | Q. Okay. And putting aside discussions you          |
| 4  | would have had with counsel, were your discussions  |
| 5  | with Ms. Mantle pertaining to the substance of your |
| 6  | testimony?  |
| 7  | A. Yes.   |
| 8  | Q. And would the same thing be true with            |
| 9  | Mr. Meyer?  |
| 10 | A. Yes.   |
| 11 | Q. And did they have any substantive comments       |
| 12 | concerning the items in your testimony concerning   |
| 13 | your preparation for this deposition?               |
| 14 | A. Substantive comments?                            |
| 15 | Q. Yes. Did they make any in preparing              |
| 16 | you for the deposition, did they suggest there was  |
| 17 | anything wrong in your testimony?                   |
| 18 | A. No.  |
| 19 | Q. And did they provide you guidance for this       |
| 20 | deposition?   |
| 21 | A. Guidance?  |
| 22 | Q. Yes.   |
| 23 | A. Yes.   |
| 24 | Q. What precisely did you confer with               |
| 25 | Ms. Mantle about?                                   |

| 1        | A. Since I had never been deposed before,          |
|----------|--|
| 2        | they offered some they offered some advice from    |
| 3        | their experience on                                |
| 4        | Q. Okay. So it basically dealt with what           |
| 5        | it's like to be deposed and what sort of questions |
| 6        | to expect, things like that?                       |
| 7        | A. Yes.  |
| 8        | Q. Did you expect that question?                   |
| 9        | And have you done anything else to prepare         |
| 10       | for the deposition today other than reviewing the  |
| 11       | documents that you mentioned and conferring with   |
| 12       | counsel and conferring with Mr. Meyer and          |
| 13       | Ms. Mantle?  |
| 14       | A. No.   |
| 15       | Q. And your current position with the Public       |
| 16       | Service Commission Staff is?                       |
| 17       | A. Utility Engineering Specialist III, Energy      |
| 18       | Department.  |
|          |  |
| 19       | Q. And how long have you been in that              |
| 19<br>20 | Q. And how long have you been in that position?    |
|          |  |
| 20       | posítion?  |
| 20<br>21 | position?  A. Two and a half years.                |

District Electric Company.

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| 1  | Q. And how long were you working for Empire         |
|----|---|
| 2  | District Electric Company?                          |
| 3  | A. I worked there for three years.                  |
| 4  | Q. Three years. What type of work did you do        |
| 5  | there?  |
| 6  | A. I developed distribution, construction           |
| 7  | standards for the most part.                        |
| 8  | Q. And what other responsibilities did you          |
| 9  | have?   |
| 10 | A. Worked on acquiring a mapping system.            |
| 11 | Q. Any other responsibilities you can recall?       |
| 12 | A. Those were the main ones.                        |
| 13 | Q. And the mapping system, can you explain          |
| 14 | what that was?                                      |
| 15 | A. A geographical information system. It was        |
| 16 | a method of premise location.                       |
| 17 | Q. Did any of your work at Empire District          |
| 18 | concern system losses?                              |
| 19 | A. No.  |
| 20 | Q. And did any of your work at Empire               |
| 21 | District involve jurisdictional allocation factors? |
| 22 | A. No.  |
| 23 | Q. Are you aware of the total size of the           |
| 24 | revenue reduction as proposed by the Staff in this  |
| 25 | case?   |

| 1  | A. Not exactly.                                    |
|----|--|
| 2  | Q. Do you have some rough understanding of         |
| 3  | what it is?  |
| 4  | A. Yes.  |
| 5  | Q. What would that be?                             |
| 6  | A. Somewhere in the it was between a range         |
| 7  | of 200 to \$245 million.                           |
| 8  | Q. And do you know what the impact of that         |
| 9  | reduction would be if it were adopted on UE's      |
| 10 | rates?   |
| 11 | A. No.   |
| 12 | Q. Have you considered what the impact of          |
| 13 | this revenue reduction would be on UE's ability to |
| 14 | make needed investments in the future?             |
| 15 | A. No.   |
| 16 | Q. Have you considered what the impact of          |
| 17 | that revenue reduction would be on UE's ability to |
| 18 | invest i a new generation?                         |
| 19 | A. No.   |
| 20 | Q. Or to invest in infrastructure?                 |
| 21 | A. No.   |
| 22 | Q. Had you considered the impact of that           |
| 23 | revenue reduction on Ameren UE's stock price?      |
| 24 | A. No.   |
| 25 | Q. Are you aware of the mergers and                |

| 1   | acquisitions involving American Utilities over the  |
|-----|---|
| 2   | last few years?                                     |
| 3   | A. Yes.   |
| 4   | Q. And you know that Louisville Gas and             |
| 5   | Electric had been taken over by a British company?  |
| 6   | A. No, I did not know that.                         |
| 7   | Q. Did you consider whether the revenue             |
| 8   | reduction proposed by Staff in this case would make |
| 9   | Ameren UE more vulnerable to a takeover bid?        |
| 10  | A. No.  |
| 11  | Q. And had you considered the impact of the         |
| 12  | revenue reduction proposed by Staff on economic     |
| 13  | development in the State of Missouri?               |
| 14  | A. No.  |
| 15  | Q. Now, is it your understanding that the           |
| 16  | Public Service Commission has an obligation to set  |
| 17  | rates that are just and reasonable?                 |
| 18  | A. Yes.   |
| 19  | Q. Is the Public Service Commission obligated       |
| 20  | to balance the interests of ratepayers, investors   |
| 21  | and shareholders in a company and the public?       |
| 22  | A. That is my understanding.                        |
| 2 3 | Q. Okay. And one purpose of your job as a           |
| 24  | member of the Staff is to develop a recommendation  |
| 25  | to the Commission that will be used in determining  |
| ļ   |   |

| 1  | the revenue requirement for Ameren UE?             |
|----|--|
| 2  | A. Yes.  |
| 3  | Q. Well, do you understand the term just and       |
| 4  | reasonable to mean in a rate context?              |
| 5  | A. All factors considered just and reasonable      |
| 6  | takes in all factors, sort of a third-party        |
| 7  | mentality neutral position.                        |
| 8  | Q. So you're saying it is an objective             |
| 9  | evaluator of the factors?                          |
| 10 | A. Yes.  |
| 11 | Q. What would the relevant factors be in           |
| 12 | determining just and reasonable rates?             |
| 13 | A. I don't know what certainly don't know          |
| 14 | what the Commission might say just the factors     |
| 15 | may very well be different in different            |
| 16 | individuals.                                       |
| 17 | Q. And would you have a as part of your            |
| 18 | obligation in making recommendations to the        |
| 19 | Commission to consider all the factors that are    |
| 20 | involved in determining just and reasonable rates? |
| 21 | A. I'm not involved in the official                |
| 22 | rate-making process here.                          |
| 23 | Q. So your role would be confined just to the      |
| 24 | particular technical issues of your testimony?     |
| 25 | A. Yes.  |

| 1  | Q. And you wouldn't concern yourself with any      |
|----|--|
| 2  | of the revenue impact of that?                     |
| 3  | A. No.   |
| 4  | Q. Now, do you have a copy of the Staff's          |
| 5  | response to the interrogatories that were          |
| 6  | A. Interrogatories?                                |
| 7  | Q. Yes. UE's First Set of Interrogatories.         |
| 8  | Steve made it a big, fat document. It looks        |
| 9  | thinner double sided. In this you are identified   |
| 10 | as answering interrogatories 4 through 6 which     |
| 11 | would make sense, because if I remember correctly, |
| 12 | interrogatories 4 through 6 dealt with your        |
| 13 | testimony, but that would be on page 22 of the     |
| 14 | Staff's response.                                  |
| 15 | A. Yes.  |
| 16 | Q. And you identified three people who             |
| 17 | reviewed a draft of your testimony, Lena Mantle,   |
| 18 | Greg Meyer and Denny Frey or Frey. Frey is it?     |
| 19 | A. Frey.   |
| 20 | Q. Frey. And Mr. Frey is an attorney?              |
| 21 | A. Yes.  |
| 22 | Q. And his review was legal review                 |
| 23 | essentially?                                       |
| 24 | A. Yes.  |
| 25 | Q. Putting Mr. Frey aside, do you recall what      |

| 1   | Ms. Mantle did in reviewing the draft of your       |
|-----|---|
| 2   | testimony?  |
| 3   | A. Not exactly.                                     |
| 4   | Q. Okay. She's also identified as                   |
| 5   | participating or contributing to the preparation of |
| 6   | the testimony. Do you recall what she did to        |
| 7   | prepare or to participate or contribute to the      |
| 8   | preparation of the testimony?                       |
| 9   | A. As I recall she provided words and phrases       |
| 10  | to describe the ideas that were presented.          |
| 11  | Q. Did she offer any substantive changes to         |
| 12  | the testimony, changes to numbers or to the         |
| 13  | methodology that was included?                      |
| 14  | A. No.  |
| 15  | Q. And Greg Meyer, who also reviewed a draft        |
| 16  | of the testimony and participated or contributed to |
| 17  | the preparation, do you recall what contribution he |
| 18  | made after reviewing the testimony?                 |
| 19  | A. It would have been similar.                      |
| 20  | Q. Word changes?                                    |
| 21  | A. Yes.   |
| 22  | Q. But no change to any of the methodology or       |
| 23  | the numbers?  |
| 2 4 | A. No.  |
| 25  | Q. And John Cassidy is also listed as having        |

| 1  | participated in or contributed to the preparation   |
|----|---|
| 2  | of your testimony?                                  |
| 3  | A. Yes.   |
| 4  | Q. Was his participation limited to the             |
| 5  | response in interrogatory No. 6, providing a copy   |
| 6  | of the data request?                                |
| 7  | A. Yes.   |
| 8  | Q. And he didn't do anything further than           |
| 9  | that?   |
| 10 | A. No.  |
| 11 | Q. And you also identified in the response to       |
| 12 | the interrogatories as having assisted Mr. Bender   |
| 13 | in answering numbers 7, 8 and 9, which deal with    |
| 14 | Mr. Bender's testimony and review and participation |
| 15 | in it. Do you recall how you may have assisted in   |
| 16 | the response to No. 7?                              |
| 17 | MR. DOTTHEIM: Mr. Wolski, could you                 |
| 18 | specifically point out to Mr. Bax where it's        |
| 19 | indicated that he assisted Mr. Bender on 7, 8 and   |
| 20 | 9?  |
| 21 | MR. WOLSKI: Certainly.                              |
| 22 | MR. DOTTHEIM: Thank you.                            |
| 23 | BY MR. WOLSKI:                                      |
| 24 | Q. On page 13 of the Staff's responses, in          |
| 25 | response to No. 2, which is, Identify each person   |

- the response to No. 8 and No. 9?
  - Α. Yes.

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And also if you turn back to the chart -actually, we'll go to page 18 of the Staff response, and you're listed in the second -- in the column to the right, among the people who assisted in the response to No. 89, 90, 91 and 92 that were answered by Mr. Bender. So if we could turn first to No. 89, your response to 89, which begins on page 85.

Now, looking at the Staff's response to

- those were, as I understand it, direct inputs
  the end of the model and that's . . .

  Q. So you supplied data that was input
- Q. So you supplied data that was input directly into this model?
  - A. That's my understanding.

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| 1    | Q. And for No. 104, the response to                |
|------|--|
| 2    | interrogatory No. 104, which references the method |
| 3    | of utilizing the data referred to in interrogatory |
| 4    | No. 103 and what documents would be relied on, do  |
| 5    | you recall assisting in No. 104?                   |
| 6    | A. <b>Mo</b> .                                     |
| 7    | Q. And the response to No. 105, which              |
| 8    | concerns the use of unit maintenance history data  |
| 9    | in the real time production cost model, do you     |
| 10   | recall how you assisted in the response to         |
| 11   | interrogatory No. 105?                             |
| 12   | A. This information is also supplied in the        |
| 13 . | 20.080 data that was before mentioned, and we      |
| 14   | reviewed this, but I don't know how he set up the  |
| 15   | model parameters. We reviewed the information that |
| 16   | was supplied in the 20.080 data.                   |
| 17   | Q. So you had supplied data to Mr. Bender for      |
| 18   | use in the model, but you don't know exactly how   |
| 19   | that was used in the model?                        |
| 20   | A. No. I mean, we discussed the 20.080 data        |
| 21   | supplied by the Company.                           |
| 22   | Q. And you reviewed the data?                      |
| 23   | A. We discussed that data, but I do not know       |
| 24   | how he used that in the model.                     |
| 25   | Q. No. 106 refers to documents relied upon         |

| 1  | for the previous response, do you recall anything |
|----|---|
| 2  | to do with that or were you just pulled in as one |
| 3  | of the usual suspects in assisting this sort of   |
| 4  | topic?  |
| 5  | A. There's nothing further that I added           |
| 6  | there, only that we reviewed that 20.080 data     |
| 7  | again.  |
| 8  | Q. And you said you don't know how the            |
| 9  | parameter or the models were employed; is that    |
| 10 | A. No, I do not.                                  |
| 11 | Q. So you wouldn't know why planned outage        |
| 12 | hours were averaged over five years?              |
| 13 | A. No, I don't.                                   |
| 14 | Q. Now, is this the second time that you had      |
| 15 | provided testimony or participated in testimony   |
| 16 | that relates to jurisdictional allocation?        |
| 17 | A. Yes.   |
| 18 | Q. And the previous one would have been the       |
| 19 | Empire District case?                             |
| 20 | A. Yes.   |
| 21 | Q. And the same thing is true for system          |
| 22 | energy losses?                                    |
| 23 | A. That I provided testimony for, yes.            |
| 24 | Q. Had you worked on other people's testimony     |
| 25 | involving jurisdictional allocation factors?      |

decided that there was no need for testimony. 1 Was that your first introduction to the ο. 2 concept of system energy losses? 3 Not to the concept, no. Α. Had you studied that before as an Q. 5 electrical engineer? 6 Α. Yes. Jurisdictional allocation factors, what Q. was the first work you did concerning those while you were employed with the Staff? 10 That would have been with the Empire rate 11 Α. 12 case. 13 And had you been familiar with the concepts involved in jurisdictional allocation 14 prior to that assignment? 15 Α. 16 The concept, yes. 17 Was that something you would have studied while you were doing your electrical engineer and 18 19 course work? 20 Α. Yes. And who specifically gave you the 21 Q. 22 assignment in this case to do system energy losses and the Missouri jurisdictional allocation factor, 23 do you recall? 24 As I recall Dr. Eve Lissik. 25 Α.

| 1  | Q. Was the assignment outlined to you before        |
|----|---|
| 2  | you performed it?                                   |
| 3  | A. No.  |
| 4  | Q. When you were first assigned the system          |
| 5  | energy loss factor item for this case, what steps   |
| 6  | did you take to prepare for your testimony?         |
| 7  | A. The supply of to ask the company for             |
| 8  | data, reviewed data that other Staff witnesses,     |
| 9  | John Cassidy specifically, had received.            |
| 10 | Q. So to perform the system energy loss             |
| 11 | calculation then, you asked for all the data that   |
| 12 | you needed that you didn't have from other sources  |
| 13 | such as Mr. Cassidy?                                |
| 14 | A. Right.   |
| 15 | Q. Did you consult any prior testimony of           |
| 16 | Staff witnesses concerning the system energy losses |
| 17 | topic in order to learn how to perform this         |
| 18 | calculation?  |
| 19 | A. Since I had looked at losses on the              |
| 20 | St. Joe Light and Power system, no, I had already   |
| 21 | reviewed documents.                                 |
| 22 | Q. And do you recall which documents you            |
| 23 | reviewed when you first looked at the issue for the |
| 24 | St. Joe Power and Light matter?                     |
| 25 | A. No, I do not recall specifically.                |

| 1  | Q. <b>Mow</b> , what is your recommended system     |
|----|---|
| 2  | energy loss factor for Ameren?                      |
| 3  | A. Well, that is a proprietary that has             |
| 4  | been asked by the Company to be held proprietary.   |
| 5  | Q. What we'll do in this matter is and the          |
| 6  | other depositions is that the transcript will be    |
| 7  | confidential subject to the protective order, and   |
| 8  | we will I suppose we will review the transcript     |
| 9  | when we receive it and release information that is  |
| 10 | not proprietary and keep the proprietary            |
| 11 | information sealed, so you may testify as to the    |
| 12 | proprietary information.                            |
| 13 | MR. DOTTHEIM: Please proceed.                       |
| 14 | BY MR. WOLSKI:                                      |
| 15 | Q. It's good of you to remember that.               |
| 16 | Thanks.   |
| 17 | A. On page 3 on my direct testimony, I              |
| 18 | calculated in line 22, have calculated the          |
| 19 | system energy loss percentage to be 7.016 percent.  |
| 20 | Q. Okay. And could you explain for those of         |
| 21 | us who aren't electrical engineers what this number |
| 22 | means?  |
| 23 | A. Page 2 I have the direct testimony, line         |
| 24 | 15 have defined system energy losses as the energy  |
| 25 | losses that occur in the electrical equipment       |

| 1  | transmission and distribution lines, transformers,  |
|----|---|
| 2  | et cetera, in the Company system between generating |
| 3  | sources and customers' meters.                      |
| 4  | Q. So you look at the amount of electricity         |
| 5  | that's generated, then you look at the amount of    |
| 6  | electricity that is registered in the meters and    |
| 7  | the differences of what the system energy loss      |
| 8  | would be?   |
| 9  | THE WITNESS: Could you read that back for           |
| 10 | me?   |
| 11 | THE REPORTER: Sure.                                 |
| 12 | (THE LAST QUESTION WAS READ BACK BY THE             |
| 13 | REPORTER.)  |
| 14 | THE WITNESS: In part I have defined                 |
| 15 | system energy losses on page 3 of the testimony as  |
| 16 | being the difference between what is generated and  |
| 17 | what is the net interchange.                        |
| 18 | BY MR. WOLSKI:                                      |
| 19 | Q. So you also then factor in                       |
| 20 | A. So I factor in                                   |
| 21 | Q how much energy, whether there would be           |
| 22 | energy that's sold off to the system or whether     |
| 23 | there's energy that's acquired from outside to it?  |
| 24 | A. Yes.   |
| 25 | Q. Now, the number that you come up with here       |

| 1   | for the system energy loss percentage, that number |
|-----|--|
| 2   | is an Ameren system average energy loss factor,    |
| 3   | correct?   |
| 4   | A. Yes.  |
| 5   | Q. Now, is this system loss factor the same        |
| 6   | for every customer that would be served by Ameren? |
| 7   | A. This is a that wouldn't necessarily be          |
| 8   | true, no.  |
| 9   | Q. That's because system energy losses would       |
| 10  | be different for various customer classes?         |
| 11  | A. Potentially.                                    |
| 12  | Q. What would be the factors that would            |
| 13  | determine how much system energy loss would be     |
| 14  | associated with a particular customer class?       |
| 15  | A. There are primary customers.                    |
| 16  | Q. Primary customers being ones that are           |
| 17  | receiving at higher voltage?                       |
| 18  | A. Yes.  |
| 19  | Q. So there are fewer step-downs?                  |
| 20  | A. There are fewer, yes.                           |
| 21  | Q. So you wouldn't have the energy loss that       |
| 22  | occurs because of the transformers and the         |
| 23  | step-down of the voltage?                          |
| 2 4 | A. Yes.  |
| 25  | Q. And you would have shorter lines to them,       |

so you wouldn't have the loss that comes off of the 1 line length as well? 2 3 Α. Most likely. Q. And so for the primary customers that receive the electricity at the higher voltage, they 5 would have lower system energy losses? 6 7 Α. Yes. So that then the cost of energy service 8 Q. 9 for them would be lower because of the lower losses? 10 11 There are other factors involved in determination of rates other than system energy 12 13 losses. But as far as system energy losses would 14 Q. be a factor in the cost, there would be less cost 15 in providing the higher voltage customers energy? 16 I don't know. Not necessarily. 17 Α. Because of the lack of -- because there 18 Q. 19 are fewer step-downs and the other factors that you 20 had stated relating to the primary customers, the 21 energy losses in providing electricity to the 2.2 primary customers would be lower than the overall average factor that you have calculated for Ameren 23 24 system as a whole, correct?

Please repeat that.

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Α.

Q. I'm not sure that I could. Let me see if
I can rephrase it.

22.

Because the primary customers would have less energy -- system energy losses compared to customers that have more step-downs and are receiving lower voltage of electricity, that would mean that the energy loss factor associated with those customers would be lower than the average number that you calculated, correct?

- A. That may not necessarily be involved in their rates, but I would anticipate that there would be less losses to them, yes.
- Q. And what are the other classes of electricity customers other than primary?
- A. There are what I would term secondary customers.
- Q. And secondary customers would be medium-voltage recipients? They would be receiving the electricity that's been stepped down some in the process of distribution so that they would be receiving it at a lower voltage than the primary customers?
- A. Well, you would have residential customers or . . .
  - Q. And residential customers would be

receiving at the lowest voltage of all the customers on the system?

A. Primarily.

- Q. So that the residential customers then would have the largest step-down in voltage from the energy -- the voltage of the energy at the time it was generated to the time that it's -- to the point where it's received by the user?
  - A. I'm sorry. I --
- Q. Of all the customers of electricity, because the residential customers are receiving electricity at the lowest voltage compared to other classes, there would be the greatest number of step-downs to bring the electricity voltage down from the high point or the high voltage it was at when it was generated to the low voltage that it's at when it's received by the user, correct?
  - A. For the most part.
- Q. So that there would be more system energy losses associated with the residential users because of the number of step-downs and transformers that the energy has to go through on its route to the user?
  - A. Yes.
  - Q. And also after it's stepped down, you also

1 have the losses that would be associated with the 2 lines bringing the electricity to the user's 3 location? Α. Yes. So one would expect then that the 5 Q. residential users would have a higher energy loss 6 7 factor compared to the primary users? 8 Α. Yes. 9 And there would also then be a higher 10 energy loss factor for the residential users than 11 an average number that was calculated across all 12 classes, correct? Not necessarily. 13 14 But the average is calculated looking at 15 the losses for all classes of customers, correct? 16 Α. You're asking if the -- you're asking if 17 the system energy loss is higher for a secondary 18 customer, yes. 19 Okay. And would be higher than the 0. 20 average system energy loss factor that you had 21 calculated using data for all customer classes? Ιt 22 would be higher for the residential compared to 23 that number?

This 7.016 percent represents a number of

a loss that may -- well, the secondary customer

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Α.

A. Yes.

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- Q. So that the losses of the middle-voltage customers would be -- the system energy losses associated with their service would be lower than the losses for the residential class, correct?
  - A. I'm not in rate design, but I'd say --
- Q. I mean, just dealing with the energy losses.
  - A. Theoretically, yes.
- Q. And the reason why the system energy losses would be less for the medium-voltage recipients that we've described compared to the residential is because there are fewer step-downs

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| 1   | THE WITNESS: The square of the hourly               |
|-----|---|
| 2   | load, it's one of the factors in losses is the      |
| 3   | square of current.                                  |
| 4   | BY MR. WOLSKI:                                      |
| 5   | Q. Well, doesn't it mean then that your             |
| 6   | average loss factor that you calculated wouldn't be |
| 7   | an accurate estimate of the energy loss for every   |
| 8   | hour in a year?                                     |
| 9   | A. Well, the losses would vary.                     |
| 10  | Q. So sometimes the losses would be higher          |
| 11  | than the 7 percent, the 7.016 percent number?       |
| 12  | A. Potentially.                                     |
| 13  | Q. And sometimes they would be lower?               |
| 14  | A. Yes.   |
| 15  | Q. And as the hourly load goes up, the              |
| 16  | losses, the loss percentage would be higher,        |
| 17  | correct?  |
| 18  | A. You're asking if the loss factor                 |
| 19  | necessarily increases with an increase in load and  |
| 20  | with the in most cases.                             |
| 21  | Q. Which Staff witnesses used the system            |
| 22  | energy loss percentage that you recommended in this |
| 23  | case, do you recall?                                |
| 2 4 | A. On page 4, I provided the 7.016 percent to       |
| 25  | Staff witness, Lena Mantle.                         |

| 1          | Q. Are there any other Staff witnesses that         |
|------------|---|
| 2          | would have used that number?                        |
| 3          | A. Not that I know of.                              |
| 4          | Q. And do you know how Ms. Mantle used the          |
| 5          | loss factor that you provided?                      |
| 6          | A. No.  |
| 7          | MR. DOTTHEIM: Mr. Wolski, whenever, in              |
| 8          | the next minutes or so if there's an opportune time |
| 9          | to take a short break?                              |
| 10         | MR. WOLSKI: Maybe in a couple of minutes.           |
| 11         | MR. DOTTHEIM: Okay. Fine.                           |
| 12         | BY MR. WOLSKI:                                      |
| 13         | Q. Do you know if the system energy loss            |
| l 4        | factor that you provided was used in calculations   |
| 15         | for the model to cover all hours of the year?       |
| 16         | A. No, I do not know how she used it.               |
| <b>L</b> 7 | Q. Would you know if that loss factor was           |
| Ł 8        | used in calculations concerning every customer      |
| 19         | class?  |
| <b>0</b>   | A. No.  |
| 21         | MR. WOLSKI: Why don't we take a break               |
| 2 2        | right now?  |
| 2 3        | MR. DOTTHEIM: Thank you.                            |
| 2.4        | (A BREAK WAS TAKEN.)                                |
| 25         | BY MR. WOLSKI:                                      |

| 1   | Q. Now, on page 4 of your testimony, you            |
|-----|---|
| 2   | begin your analysis of the jurisdictional           |
| 3   | allocations issue, correct?                         |
| 4   | A. Yes.   |
| . 5 | Q. And you identify in that page the FERC,          |
| 6   | F-E-R-C, generation and transmission accounts?      |
| 7   | A. Yes.   |
| 8   | Q. Now, are jurisdictional allocators used to       |
| 9   | apportion these accounts to jurisdiction?           |
| 10  | A. Are jurisdiction allocations rephrase            |
| 11  | that, please.                                       |
| 12  | Q. Are jurisdictional allocators or                 |
| 13  | jurisdictional allocation numbers used to apportion |
| 14  | these FERC accounts that you've identified to       |
| 15  | different jurisdictions?                            |
| 16  | A. Well, to apportion the cost of the               |
| 17  | generation of transmission to assets that are in    |
| 18  | part included in these generation and transmission  |
| 19  | USOA accounts.                                      |
| 20  | Q. And could you identify the Ameren                |
| 21  | jurisdictions that are applicable to our particular |
| 22  | case?   |
| 23  | A. Identified on page 7, top of page 7 of my        |
| 2 4 | direct testimony. Missouri retail, Illinois retail  |
| 25  | and Missouri wholesale.                             |

- A. In reference to line 22 of slight percentage variations, in comparing it to a -- what I term a needle peak, which is a rather -- which is a rather large variation.
- Q. Is there any particular number that you would associate with the term slight to determine how much of a variation would be slight and how much would not be slight?
- A. On a case-by-case basis, no, I don't have any -- I don't have anything particularly on it, no.
- Q. In the course of your study in electrical engineering when you were in school, could you -- you had said that you had received training that related to the determination of jurisdictional allocations; is that correct?
  - A. There was the discussion, yes.
- Q. Was that in one class or in more than one class, do you recall?
  - A. No.

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Q. And do you recall whether a particular

methodology for determining jurisdictional allocation factors was advocated or taught when you were in school?

- A. No.
- Q. And if I understand correctly what you had said in response to a question a few back, is it my understanding that you don't have a rule of thumb on how much of a variation is a slight variation when you're considering monthly peaks, you have to judge it by each particular case?
- A. I take everything on a case-by-case basis, yes.
- Q. And in general terms, you have no sense of what magnitude of variation in monthly peaks would be considered a slight variation?
- A. I'm looking for -- I'm looking for something that is greater than 40 percent.
- Q. So greater than 40 percent would be slight -- less than 40 percent variation would be a slight variation?
  - A. It all depends on the particular analysis.
- Q. Is there any particular engineering treatise that you're aware of that would define a slight variation as one that was 40 percent or smaller?

what we're discussing.

Q. And would a 40 percent increase in rates

charged to customers be a slight increase?

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A. Depending on the discussion, it may not

amount to much.

- Q. Okay. When you're looking at the monthly peaks for a particular case, what determines the percentage variation that you would consider to be slight or not slight with reference to that particular data, as you said you did it on a case-by-case basis? So in a particular case, what do you look for to determine how much variation there could be between monthly peaks and still be considered slight?
- A. You're asking what factors I would determine -- I would utilize to determine variation in monthly peaks?
- Q. No. What factors you would use to determine if the magnitude of the variation in monthly peaks was slight or not so slight?
- A. I'm generally looking for as on line 20 on page 5, that I'm looking for a -- what I would consider a distinctive peak over a particular month, which would cause me to consider using a -- possibly considering using a single-coincident peak.
- Q. Are the only two options a single-coincident peak or one-CP method and a 12-CP method?

- So that instead of a one-distinctive peak that would recommend using a one-CP method, you could have several months in a row that are at peak, a high peak compared to the other peaks throughout the year, that would then justify using, say, three- or a four-CP method if there are three or four peaks that are high relative to the others?
  - In the past it has been considered, yes.
- Are you familiar with the statistical tests that FERC uses to determine which CP to use for jurisdictional allocation purposes?
  - Not off the top of my head, no.
- Are you familiar with the on-and-off peak test that FERC uses?
  - The on-and-off peak test --
- Q. Yes.

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- -- that FERC uses? There are different analyses used depending on whether you're on-peak and off-peak purposes.
- Are you familiar with the low-to-annual Q. peak test that FERC uses which compares a ratio of the low month to the high month?
  - Α. No.
    - Q. Are you familiar with the low-to-annual

| ı   | peak test that FERC uses in which they use a ratio |
|-----|--|
| 2   | of the 12-CP figure to the one-CP figure?          |
| 3   | A. I don't recall the name of that document,       |
| 4   | no.  |
| 5   | Q. Are you familiar with FERC decisions in         |
| 6   | which the jurisdictional allocation number is      |
| 7   | determined?  |
| 8   | A. Could you repeat that, please?                  |
| 9   | Q. Are you familiar with FERC decisions in         |
| 10  | which the jurisdictional allocation number is      |
| 11  | determined for the utility being considered?       |
| 12  | A. I'm not familiar with individual cases.         |
| 13  | Q. Are you familiar with any of the                |
| 14  | methodologies employed by FERC to determine the    |
| 15  | jurisdictional allocation factor?                  |
| 16  | A. I haven't looked at any FERC cases.             |
| 17  | Q. So you haven't consulted FERC methodology       |
| 18  | or applied FERC's methodology for purposes of this |
| 19  | case?  |
| 20  | A. I have not looked at FERC I have not            |
| 21  | looked at FERC cases.                              |
| 22  | Q. Now, in your testimony, Schedule 3 of your      |
| 23  | testimony is a graph that portrays UE's monthly    |
| 24  | system peaks from 1996 through 2000?               |
| 2 5 | A. Yes.  |

| 1  | Q. And the data that is used for this graph      |
|----|--|
| 2  | appears Schedule 2?                              |
| 3  | A. Yes.  |
| 4  | Q. On page 6 of your prefiled testimony          |
| 5  | A. Page 6.                                       |
| 6  | Q. Page 6, yes. You acknowledge that the         |
| 7  | highest system peak for Ameren UE is during the  |
| 8  | summer months, correct?                          |
| 9  | A. Yes.  |
| 10 | Q. But you also term the winter months as        |
| 11 | having a relatively high-system peak?            |
| 12 | A. Yes.  |
| 13 | Q. Which turning to the Schedule 3, what are     |
| 14 | the relatively high-system peaks that you are    |
| 15 | describing for winter months? Could you identify |
| 16 | those?   |
| 17 | A. Identify December 2000 and January of '97.    |
| 18 | Q. Okay. And December 2000 is the one that       |
| 19 | is slightly above .8 on the graph?               |
| 20 | A. Yes.  |
| 21 | Q. And .8 represents a ratio, I believe, of      |
| 22 | the peak for that month compared to the peak for |
| 23 | the highest month; is that how you derived the Y |
| 24 | axis?  |
| 25 | A. On page 6, line 6, Schedule 3 attached to     |

- Q. Does that mean that you're looking at the peak for that month as a percentage of the peak for the highest month?
- A. I'm looking at the individual months coincident peak as a percentage of the corresponding system peak month.
- Q. Looking at the 2000 line, if you can actually call it a line. I'm not sure what you call these things. A line is usually straight. The graphic position of the data for the year 2000 on Schedule 3 for December of 2000 it's slightly above .8, and the peak for that year appears to be September and that's given a No. 1, correct?
  - A. Well, the peak in 2000 is August.
- Q. I'm sorry. I'm corrected. The peak in August is given a No. 1 on the Y axis and December of 2000 is slightly above .8. I don't know if that is about .81 or thereabouts. So the difference between the December figure that you have here and the highest peak for year 2000 is a little less than .2, correct?
  - A. Between August --

highest peak. That was 7,837, correct?

24

25

Α.

Yes.

| 1   | Q. So the difference is about 1,472, I guess;    |
|-----|--|
| 2   | is that  |
| 3   | A. 1,489.  |
| 4   | Q. 1,489. 1,489. So that the August number       |
| 5   | is about 24 percent higher than the December     |
| 6   | number, roughly?                                 |
| 7   | A. No. The ratio December to August is           |
| 8   | slightly less than 20 percent.                   |
| 9   | Q. But how much higher is August relative to     |
| 10  | December?  |
| 11  | A. The ratio of December to August 6,348 to      |
| 12  | 7,837 is .81 or slightly so the variation would  |
| 13  | be slightly less than 20 percent.                |
| 14  | Q. That's because you're using August as your    |
| 15  | starting point for your calculation. What if you |
| 16  | use December as the starting point for your      |
| 17  | calculation?                                     |
| 18  | A. If I used December                            |
| 19  | Q. If December's number is your baseline, how    |
| 20  | much higher is the highest peak in August?       |
| 21  | A. 23.49 percent.                                |
| 22  | Q. Okay. And if we used the lowest peak in       |
| 23  | 2000, which is April I believe April is the      |
| 24  | lowest peak for 2000, correct?                   |
| 2.5 | A That/s sorrest                                 |

| 1   | Q. If we use that as the baseline, how much         |
|-----|---|
| 2   | higher is the August peak compared to the April     |
| 3   | peak?   |
| 4   | A. April is a little less than 60 percent of        |
| 5   | August in the year 2000.                            |
| 6   | Q. And the difference between August and            |
| 7   | April, expressed as a percentage of April would be  |
| 8   | what?   |
| 9   | A. This is roughly I can't tell exactly             |
| 10  | from this graph, but it's slightly less than 60     |
| 11  | percent.  |
| 12  | Q. Looking at Schedule 2 then, using April          |
| 13  | 2000 figure as the baseline, the 4,488, how much of |
| 14  | an increase over that is the August peak of 7,837?  |
| 15  | A. No greater than 40.                              |
| 16  | Q. So that the increase from 4,488 to 7,837         |
| 17  | is less than 40 percent?                            |
| 18  | A. No. I said it was a little greater than          |
| 19  | 40.   |
| 20  | Q. Greater than 40. Well, the difference is         |
| 21  | about the difference between 7,837 and 4,488 is     |
| 22  | 3,449; is it not? Is it 3,349?                      |
| 23  | A. 3,349.   |
| 2 4 | Q. And 3,349 is what as a percentage of             |
| 25  | 4,488?  |

for purposes of this case?

percent were instead 91.21 percent, that would only

be a slight variation from the 89.61 percent

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2.5

number?

| 1  | A. If you're saying that if the monthly ratio  |
|----|--|
| 2  | was if a monthly ratio of 91.6?  |
| 3  | Q. Well, add the 25 to 89.6, so 92.1 percent   |
| 4  | compared to 89.6 percent, the differences is only  |
| 5  | 2.5 percentage points, so that would be a slight   |
| 6  | difference?  |
| 7  | A. 89.61 is an average.  |
| 8  | Q. Yes.  |
| 9  | A. Looks like 89.61 is an average ratio of   |
| 10 | the year 2000 of the given data, which had a   |
| 11 | with the range of values from 88.03 to 90.47.  |
| 12 | Q. The highest ratio in this table for the   |
| 13 | year 2000 in the last column the highest ratio is,   |
| 14 | I believe, .9080? Or, no. I'm sorry. 9086  |
| 15 | A. 9086.   |
| 16 | Q for July. And the lowest ratio looks   |
| 17 | like it's the 8803 for March?  |
| 18 | A. 8803.   |
| 19 | Q. So that the difference between those are  |
| 20 | 2 or be .02  |
| 21 | A0283.   |
| 22 | Q0283 or 2.83 percent?   |
| 23 | A0283.   |
| 24 | Q0283.   |
| 25 | Do you know how much of a difference a   |
|    | I and the second |

- spread of .0283 would mean for the revenue requirement calculation --
  - A. No, I don't.

Q. -- in this case?

Would you think that's only a slight difference?

- A. I don't know as far as the revenue requirement.
- Q. If the ratio variation on Schedule 4 were as high as 33 percent, would that still be a slight variation? Well, I think earlier you said when we were talking about variation and monthly peaks that as high as 40 percent of a variation could still be considered slight. I was wondering if a 40 percent variation for this ratio would be considered slight?
  - A. What would be the context of the . . .
- Q. Well, if the ratio of Missouri retail load to system peak load varied by as much as 40 percent for the year 2000 and comparing different months of, say, the month of July was 90 percent. It was .90 and the month of February, it was .50, so that would be a .40 difference. I'm wondering if that's a slight variation since that would be a slight variation -- 40 percent was a slight

On page 6 I've said that Schedule 4

| 1   | reflects on line 15 reflects the load attributed    |
|-----|---|
| 2   | to Missouri retail customers as a percentage of the |
| 3   | system peak load.                                   |
| 4   | Q. So as the system peak moves the Missouri         |
| 5   | load also moves? When it's higher, the Missouri     |
| 6   | load is higher, and when it's lower, the Missouri   |
| 7   | load is lower?                                      |
| 8   | A. No. That's not as far as a percentage,           |
| 9   | that's not necessarily true.                        |
| 10  | Q. Okay. And the ratios that are expressed          |
| 11  | on Schedule 4, those are simply the monthly         |
| 12  | Missouri allocators?                                |
| 13  | A. That is the ratio of the Missouri retail         |
| 14  | load to the system peak load during the particular  |
| 15  | month.  |
| 16  | Q. Do you know if FERC uses monthly                 |
| 17  | allocators to determine appropriate allocation      |
| 18  | methodology for any utility that it regulates?      |
| 19  | A. I did not no, I don't know.                      |
| 20  | Q. On page 7 of your testimony, one of the          |
| 21  | jurisdictions you identified is a FERC Customer     |
| 22  | Group, isn't it?                                    |
| 23  | A. Yes.   |
| 2 4 | Q. That would be the Missouri wholesale?            |
|     | <b>,</b> , , , , , , , , , , , , , , , , , ,        |

Missouri wholesale.

And did you consider how FERC would 1 Q. allocate production and transmission costs to this 2 3 wholesale group for purposes of coming up with this number? 5 Α. No. You did not. Okay. 6 Q. 7 One of the documents that you produced in response a document request by Ameren was the 8 direct testimony of Eve Lissik that was filed in 9 the Empire District Electric Company case? 10 11 Α. Yes. Q. And you're familiar with that testimony? 12 Now, I believe you had said that you were 13 involved in the calculations that were embodied in 14 15 that testimony; is that accurate? 16 That's accurate. Α. 17 And are you familiar with the methodology 0. that was employed in that particular testimony to 18 19 determine the allocation factors? 20 Α. Yes. And there's a statement on page 4 of this 21 Q. testimony that -- the testimony of Eve Lissik in 22 the Empire District Electric Company case, Case No. 23 24 ER-2001-299. It says, FERC has historically 25 advocated utilizing either a one-CP or a 12-CP

1 methodology.

MR. DOTTHEIM: Mr. Wolski, could you provide a copy of that document to Mr. Bax?

MR. WOLSKI: Certainly.

## BY MR. WOLSKI:

- Q. This was as it was printed out off of the computer disk with a bates number added on the bottom, but the document number on the bottom wasn't on there, but everything else was printed out of the file. And I was referring to lines 7 and 8 of page 4, FERC has historically advocated utilizing either a one-CP or a 12-CP methodology. Do you recall if you had anything to do with that particular conclusion?
  - A. I don't recall, no.
- Q. Do you know whether FERC has historically advocated either a one-CP or a 12-CP methodology to the exclusion of other CP methodologies?
  - A. Not to the exclusion of.
- Q. So that it wouldn't be accurate to say that FERC advocated utilizing either one or the other, that there are additional CP methodologies other than one CP or 12 CP that FERC has advocated using?
  - A. Well, I don't recall this statement.

| 1   | Q. But do you recall if FERC has advocated       |  |  |  |  |  |  |
|-----|--|--|--|--|--|--|--|
| 2   | using a methodology other than one CP or 12 CP?  |  |  |  |  |  |  |
| 3   | A. Well, I haven't I did not review any          |  |  |  |  |  |  |
| 4   | FERC documents, FERC cases for this proceeding.  |  |  |  |  |  |  |
| 5   | MR. WOLSKI: Okay. Just take a one-minute         |  |  |  |  |  |  |
| 6   | break.   |  |  |  |  |  |  |
| 7   | MR. DOTTHEIM: Sure.                              |  |  |  |  |  |  |
| 8   | (OFF THE RECORD.)                                |  |  |  |  |  |  |
| 9   | BY MR. WOLSKI:                                   |  |  |  |  |  |  |
| 10  | Q. Mr. Bax, did you consult any treatises or     |  |  |  |  |  |  |
| 11  | textbooks or journal articles to determine what  |  |  |  |  |  |  |
| 12  | methodology you would use to calculate the       |  |  |  |  |  |  |
| 13  | jurisdictional allocation factor?                |  |  |  |  |  |  |
| 14  | A. Any treatises?                                |  |  |  |  |  |  |
| 15  | Q. Or a textbook or journal article?             |  |  |  |  |  |  |
| 16  | A. No.   |  |  |  |  |  |  |
| 17  | Q. Where did you get the method that you         |  |  |  |  |  |  |
| 18  | employed in this case to determine the           |  |  |  |  |  |  |
| 19  | jurisdictional allocation factor?                |  |  |  |  |  |  |
| 20  | A. In this proceeding where did I get the        |  |  |  |  |  |  |
| 21  | methodology?                                     |  |  |  |  |  |  |
| 22  | Q. Yes.  |  |  |  |  |  |  |
| 23  | A. I obtained the data from information given    |  |  |  |  |  |  |
| 2 4 | by AmerenUE and data requests and it was used in |  |  |  |  |  |  |
| 25  | the Empire case.                                 |  |  |  |  |  |  |

| 1   | Q. So you used the methodology that was used        |
|-----|---|
| 2   | in the Empire case to determine how one would       |
| 3   | calculate the jurisdiction allocation factor?       |
| 4   | A. Well, I used that to support it.                 |
| 5   | Q. And in the Empire District case when you         |
| 6   | were making the jurisdictional allocation           |
| 7   | calculation, where did you get the methodology that |
| 8   | you used to calculate jurisdiction allocation for   |
| 9   | that case?  |
| 10  | A. When assigned the project, the when I            |
| 11  | discussed this with Dr. Eve Lissik, as I recall,    |
| 12  | that was in discussions with her that that was the  |
| 13  | approach to take.                                   |
| 14  | Q. So you used the approach that had been           |
| 15  | employed by the Staff in the past?                  |
| 16  | A. Perhaps that was the that may have               |
| 17  | entered into Dr. Eve Lissik's discussions.          |
| 18  | Q. But all you're certain of is that you used       |
| 19  | the approach that Dr. Lissik told you to follow?    |
| 20  | A. In our discussions, that was the that            |
| 21  | was the methodology that she recommended.           |
| 22  | Q. And then you used that same methodology in       |
| 23  | the AmerenUE case for your testimony?               |
| 2 4 | A. Upon looking at the data that I received.        |
|     |   |

And did you do any independent research to

25

Q.

| 1   | coincident peaks.                                   |  |  |  |  |  |  |
|-----|---|--|--|--|--|--|--|
| 2   | Q. And how did you know how to determine how        |  |  |  |  |  |  |
| 3   | many coincident peaks to use to calculate the       |  |  |  |  |  |  |
| 4   | jurisdictional allocation factor?                   |  |  |  |  |  |  |
| 5   | THE WITNESS: Would you please repeat                |  |  |  |  |  |  |
| 6   | that?   |  |  |  |  |  |  |
| 7   | THE REPORTER: Yes.                                  |  |  |  |  |  |  |
| 8   | (THE LAST QUESTION WAS READ BACK BY THE             |  |  |  |  |  |  |
| 9   | REPORTER.)  |  |  |  |  |  |  |
| 10  | THE WITNESS: The number of coincident               |  |  |  |  |  |  |
| 11  | peaks I used in this case, I thought I supported it |  |  |  |  |  |  |
| 12  | in my testimony.                                    |  |  |  |  |  |  |
| 13  | BY MR. WOLSKI:                                      |  |  |  |  |  |  |
| 14  | Q. But how did you know that the reasons            |  |  |  |  |  |  |
| 15  | given in your testimony to support the use of 12 CP |  |  |  |  |  |  |
| 16  | are the reasons that one would employ to determine  |  |  |  |  |  |  |
| 17  | the number of coincident peaks?                     |  |  |  |  |  |  |
| 18  | A. Well, that was the methodology that was          |  |  |  |  |  |  |
| 19  | the procedure that was discussed with Dr. Eve       |  |  |  |  |  |  |
| 20  | Lissik in the previous case.                        |  |  |  |  |  |  |
| 21  | Q. And were there any other influences upon         |  |  |  |  |  |  |
| 22  | your decision to determine the number of coincident |  |  |  |  |  |  |
| 2 3 | peaks in the manner that you did?                   |  |  |  |  |  |  |
| 2 4 | A. The testimony was reviewed by Staff              |  |  |  |  |  |  |
| 2.5 | witness Lena Mantle and Grea Meyer and that         |  |  |  |  |  |  |

| 1   | provided what I thought was support for it.        |  |  |  |  |  |  |
|-----|--|--|--|--|--|--|--|
| 2   | Q. Did they make any substantive changes to        |  |  |  |  |  |  |
| 3   | your methodology?                                  |  |  |  |  |  |  |
| 4   | A. No.   |  |  |  |  |  |  |
| 5   | Q. So there was no other basis for your            |  |  |  |  |  |  |
| 6   | conclusion that the approach that you took in your |  |  |  |  |  |  |
| 7   | testimony to determine the number of coincident    |  |  |  |  |  |  |
| 8   | peaks y seed other than the discussions that you   |  |  |  |  |  |  |
| 9   | had with Dr. Lissik in doing the Empire District   |  |  |  |  |  |  |
| 10  | calculations?                                      |  |  |  |  |  |  |
| 11  | A. Well, the case file by Empire District was      |  |  |  |  |  |  |
| 12  | also based on the 12-CP methodology would seem to  |  |  |  |  |  |  |
| 13  | support it.  |  |  |  |  |  |  |
| 14  | Q. And other than that was there any other         |  |  |  |  |  |  |
| 15  | source of your method to determine the number of   |  |  |  |  |  |  |
| 16  | coincident peaks you would employ?                 |  |  |  |  |  |  |
| 17  | A. No.   |  |  |  |  |  |  |
| 18  | MR. WOLSKI: Okay. I don't have anything            |  |  |  |  |  |  |
| 19  | further.   |  |  |  |  |  |  |
| 20  | Do you have anything?                              |  |  |  |  |  |  |
| 21  | MR. DOTTHEIM: No.                                  |  |  |  |  |  |  |
| 22  | (PRESENTMENT WAIVED; SIGNATURE REQUESTED.)         |  |  |  |  |  |  |
| 2 3 |  |  |  |  |  |  |  |
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| 1   | (THIS IS THE SIGNATURE PAGE TO THE DEPOSITION OF |
|-----|--|
| 2   | ALAN J. DAX TAKEN ON NOVEMBER 28, 2001.)         |
| 3   | ` <del>-:</del> '                                |
| 4   |  |
| 5   |  |
| 6   |  |
| 7   |  |
| 8   | v.   |
| 9   |  |
| 10  | ALAN J. BAX                                      |
| 11  |  |
| 12  |  |
| 13  | subscribed and sworn to before me this day of    |
| 14  | , 2001.  |
| 15  |  |
| 1.6 | Notary Public in and                             |
| 17  | for County<br>State of Missouri                  |
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## 1 CERTIFICATE 2 STATE OF MISSOURI SS. 3 COUNTY OF COLE 4 I, Melinda Adolphson, Certified Shorthand Reporter 5 and Notary Public in and for the State of Missouri, with the firm of Associated Court Reporters, Inc., 6 do hereby certify that there came before me, 7 ALAN J. BAX, in the offices of Governor Office Building, Room 8 510, in the City of Jefferson, County of Cole, State of Missouri, on the 28th day of November, 9 2001, who was first duly sworn to testify to the 1.0 whole truth of his knowledge concerning the matter in controversy aforesaid; that he was examined and 11 his examination was then and there written in machine shorthand by me and afterwards typed under my supervision, and is fully and correctly set 12 forth in the foregoing pages; and the witness and counsel waived presentment of this deposition to 13 the witness, by me, and that the signature may be acknowledged by another notary public, and the 14 deposition is now herewith returned. 15 I further certify that I am neither attorney or counsel for, nor related to or employed by any of 16 the parties to the action in which this deposition is taken; and furthermore, that I am not a relative 17 or employee of any attorney or counsel employed by the parties hereto, or financially interested in 18 the action. 19 IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Natolphson Seal this 29th day of November, 2001. MELINDAS. ADOLPHSON Seal this 29th day of November, Notary Public-Notary Seal 20 STATE OF MISSOURI 21 My Commission Expires Dec. 3, 2004 MELINDA ADOLPHSON, 22 (Computation of court costs based on payment 23 costs: within 30 days.) 24 Pd by Attorney for Complainant: Pd by Attorney for Respondent: 25

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