ERRATA SHEET

Deposition of:

Jolie Mathis

Case Caption:

EC-2002-1

Date Taken:

November 27, 2001

Page	Line	Correction	Reason
7	4	"532" instead of "032"	Туро
8	18	"changes in the schedule I named" should be inserted between the words "Yes" and "that"	Unclear answer
11	7	"principles" instead of "principals"	Туро
13	18	Insert the word "annual" so the words should be: "decrease in annual accrual"	Type of accrual clarification
19	7, 14	"inter-generational" instead of "inner- generational"	Туро
28	20	"Iowa State" instead of just "Iowa"	To distinguish the school
53	4	"has applied" instead of "is applied"	Туро
53	6	"than previously" instead of "that previously"	Туро
55	4	"Yes" instead of "I don't know."	Correction
69	22	Change to: "I know that's what I did, look at 3 year and 5 year averages."	Correction
70	24	Change to: "I discussed the 3 year and 5 year averages."	Correction
72	12	"Black and Veatch" instead of "Blacken Veatch"	Туро
72	20	"Kalamazoo" instead of "Kalamazoon"	Туро

Signature

ERRATA SHEET

Deposition of:	Jolie Mathis		
Case Caption:	EC-2002-1		
Date Taken:	November 27, 2001		

Page	Line	Correction	Reason
81	19	"Penn Sheraton" instead of "Penn Sheridan"	Туро
82	2	"Penn Sheraton" instead of "Penn Sheridan"	Туро
82	5	"Penn Sheraton" instead of "Penn Sheridan"	Туро
113	14	"in service" instead of "end service"	Туро
123	18	"look" instead of "looking"	Туро
129	19	"Penn Sheraton" instead of "Penn Sheridan"	Туро
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Signature Mathis

(This is the signature page to	o the deposition of Jolie Mathis taken on November 27, 2001.)
STATE OF MISSOURI COUNTY OF COLE)) ss.)
I, Jolie Mathis, do hereby ce	ertify:
That I have read the	foregoing deposition;
as might be necessary to ren	ch changes in form and/or substance on the attached errata sheet(s), ider the same true and correct; ich changes thereon, I hereby subscribe my name to the deposition.
	day of March , 2002 Le County, Missouri
My Commission Expires:	SHARON S WILES NOTARY PUBLIC STATE OF MISSOURI COLE COUNTY MY COMMISSION EXP. AUG. 23,2002

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

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ORIGINAL

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

The Staff of the Missouri Public Service Commission,)			
Complainant,)			
VS.)	Cause	No.	EC-2002-1
Union Electric Company, d/b/a Ameren UE,)			
Respondent.) }			

DEPOSITION OF JOLIE MATHIS taken on behalf of the Respondent November 27, 2001

ASSOCIATED COURT REPORTERS

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2	INDEX OF QUESTIONERS	
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4	QUESTION BY:	PAGE NO.
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14	No Pubility was instanced	
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1	BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI			
2				
3	The Staff of the Missouri) Public Service Commission,)			
4	Complainant,			
5	vs.) Cause No. EC-2002-1)			
6	Union Electric Company,) d/b/a Ameren UE,			
7	Respondent.)			
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9	·			
10	DEPOSITION OF WITNESS, JOLIE MATHIS, produced,			
11	sworn, and examined on the 27th day of November, 2001,			
12	between the hours of eight o'clock in the forenoon and six			
13	o'clock in the afternoon on that day, at the offices of 200			
14	Madison, Suite 810, Jefferson City, Missouri, before DEANNE			
15	M. LAKE, a Registered Professional Reporter, Certified			
16	Shorthand Reporter and Notary Public, in a certain cause now			
17	pending Before the Public Service Commission of the State of			
18	Missouri, wherein The Staff of the Missouri Public Service			
19	Commission is the Complainant and Union Electric Company,			
20	d/b/a Ameren UE is the Respondent.			
21				
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1	APPEARANCES
2	
3	
4	For the Complainant:
5	Mr. Thomas Schwarz, Jr.
6	Governor Office Building Suite 800
7	200 Madison Street PO Box 360
8	Jefferson City, Missouri 65102-0360 573-751-5239
9	Also present:
10	Mr. Greg Meyer Ms. Lena Mantle
11	Mr. Paul Adams Ms. Lisa Kremer
12	
13	For the Respondent:
14	Mr. Tom Byrne Ameren Services
15	One Ameren Plaza 1901 Chouteau Avenue
16	PO Box 66149, MC 1310 St. Louis, Missouri 63166-6149
17	314-554-2237
18	Also present: Mr. John Wiedmayer
19	Mr. Robert Kenney Ms. Suedeen G. Kelly
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22	
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IT IS HEREBY STIPULATED AND AGREED, by and between counsel for the Complainant and counsel for the Respondent that this deposition may be taken in shorthand by DeAnne M. Lake, a Certified Shorthand Reporter, Registered Professional Reporter and Notary Public, and afterwards transcribed into typewriting; and the signature of the witness is expressly reserved.

* * * * *

JOLIE MATHIS,

of lawful age, produced, sworn, and examined on behalf of

of lawful age, produced, sworn, and examined on behalf of the RESPONDENT, deposes and says:

* * * * *

MR. BYRNE: My name is Tom Byrne, and I am an attorney for Union Electric Company doing business as Ameren UE. Today we are here to take the deposition of Jolie Mathis of the Missouri Public Service Commission staff in Missouri Public Service case number EC-2002-1.

Present in the room in addition to myself and the court reporter and Ms. Mathis are Tim Schwarz, Greg Meyer, Paul Adam, Lena Mantle, Lisa Kremer, all from the Commission staff, and there is Bob Kenney and John Wiedmayer who are representing Ameren UE.

DIRECT-EXAMINATION

QUESTIONS BY MR. BYRNE:

Q. Could you, please, state your name?

Jolie Mathis. 1 Α. Ms. Mathis, I would like to ask you a couple 2 Ο. 3 preliminary questions before we get started. First of all, 4 have you ever been deposed before? Α. No, I have not. Okay. Well, if you don't hear one of my questions 6 7 or if you don't completely understand the question, one 8 thing I would ask is if you would ask me to either repeat it 9 or clarify it. Can you do that? 10 Α. Yes. 11 Okay. Are you taking any medications that might Q. 12 affect your ability to answer questions or understand my 13 questions today? 14 Α. No. 15 To your knowledge, is there any other factor that 16 might impair your ability to understand the questions or 17 answer them this morning? 18 Α. No. 19 Okay. And I guess I would also like to maybe set 0. 20 up some -- define some terms up front that will probably be 21 used in the deposition. If I say UE or Ameren UE, I am 22 talking about Union Electric Company. Is that okay with 23 you? 24 Yes. Α. 25 And if I say Ameren, I would be referring to the Q.

1	parent corporation, Ameren Corporation. Is that okay?
2	A. Yes.
3	Q. I guess the last preliminary thing is if you would
4	like to take a break at any time, just say so, you know. We
5	can take whatever breaks you want to take. Okay.
6	By whom are you employed, Ms. Mathis?
7	A. The Missouri Public Service Commission.
8	Q. And in what capacity are you employed with the
9	Commission?
10	A. I work as a depreciation engineer.
11	Q. And are you the same Jolie Mathis that filed
12	direct testimony in case number EC-2002-1 on the subject of
13	depreciation of plant that consists of 16 pages and 4
14	schedules?
15	A. Yes.
16	Q. Do you have a copy of your testimony with you?
17	A. Yes, I do.
18	Q. Okay. Do you before we started the deposition,
19	you identified some changes. Could you identify those
20	changes that you are proposing to make to your testimony for
21	the deposition?
22	A. Sure. On page 4, line 20, instead of 25 out of
23	the 50 accounts, it should be 24 out of the 50 accounts.
24	Line 22, it should be the other 26 accounts. Page 5, line
25	5, instead of 56 percent, it should be 43 percent. Page 14,

1 line 16, 45 percent should be 19 percent. 2 Q. 19 percent. 3 Yes. Line 17, 25 percent should be 10 percent. 4 Page 15, line 7, instead of 220,925,032, it should be 222,515,744. Line 11, instead of the 220 million, it should 5 6 be again 222,515,744, and instead of the 229 million, it 7 should be \$231,559,076. Lime 16 should be -- instead of the 8 28 million, it should be 27,151,279, and then on the 9 schedule on the second page of my schedule --Which schedule is that? 10 Q. 11 Schedule 2, schedule 2-2. Account 371, instead of 12 2.70 percent, it should be 3.23 percent. 13 Q. Which column are you --14 Α. I'm sorry. Under staff proposal under 15 depreciation rate. 16 Q. Okay. So the 4-2.70 should be 3.23 percent. 17 Α. 1.8 Q. Okay. 19 Α. Account 373, same column; the 4.35 percent should 20 be 3.57 percent. Account 391, same column; the 7.60 percent 21 should be 8.06 percent. (Account 392; 9.09 percent should be 22 11.11 percent. 23 Ο. Is that all the changes? 24 Except for the column changes, the column totals 25 at the end of staff's annual accrual. That should make that

i i	
1	222,515,744 and that would make column total for the
2	increase or decrease in accrual 36,194,611.
3	Q. Can you say that number again?
4	A. 36,194,611.
5	Q. And it is negative, in parentheses; is that right?
6	A. Yes. And finally in the last column, total, the
7	number should be 5,912,419.
8	Q. Again in parentheses?
9	A. In parentheses.
10	Q. Yes. Sorry to do this, but what is the number
11	that replaces 220,920,000?
12	A. It is 222,515,744.
13	Q. Okay. I would like to ask you why you made the
14	changes that you just recited. Let me ask it this way.
15	Would it be fair to say that the changes in the body of your
16	testimony either just reflect changes in that schedule that
17	you named or they're corrections to mathematical mistakes?
18	A. Yes, that would be correct.
19	Q. So the only substantive changes you made were in
20	the depreciation rates in that schedule 2.2.
21	A. Yes.
22	Q. Okay. Why did you make those changes?
23	A. Actually, for those accounts, it was simply a
24	misprint.
25	Q. Okay. So you didn't change the theory or anything

1	else you did.
2	A. No.
3	Q. It was just a misprint.
4	A. Right.
5	Q. Sort of taking
6	A. A matter of reporting from the output of the
7	software. It's just a misprint.
8	Q. Okay. Okay. According to your testimony, you
9	have been employed with the Commission since 1984 or
10	1994, right after you graduated from college; is that
11	correct?
12	A. A year after I graduated from college. Yes.
13	Q. Okay. Did you hold any jobs related to the issue
14	that you are testifying to in case number EC-2002-1 prior to
15	your employment with the Commission?
16	A. No, I did not.
17	Q. Okay. Could you briefly explain what positions
18	you have held at the Commission since 1994 and what duties
19	you performed in each position?
20	A. I have held the same position that I hold now,
21	which is depreciation engineer, and I primarily do
22	depreciation studies in all areas, electric, water and
23	sewer, gas and so forth.
24	Q. Okay. And could you explain where your current

position fits into the Commission's organizational chart?

1 For example, who is your supervisor? 2 My supervisor is Lisa Kremer, and she is the 3 manager of the engineering and management services 4 department, and then above her is Bob Schallenburg, who is 5 the utility services department director -- or division director, and I guess above him would be the executive 6 7 director which is now --8 That is okay. And then the executive director 9 reports --10 To the Commission. Α. 11 Okay. Let me ask you what is the relationship Q. 12 between your department and the Commission staff accounting department, if any? Is there a relationship within the 13 14 organization? 15 There is not really a formal relationship, an Α. 16 informal relationship in that a lot of times we will get 17 together and discuss different accounting issues relating to 18 depreciation, but not an official relationship. 19 0. There is no reporting relationship like --20 Α. No. 21 You neither report to the accounting department, Q. 22 nor do they report to your department; is that true? 23 Α. Right.

24

25

Q.

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leading up to Bob Schallenburg probably; is that --

Okay. But I quess you're on parallel tracks

1	A. Yes.
2	Q. Okay. I would like to start out by asking you
3	some general questions about your understanding of some of
4	the purposes of the regulation of public utility such as
5	Ameren UE.
6	Would you agree with me that one of the key
7	principals of public utility regulation is that public
8	utilities should have the opportunity to earn a fair rate of
9	return?
10	A. Yes.
11	Q. And would you agree with me that the opportunity
12	to earn a fair rate of return is affected not only by the
13	rate of return that's allowed by the Commission, but also by
14	the costs that are allowed to be reflected in rates?
15	A. Yes.
16	Q. In other words, if a utility had actual cost of
17	\$500,000,000, but it was only permitted to recover
18	\$100,000,000 through its rates, wouldn't it be very likely
19	to be unable to return its authorized rate of return,
20	whatever that was?
21	A. I don't know.
22	Q. Would you agree with the statement that it is very
23	important to set rates at a level which reflect the cost of
24	providing service in a reasonable and efficient manner?

25

A. Yes.

1	Q. Would you agree that it is improper for a
2	Commission, such as the Missouri Public Service Commission,
3	to knowingly under include those costs in setting rates, and
4	by "those costs" I mean the costs of providing service in a
5	reasonable and efficient manner?
6	A. Could you repeat that?
7	Q. Okay. I don't know if I can.
8	(Wherein, the requested question was read back.)
9	Q. (By Mr. Byrne) Let me try it again. Would you
10	agree that it is improper for a commission, such as the
11	Missouri Public Service Commission, to knowingly under
12	include costs, those costs in developing rates, and by
13	"those costs" I mean the cost of providing service in a
14	reasonable and efficient manner?
15	A. I guess it would be hard for me to comment on what
16	is proper for the Commission to do.
17	Q. So you don't have an opinion on that.
18	A. I just don't I don't know.
19	Q. Okay. Looking at this case specifically, and I
20	mean case number EC-2002-1, do you know what the staff's
21	overall proposal is?
22	A. No, I do not.
23	Q. You don't know the amount of the proposed rate
24	reduction.

A. I don't recall at this time.

1	Q. Okay. Do you know how the depreciation issues
2	that you are testifying on affect the overall staff
3	recommendation?
4	A. No.
5	Q. Do you know the dollar value of the net salvage
6	issue in this case?.
7	A. Yes, I do.
8	Q. What is the dollar value?
9	A. Approximately 30 million is due to net salvage in
10	my proposal.
11	Q. And are you referring to one of the schedules in
12	that 30 million dollar number?
13	A. Actually, that was an individual computation.
14	After you are you on that page now?
15	Q. Which page?
16	A. Schedule 2-2.
17	Q. Yes.
18	A. I am recommending a decrease in accrual of 36
19	million, and 6 million of that is due to life changes. 30
20	million is due to salvage. 30 million is not on there, but
21	that is subtraction, 36 million minus the 6 million.
22	Q. Okay. And then is 36 million well, is the 6
23	million the other depreciation issues aside from the net
24	salvage issue?
25	, A Vec *

1	Q. And are those amounts, 30 million dollars and 6
2	million dollars, changes from the existing depreciation
3	rates that the company has?
4	A. Yes.
5	Q. Okay.
6	A. Well, in some accounts, not all accounts.
7	Q. Okay. Some accounts still have the same
8	depreciation rates and others changed; is that right?
9	A. Well, actually, no. All of them have changes. I
10	am sorry.
11	Q. Okay. But the point is the point I am trying
12	to make is 36 million dollars reflects the difference
13	between your proposal and the existing depreciation rates of
14	the company; is that correct?
15	A. That's correct.
16	Q. Okay. If the staff's proposal in the case is
17	adopted, have you considered what impact it will have on
18	Ameren UE?
19	A. No.
20	Q. Do you know what impact it would have on Ameren
21	UE's ability to invest in infrastructure?
22	A. No.
23	Q. Do you know what impact it would have on Ameren
24	UE's ability to provide adequate security for its
25	facilities?

DEPOSITION OF JOLIE MATHIS, 11/27/01

1	A. No.
2	Q. Do you know what impact it would have on the
3	company's stock price?
4	A. No.
5	Q. Do you know what impact it would have on the
6	company's ability to pay a dividend to its shareholders?
7	A. No.
8	Q. Do you know what impact it would have on the
9	company's ability to attract capital?
10	A. No.
11	Q. And you didn't consider any of these impacts when
12	you wrote your testimony.
13	A. No.
14	Q. In your opinion, would it be a good thing if the
15	Commission took an action that impaired Ameren UE's ability
16	to invest in infrastructure?
17	A. Could you repeat that?
18	Q. In your opinion, would it be a good thing if the
19	Commission took an action that impaired Ameren UE's ability
20	to invest in infrastructure?
21	A. I don't know.
22	Q. Are you familiar with the recent state of utility
23	mergers which has swept across the United States in the
24	recent years?
25	A. Yes.

1	Q. Do you know whether the staff's proposal, if
2	adopted, would make Ameren UE a more likely target for a
3	takeover by an out of state purchaser?
4	A. I don't know.
5	Q. Did you consider that issue when you wrote your
6	testimony?
7	A. No.
8	Q. Do you think it would be good policy for the
9	Commission to take an action that would subject Ameren UE to
10	a greater likelihood of being taken over by an out of state
11	purchaser?
12	A. I don't know.
13	Q. Are you generally familiar with the alternative
14	regulation plan that UE had in effect until just recently
15	known as the EARP, which I think stands for Experimental
16	Alternative Regulation Plan?
17	A. Generally, yes.
18	Q. Do you know how long that plan was in effect?
19	A. I can't recall at this time.
20	Q. Was it several years if you know?
21	A. I don't know.
22	Q. Okay. Do you know generally what the terms of
23	that Alternative Regulation Plan were?
24	A. I don't know the details, no.
25	O. Do you know if rates for customers increased or

1	decreased when that plan was in effect?
2	A. I don't know.
3	Q. Okay. Do you know if Ameren UE had excess
4	earnings during the period the plan was in effect?
5	A. I don't know.
6	Q. In your opinion, is it appropriate for the
7	Commission to take into consideration in this case any
8	excess earnings or under earnings which Ameren UE may have
9	realized under that EARP?
10	A. I don't know.
11	Q. So it might be okay for the Commission to take
12	that into consideration in this case?
13	A. No. I just simply don't know.
l 4	Q. Okay. Okay. Now, looking more specifically at
15	your direct testimony, can you explain to me what you are
16	trying to measure or determine for purposes of this case?
L7	A. I am trying to measure the appropriate
18	depreciation rate for each account.
L9	Q. Okay. In determining the appropriate depreciation
20	rates, is your primary goal to protect rate payers from
21	paying high rates?
22	A. No.
23	Q. What is your primary goal?
24	A. To make sure that for each account the company is
25	able to recover the original cost of plant over the life of

1	that plant.
2	Q. Let me ask you a broader question. What is the
3	purpose of depreciation in accounting if you know?
4	A. The purpose of depreciation in accounting is to
5	allocate the original cost a plant over the life of that
6	plant.
7	Q. Would a fair statement be that the purpose is to
8	allocate the full cost of a capital asset over the useful
9	life of that asset?
10	A. Yes.
11	Q. Why do we want to do that? Why shouldn't when
12	a capital asset goes into service in a particular year, why
13	shouldn't we just charge the full cost of that asset to the
14	rate payers in that year?
15	A. Because that would be too high of a rate for a
16	customer to pay. You want to spread it over the life of the
17	plant in equal amounts so that customers can pay their fair
18	share.
19	Q. Is it because customers in future years will get
20	use out of that plant during its useful life, and therefore,
21	they should pay a proportionate share of the cost of that
22	plant?
23	A. Would you say that again?
24	(Wherein, the requested question was read back.)
25	THE WITNESS: Yes.

1	Q. (By Mr. Byrne) And isn't it true that the customer
2	base from year to year changes as customers come on the
3	system or leave the system so that it is not the same
4	customer base paying the cost from year to year; is that
5	true?
6	A. That's true.
7	Q. Are you familiar with the term inner generational
8	equity?
9	A. Yes.
10	Q. Do you know what it means?
11	A. It is making sure that I don't have a
12	definition. No.
13	Q. Let me propose one and see if you agree with it.
14	Would it be fair to say that the point of inner generational
15	equity is that you shouldn't have one generation of
16	customers subsidizing another generation of customers by
17	paying costs that are properly attributable to that other
18	generation of customers?
19	A. I guess my understanding of it is that each
20	customer pays their fair share of rates from generation to
21	generation.
22	Q. And so customers at a particular point in time
23	shouldn't should neither be subsidized nor should they
24	subsidize the customers that came before or after them. Is
25	that fair to sav? "

1	A. I am not sure about the subsidizing.
2	Q. Well, okay. I mean, isn't that just what it is,
3	though; that there should be no subsidies running either way
4	from one generation of customers to another? Each
5	generation should pay the appropriate costs for plant that
6	they use?
7	A. Yes.
8	Q. Did you conduct a depreciation study in this case?
9	A. Yes, I did.
10	Q. How many depreciation studies have you conducted
11	in your career with the Commission, if you know?
12	A. I would estimate four.
13	Q. Four.
14	A. Five.
15	Q. Were they in electric cases?
16	A. No.
17	Q. So this is your first depreciation study in an
18	electric case.
19	A. Yes.
20	Q. Okay. Did anyone help you conduct the
21	depreciation study?
22	A. When you say, "help," what do you mean?
23	Q. I don't know. Provide you any assistance I guess
24	A. Sure. People in my department.
25	Q. Okay. Like who for example?

1	A. Paul Adam, Rosella Schad.
2	Q. And in what way did Paul Adam and Rosella Schad
3	help you with this depreciation study?
4	A. Just generally to discuss the approach to net
5	salvage and perhaps talking about different lives of plant.
6	Q. Okay. Did anyone directly supervise you while you
7	were doing this depreciation study?
8	A. Outside of my supervisor, Lisa Kremer, no.
9	Q. And was Lisa Kremer very active in working on the
10	details of this depreciation study?
11	A. No. I would not say that.
12	Q. Do you know if Paul Adam or Rosella Schad have
13	conducted depreciation studies for electric utilities?
14	A. I believe Paul Adam has.
15	Q. Okay. I guess what I would like to do is have you
16	take me step by step through what you did in your
17	depreciation study. So, I guess, what was the first step in
18	your depreciation study? Did you obtain data from the
19	company?
20	A. Yes. That's the first step.
21	Q. Okay. What data did you obtain from the company?
22	A. Well, actually, I used the data that was filed
23	before the Commission in, I believe, 1996, which included up
24	to year end 1995 data.
25	Q. Okay. And was that in the normal I mean, was

1	that in the every five years depreciation filing that the
2	company is required to make; is that right?
3	A. Yes.
4	Q. So you didn't go ask the company for any data.
5	You just took what they had filed in 1996; is that right?
6	A. No. Actually, I did ask for more updated data
7	through the year 1998.
8	Q. Okay. And did you ever receive that data?
9	A. At the time that I requested within the 20 day
10	period, no. They objected or I don't know if they
11	objected. I might be thinking of another case.
12	But they stated because of their filing in January
13	of '97, that they were not due to file one until January of
14	2002, and so they refused to provide the data at that time.
15	Q. Okay. Is it possible that they didn't have the
16	data at that time?
17	A. No. I think they had it.
18	Q. Why do you think they had it?
19	A. Because I think the company is responsible to
20	update their database every year.
21	Q. Okay.
22	A. And they keep that on record. They have the data.
23	Q. Did you eventually get updated data from the
24	company?
25	A. Yes, I did, but this was after I wrote testimony.

1 This was probably about a month ago. 2 Q. A month ago. 3 Α. Uh-huh. And when did you -- you wrote your testimony -- I 4 guess it was filed in --5 6 Α. July. 7 July 2 I think it was. 8 Α. Yes. 9 Okay. And so you think you got the updated data 10 perhaps a month ago, which would be mid to late October; is 11 that right? 12 I think that's right. Α. 13 Okay. Do you plan to update your depreciation 14 study to incorporate the updated data that the company 15 recently provided you? 16 Α. Yes, I do. 17 Q. And are you in the process of doing that now? 18 Not right now. Α. 19 Okay. When do you plan to do it? Q. 20 Α. As soon as I finish another case. 21 Okay. What is the other case? Q. 22 Missouri Public Service. Α. 23 Q. Is it a rate case? 24 Α. Yes. 25 Q. Are you doing a depreciation study in that case

1	too?
2	A. Yes.
3	Q. Do you have any idea when you will be able to do
4	the update to your study in this case?
5	A. It will take at least two months, and I am
6	probably going to start at the end of next week.
7	Q. So then you would be done by if you did
8	start if you were able to start by the end of next week,
9	I guess you would be done by the end of January or beginning
10	of February; is that right?
11	A. It is possible if I don't have any other
12	outstanding issues with other cases.
13	Q. Okay. So when you say it will take two months,
14	that's assuming you can concentrate pretty exclusively on
15	A. Normally, we like to have a week per account. So
16	that would probably make it well, depending on the data
17	on some of the accounts that I did not have a curve fit on,
18	a few more years may give me a curve fit that I didn't have
19	before, which would extend it even longer and maybe
20	Q. How many accounts?
21	A three months.
22	Q. Sorry. How many accounts are there for Ameren UE?
23	A. 50.
24	Q. So if you would like to have a week per account,
25	that is, like, a year.

1	Α.	Well, I would be no. I would work within the
2	deadlines	of the case.
3	Q.	How long did it take you to do your depreciation
4	study tha	t you filed with your testimony?
5	Α.	I actually worked on it off and on probably for
6	seven, ei	ght months.
7	Q.	But you were doing other cases at the same time.
8	Α.	Right.
9	Q.	Did you have how did it fit in the priority of
LO	things th	at you were doing during that seven or eight month
L1	period?	
12	Α.	It was top priority.
L3	Q.	Did you have any other rate cases that you were
L 4	working o	n?
15	Α.	I had some small water and sewer cases.
L 6	Q.	Did you have any other major projects that you can
L7	think of	that you were working on?
L8	Α.	No.
L 9	Q.	Let me ask you, when the company provided updated
20	data, wha	t period did it cover?
21	Α.	Up to year end 2000.
22	Q.	When you update your depreciation study, do you
23	plan to f	ile it as part of your testimony in this case?
24	А.	I would like to. Yes.
25	Q <i>-</i>	Do you think it would be appropriate for you to be

1	allowed to do that?
2	A. Yes, I do.
3	Q. Why is it better to use more updated data?
4	A. Considering the fact that this is 2001, we would
5	like to have the most recent data, because there could be a
6	significant increase in dollar amount from 1995 to 2000 in
7	some accounts.
8	Q. Is 1995 data relatively stale compared to the data
9	that you have used in other depreciation studies?
10	A. Relatively stale.
11	Q. Relatively old compared to the data that you
12	usually use in depreciation studies.
13	A. Yes.
14	Q. Have you ever done a depreciation study using data
15	that is six years old, that ends six years old?
16	A. No.
17	Q. You may have answered this previously, but let me
18	ask it again anyway. In your opinion, how often should a
19	utility like Ameren UE conduct a depreciation study?
20	A. I think they should conduct a study, according to
21	the rule, every five years.
22	Q. Okay. And that's a Commission rule that requires
23	us to file a depreciation study with the Commission; is that
24	right?
25	A. Yes.

1	Q. But you also say that didn't you also say that
2	the company ought to be updating its depreciation records
3	every year; is that true?
4	A. Yes.
5	Q. What is wrong with just continuing to use the same
6	depreciation rates once they are established? Doesn't it
7	all come out even in the end anyway?
8	A. No. Because so many changes are made to the
9	utility plant. You could have major projects going on that
.0	could increase your rate base. Because of additions and
.1	retirement activities, it is important to analyze your
.2	depreciation rates frequently so that it best reflects your
.3	current plant.
4	Q. Okay. Let's go back to your depreciation study.
.5	I guess you had the data from the 1995 filing; is that
.6	correct?
.7	A. That's correct.
.8	Q. What did you do with that data?
.9	A. I uploaded it on my computer, and using
0	Gannett-Fleming software, I began to I began my
1	depreciation analysis on account by account basis, and also,
2	I took plant tours of several facilities for Ameren UE,
3	Sioux, Labadie, Rush Island, Osage, Taum Sauk, Meramec.
4	Q. Okay. Let me back up and talk about the
5	Gannett-Fleming program. The Gannett-Flemming program is a

computer software program; is that correct? 1 2 Α. That's correct. 3 Q. And you bought it from Gannett-Fleming; is that right? 4 Α. PSC did. Yes. 6 PSC did. Okay. And what does that program do if Q. - 7 you can tell me? 8 Α. Well, it has several programs within the program. 9 Like, for instance, you can start up with audit which will 10 audit the database and make sure that everything is coded 11 correctly according to whether it is a retirement or 12 addition or so forth. 13 Deprate is a software that takes your life input 14 and your salvage input and comes up with a depreciation rate 15 and theoretical reserve, and it also looks at graphs, 16 survivor curves, compares that to Iowa curves to come up 17 with the appropriate average service life. 18 What is an Iowa curve? Q. 19 Α. An Iowa curve is -- it is a system of curves set 20 up by the Iowa engineering experiment station back in the 21 '20s based on industrial property mortality, and it's used 22 to compare to actual curves that are produced from 23 retirement activity in the database to come up with the 24 average service life. 25 So let me see if I understand this. I might not. Ο.

- 1 You take the company's information about its actual 2 retirements in each account -- is that where you start --3 and feed those into the Gannett-Fleming computer model, and 4 then the Gannett-Fleming computer model attempts to match an 5 Iowa curve -- an Iowa survivor curve to the data that you've 6 fed in. Is that true? 7 Α. Well, for each particular account, it will take 8 retirement activity, account balances, ending balances, 9 beginning balances, primarily retirement activity, plots, 10 percent surviving, which forms a curve.
 - O. And that is a survivor curve.
 - A. Yes.

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- Q. Okay.
- A. And that curve is compared to an Iowa curve that would represent, say, maybe a 25 year life. If it closely matches that, then that's the average service life that you would choose.
- Q. So there is a whole bunch of these Iowa curves, right?
 - A. I believe like 165.
- Q. Okay. And each one -- well, depending on which curve you select, that tells you what the average service life for the account is; is that correct?
- A. That's correct.
 - Q. And so then not to be belabor this, but I don't

	DEPOSITION OF JOLIE MATHIS, 11/27/01
1	understand it. So the computer takes the company's actual
2	retirement experience in each account and it finds which one
3	of the 160 Iowa survivor curves is most appropriate given
4	that actual retirement data; is that true?
5	A. There is a program called Retrate, which lists the
6	retirement activity, which gives you it will produce a
7	set of curves that it will output a set of curves that it
8	thinks best fits, and from that table, you select which one
9	has according to the lowest residual measure, and the
ro	residual measure is like a
11	Q. Is it a mathematical calculation?
12	A. It is a mathematical calculation, and the lower
13	residual measure that you have, the more likely it is to fi
14	that curve.
15	Q. Is it sort of a mathematical measure of how
16	closely the actual data that the company has, how closely

- that fits --
 - Α. Yes.
 - -- each of the survivor curves? Q.
- Yes. Α.

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- Q. And do you do that mathematical calculation, or does the computer model do it for you?
- The computer model does it, and we look -- not Α. only do we look at that, but we also look at it visually, because it may say mathematically that it fits, but we may

1	look at it visually and say, well, no, let me try S2 45
2	years instead of an S2 35 year.
3	Q. And those are different types of Iowa curves
4	A. Yes.
5	Q S2 45 years versus S2 30 years.
6	A. Yes. And we also, when we go out to companies and
7	talk to plant personnel, they may we also consider, when
8	we talk to engineers, what they are talking about with
9	regard to the life of the property. So we look at all those
10	three things.
11	Q. Okay. Sometimes for some accounts is the
12	Gannett-Fleming computer model unable to find an Iowa type
13	curve that matches the company's retirement data?
14	A. Well, there are some accounts where you don't have
15	enough retirement activity, or enough plots to be able to
16	gain a good fit. So, like, you may have a residual measure
17	that is, like, six point something, and that is not
18	something you would choose, because looking at it visually,
19	it would be totally off.
20	Q. Okay. How many of the company's 50 accounts fell
21	in I think it is 51 accounts actually, but how many of
22	the accounts fell into the category that there wasn't an
23	adequate Iowa curve to match?
24	A. I would say about half.

About half. Okay. Let me talk about the other

25

Q.

- half, the half where they did have a curve that fit. Okay. 1 2 My understanding is for those -- for that half of the 3 accounts, computer model output was a list of Iowa curves 4 that would be good candidates to fit that data, and then you 5 could look at that list, and the computer model would tell 6 you which curve had the best mathematical fit with the data; 7 is that right? Yes, but normally, it is usually only two or 8 Α. three --9 10 Two or three curves. Q. -- that would normally end up being a good fit. 11
 - The rest are usually -- can be way off.
 - Q. Okay. And it will tell you of those two or three curves which one is the best fit; is that right?
 - A. Yes.

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Q. In this particular depreciation study, for those accounts, were there any of them where you did not take -- let me back up for a second.

Once you decide what curve is most appropriate, what Iowa curve, that tells you what the average service life for the account is; is that right?

- A. Yes.
- Q. Okay. For the ones -- for the accounts -- for the half of the accounts where the computer model kicked out an Iowa curve or several Iowa curves and then told you which

1	one was the best mathematical fit, were there any accounts
2	that you did not use that Iowa curve and use that life?
3	A. There may have been a few, but I would have to go
4	back and look at my notes to tell you which ones they were.
5	Q. But to the best of your recollection or would
6	it be fair to say there weren't very many that you didn't
7	use the Iowa curve with the best mathematical fit that the
8	computer model kicked out?
9	A. I would say that more than likely I definitely
10	used their survivor curve, and then I may have varied a
11	little bit on the year, but for the most part I did choose
12	what the computer program selected.
13	Q. When you say, "the year," you mean the life.
14	A. The life. I am sorry.
15	Q. Okay. When you say, "for the most part," do you
16	think over 90 percent?
17	A. Yes.
18	Q. Over 95 percent?
19	A. I don't know.
20	Q. Okay. And then what did and when you did in
21	the few instances when you did well, let me back up.
22	Is it did I is it right that you said in all
23	instances you accepted the curve that the computer kicked
24	out, but that in some instances you selected a different
25	life, slightly different life; is that true?

1	Α.	Yes.
2	Q.	Okay. And why did you do that in the instances
3	that you	did?
4	Α.	In the instances that I changed the life?
5	Q.	Yes.
6	Α.	Because it seemed to make a better fit visually,
7	and the a	verage service life. It seemed to be a better
8	average s	ervice life that reflected that particular account.
9	Q.	It would be fair to say you used your judgment
10	А.	Right.
11	Q.	based on other information to modify the life.
12	Α.	Yes.
13	Q.	And did you significantly modify the lives of the
14	cases whe	re you modified them?
15	Α.	I don't think so.
16	Q.	Okay. Okay. Let me talk about the instances
17	where the	computer model didn't have enough information to
18	have a cu	rve with a good enough fit, and do you know what I
19	am talkin	g about?
20	Α.	Yes.
21	Q.	And that's about half the accounts; is that true?
22	Α.	Yes.
23	Q.	Okay. What did you do then? What did you do with
24	those acc	counts?
25 	Α.	For those accounts, I estimated the average

1	service life as being I am sorry estimated the
2	depreciation rate as being one over the average service life
3	of the account.
4	Q. And how did you determine the average service life
5	of the account?
6	A. I used the currently prescribed average service
7	lives.
8	Q. Okay. And do you know what the source of the
9	currently prescribed average service lives is?
10	A. I know what rate case it came from.
11	Q. Okay. What rate case did it come from?
12	A. ER-83-163.
13	Q. Okay. And do you know what year the depreciation
14	study that yielded those average service lives was conducted
15	in?
16	A. No, I do not.
17	Q. Wouldn't it have to be sometime before 1983?
18	A. Yes. I don't know the exact year.
19	Q. Do you know whether the depreciation rates in case
20	number ER-83-163 were the subject of a settlement?
21	A. No, I do not know that.
22	Q. Okay. Do you know who the staff witness was who
23	was responsible for calculating the average service lives in
24	case number ER-83-163?
25	A. No, I do not.

1	A. Yes.
2	Q. Okay. Let me ask about your discussions with
3	company personnel. I assume when you toured
4	MR. SCHWARZ: Can we take a break at this stage?
5	MR. BYRNE: Sure.
6	(Wherein, a brief recess was taken.)
7	Q. (By Mr. Byrne) Okay. If I remember where I was, I
8	was going to ask you about discussions that you had with
9	company personnel. I assume when you listed a bunch of
10	plants that you toured earlier in your deposition, and I
l 1	assumed that you talked with company personnel during those
12	plant tours.
13	A. Yes.
14	Q. Do you remember who you talked to, or was it just
1.5	various people?
16	A. Various people.
17	Q. People who operated the plants?
18	A. Normally, yes.
19	Q. Okay. Was there any, like, depreciation people
20	from Ameren with you, or was it all
21	A. Yes. Bob Kenney came with me to I am trying to
22	remember which plant it was. At least one of those tours.
23	Q. Okay. And what did you talk to Ameren UE
24	personnel about during those tours?
25	A. We talked about the operation of the plant, any

1	construction projects that have gone on over the past ten
2	years, talked about retirement activity. That's pretty much
3	it.
4	Q. Okay. Did you have any other conversations with
5	Ameren UE personnel related to your depreciation study
6	outside of those tours?
7	A. No.
8	Q. Okay. And I assume all of your tours were of
9	generation plants, right?
10	A. Yes. There was some hydroelectric plants, Taum
11	Sauk.
12	Q. Okay. So would your discussions have been limited
13	to the depreciation rates and lives you have developed for
1'4	generation accounts?
15	A. Are you asking on the plant tour, did I discuss
16	that?
17	Q. Yeah. I guess on the plant tour or let me ask
18	it this way. Were your discussions with Ameren UE personnel
19	limited to discussions related to generation plant as
20	opposed to transmission or distribution plant?
21	A. No. They weren't limited to that.
22	Q. Okay. But
23	A. I would say a majority of it.
24	Q. Okay. I mean, when you were talking to the plant
25	personnel at these generation plants and I would include
~~ !	1 bereamer as sucre delictation brained and I would include

1 2 3 system or its distribution system? Α. 5 0. transmission or distribution systems? 6 7 8 0. 9 10 11 Α. That's correct. 12 13 14 from company personnel? 15 Α. 16 0. 17 18 19 20 21 22

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Taum Sauk in the generation plants -- I mean, did you ever ask them any questions about the company's transmission

- I might have had a question or two about it.
- Okay. Did they know anything about the company's
 - At the time, it was limited, but yes.
- But you didn't have any other discussions with personnel whose primary responsibilities were for transmission or distribution facilities; is that true?
- Did you change any of the survivor curves or average service lives to reflect information that you got
 - It was considered in all of my life analysis.
- Okay. So even -- so I think you said that in cases where the computer had a best fit curve in that half of the accounts, they maybe -- you know, the majority of them, maybe 90 percent, you accepted the curve and the life of the computer, but on, you know, some smaller percent, maybe 10 percent, you changed the life, and I guess, would it be fair to say in making either of those decisions, either accepting the best mathematical fit that the computer put out or in deciding to change it, you took into consideration the discussions that you had with the company

1	personnel?
2	A. Yes.
3	Q. Okay. That didn't I guess that didn't affect
4	the other half of the accounts where you use the ER-83-163.
5	Is that fair to say?
6	A. Yes.
7	Q. Okay. Are there any textbooks that you use or
8	refer to that describe how to conduct a depreciation study?
9	A. Yes. Depreciation Systems by Frank Wolf, and
10	Public Utility Depreciation Practices is a NARUC.
11	Q. Is that let me ask you, because I've got it
12	written down, not because I have independent knowledge of
13	it, but is Depreciation Systems by both Wolf and a guy named
14	Fitch?
15	A. Yes.
16	Q. Okay. And Public Utility Depreciation Practices
17	is published by NARUC. Is that I think that is a 1996
18	publication. Does that sound right to you?
19	A. Yes.
20	Q. Any other texts?
21	A. No.
22	Q. Do you consider these texts to be authoritative on
23	the issue of depreciation studies?
24	A. Yes.
25	Q. And to your knowledge, did the depreciation, that

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1	study that you conducted, comply with the methods
2	recommended by these texts?
3	A. Yes.
4	Q. Do you know what generally accepted accounting
5	principals are?
6	A. No.
7	Q. Do you know whether your recommendations
8	concerning the company's depreciation rates and the staff's
9	proposed treatment of net salvage comply with generally
10	accepted accounting principals?
11	A. I think they do.
12	Q. Why do you think they do?
13	A. Because I have people who check my work, and they
14	would tell me if it did not.
15	Q. Okay. But you don't have any independent basis to
16	determine whether it complies with generally accepted
17	accounting principals because you don't know what they are.
18	A. Correct.
19	Q. Okay. Do you have an opinion as to whether
20	companies and the Commission should comply with generally
21	accepted accounting principals in setting depreciation
22	rates?
23	A. I am sure that they should.
24	Q. Okay. Do you know what Financial Accounting
25	Standards Board standards are?

1	A. No.
2	Q. Do you know if your recommendations regarding the
3	company's depreciation rates and the staff's proposed
4	treatment of net salvage comply with Financial Accounting
5	Standards Board standards?
6	A. I don't know.
7	Q. You probably don't remember this, but maybe
8	generally you do. I was trying to get specifically when you
9	toured each plant and who you met with. You probably
10	there were so many plants, you probably if you don't
11	know, that's okay, but do you know just generally when you
12	toured the plants?
13	A. Yes, I do.
14	Q. Okay.
15	A. The Sioux plant was toured in November, 2000, and
16	the remaining plants were toured in the spring of 2001.
17	Q. Okay. And do you remember, other than Bob Kenney,
18	the names of any specific people that you talked with when
19	you were on those tours?
20	A. I would have to go get the names. I don't recall
21	at this time.
22	Q. Do you have them in notes that you took?
23	A. I have their business cards.
24	Q. Okay. Did you take notes of your discussions with
25	them?

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1	A. Yes, I did.
2	(Wherein, Ms. Suedeen G. Kelly joined the
3	deposition).
4	Q. Do you know what specific accounts you discussed
5	on those plant tours?
6	A. I would have to say I didn't necessarily discuss a
7	specific account. I looked at turbo generator units and
8	discussed the operation of those and looked at boiler plant
9	equipment. That's all I can recall offhand right now.
10	Q. Okay. But if I got a hold of your notes from
11	those tours, I guess would that would those notes tell me
12	the subjects that you discussed to the extent you can't
13	remember them now?
14	A. They should. Yes.
15	Q. I mean, would it be fair to say that you would
16	have you would have written down in your notes anything
17	that you discussed that's relevant to your depreciation
18	study? Is that fair to say?
19	A. For the most part, yes.
20	Q. Did you compare the service life estimates and
21	survivor curves you used in this depreciation study with
22	those used for other electric companies?
23	A. Yes, I did.
24	Q. Okay. Which electric companies did you look at i
25	you remember?

1	A. Empire District Electric, Missouri Public Service,
2	St. Joe Light and Power, KCP&L.
3	Q. And did you look at all the accounts for all those
4	electric companies?
5	A. Not all of them, no.
6	Q. Do you remember which specific accounts you did
7	that comparison for?
8	A. No.
9	Q. Was it most of the accounts do you think?
10	A. A lot of the larger accounts I did.
11	Q. And so it would be separated, maybe, by dollar
12	value rather than number of accounts.
13	A. Correct.
14	Q. And what was your source of information in
15	comparing those other utilities?
16	A. What do you mean by my "source of information?"
17	Q. Well, did you look at I mean, how did you get
18	the information from those utilities? Was it part of their
19	every five year filing at the Commission, or was it part of
20	a rate case, or how did you get the information that you
21	compared Union Electric's survivor curves and estimated
22	lives to theirs?
23	A. We keep a log of all utilities in the State of
24	Missouri, the most current depreciation rates.
25	Q. Okay.

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1	A. So it would have to be their most recently
2	approved depreciation rates.
3	Q. Okay. And those I guess those could have been
4	approved well, do you know how long ago those were
5	approved for those various utilities?
6	A. Some were as recent as this year, and some go as
7	far back as early '90s.
8	Q. Okay. Was Empire like one that was this year?
9	A. Yes.
10	Q. What was one that do you remember which ones
11	went back the furthest?
12	A. I don't recall right now.
13	Q. Was KCP&L maybe one that went back the furthest?
14	A. It may have been.
15	Q. Okay. I would like to look at schedule 3.1
16	attached to your testimony, and I guess it goes with
17	schedule 3.2. As I understand it, schedule 3.1 is an
18	example of a survivor curve that the Gannett-Fleming model
19	provided; is that true?
20	A. Yes.
21	Q. And are all the little Xes on that chart actual
22	data points of retirements for the account at issue, which
23	is account 365?
24	A. Each point represents a percent surviving at that
25	age.

1	Q. Okay. And what is what are we talking about in
2	account 365? What kind of plant is it?
3	A. Overhead conductors and services and the
4	devices. I am sorry.
5	Q. What are those?
6	A. That would be a plant that above the pole that
7	basically conduct electricity.
8	Q. Like wires? Is that what that is?
9	A. Yes.
10	Q. Okay. And what as I understand your previous
11	testimony, what the computer does is it looks at all those
12	Xes, which is the company's actual experience, and then it
13	provides you some choices of Iowa curves that fit it to
14	various degrees; is that right?
15	A. That's correct.
16	Q. And is schedule 3.2 some of the closest fitting
17	survivor curves that the computer program could find; is
18	that right?
19	A. Yes.
20	Q. And then you it looks like you circled one in
21	the middle that says 52.4-LO, and it has a residual measure
22	of .85, and range of fit, it says 0 to 47. Is that
23	information circled because that's the survivor curve that
24	you picked out of the choices that the computer model gave

you?

1	A. That's the I selected that curve because it had
2	the lowest residual measure, and that was the first survivor
3	curve that I attempted to fit to the data.
4	Q. Okay. And that residual measure and for this
5	one it is .85, right?
6	A. Yes.
7	Q. And that's sort of not to oversimplify it, but
8	is that a mathematical representation of how closely the
9	curve fits the company's data?
10	A. Yes.
11	Q. And so the lower the number, under residual
12	measure, the closer the fit; is that true?
13	A. Yes.
14	Q. Okay. I notice some of the other curves have
15	residual measures of well, the one right below it has
16	1.19 and then below that is 2.99, and I think the highest
17	one is 6.35.
18	Am I understanding from your testimony before that
19	if it is above a six, that's really no good. Is that a fair
20	butchering of your prior testimony? I mean, is a six a
21	cutoff where you won't use it at all?
22	A. Yes.
23	Q. And below six is there a point where it gets to
24	be, in your opinion, a reasonably good fit? Is there some
25	point in your judgment where it is a protty good fit?

- A. It would depend on, you know, each individual

 curve that I tried. I mean, mathematically, it could -
 like even a 1.19 you would think would fit pretty close, but

 then it is another thing to actually see it on the screen.

 Q. Okay. Well, set aside seeing it on the screen for

 a minute, but just for -- if you're only considering how
 - Q. Okay. Well, set aside seeing it on the screen for a minute, but just for if you're only considering how mathematically close a fit is, would it be fair to say anything below a two or a two and a half is a pretty good fit mathematically?
 - A. I would have to say below a one.
 - Q. You would have to say below a one. I mean, I understand that even within the category of those that are a reasonably good mathematical fit, you would pick the one that is the best, unless there is some reason not to, but I guess the point I am making is even though they are not the best mathematical fit, aren't some of those other ones like the ones that are, say, below two or two and a half, aren't they a pretty good mathematical fit, albeit not the best mathematical fit?
 - A. Well, there are other things you have to look at too, and that's the mode of the curve, like for instance LO. That L represents -- that means that it is to the left of the mode of the curve. The mode being the highest point of the curve, and that means that you might have more retirements at the beginning, and then if you pick an R type

- 1 of curve, that means you may have more retirement to the 2 right side of the mode. 3 Q. And in this case, you thought an L curve was better than an R curve. 4 5 A. Yes. 6 0. How come? 7 Α. Because you have more retirement activity to the 8 left than you did towards the right. 9 Okay. But you are not going to -- I keep trying Q. 10 to get you to tell me a cut off number for that residual 11 measure that you think is a pretty good measure. So let me 12 ask it again. 13 Let's say they were all left mode, you know, and 14 you are only looking -- and that is the appropriate mode in 15 your opinion --16 Α. Well, it would never be all left mode. They 17 always give you S R L O. 18 Q. Okay. Among the ones that are left mode --19 Α. Uh-huh. Yes. -- would it be fair to say that the ones below a 20 Q. 21 two or a two and a half are a pretty good mathematical fit
 - A. I guess I just hate to give it a number.

or not, or is there some other cut off? I mean, I

understand that .85 is the best mathematical fit.

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Q. Okay. Fair enough. Okay. Let me ask you, then,

- 1 the question my expert asked me to ask you, which is would 2 you characterize -- can you assign a number in your mind, in 3 your judgment, where it would be an excellent fit or a good 4 fit or a fair fit? Can you assign numbers to those 5 adjectives? 6 I think a good fit would be -- a really good fit 7 would be less than one. Then once you start going over one, 8 it would go into fair. 9 Okay. And then, like, six is off the map I Q. 10 assume. 11 Α. Yeah. 12 Q. Horribly terrible. 13 Α. Yeah. 14 Okay. I would like to ask you about the 0. 15 definition of a term, and the term is service value as it 16 applies in the context of depreciation accounting, and I 17 guess I would like to give you something. 18 MR. BYRNE: I don't think it is necessary to make 19 it an exhibit unless you want me to, but it is a -- and
 - unfortunately I only have two copies.

21 MR. SCHWARZ: I just want to look at it for --

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(By Mr. Byrne) And this is an excerpt from Public Q. Utility Depreciation Practices, which, I think, is that NARUC publication that you referred to before, and on the second page after the cover, which is page 14 in the book,

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it's got a definition of service value, and I guess I want to ask you if you agree with it, and it's probably a third of the way down the page, and since I don't want to make this an exhibit, I guess I would like to read it into the record. It says, "The Uniform System of Accounts for 7 electric utilities recommended by NARUC defines 'service 8 value' as follows: The difference between the original cost 9 and the net salvage value of the utility plant. 'Loss in 10 service value,' therefore, must be understood and construed 11 in light of its specially defined meaning." 12 Do you agree with that definition of service 13 value? 14 Α. Yes. 15 0. 16 need to ask about that document. 17

Okay. Okay. Let me ask about -- that's all I

MR. BYRNE: Mr. Schwarz, I don't see any need to make that as an exhibit, but I will if you want me to.

MR. SCHWARZ: No need. I am sure we have copies of it and so forth.

(By Mr. Byrne) Okay. I would like to talk to you about the staff's treatment of net salvage in this case. Well, first of all, is it fair to say that you're proposing a new treatment of net salvage, at least for Ameren UE's electric service, different than it has been treated in the 1 past in Ameren UE electric cases? Α. Yes. 3

- And it's a new method of addressing net salvage 0. that I guess the staff is applied in a few cases in the recent years, but again, it's different from the traditional treatment that previously was afforded net salvage. fair to say?
 - Α. Yes.

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- Can you explain to me the difference between the old way that net salvage was treated and this new way that net salvage is being treated?
- For the old way of net salvage, typically a depreciation analyst will use the formula one minus net salvage over the average service life to come up with a depreciation rate, and they would analyze net salvage using historical salvage data, trying to project into the future what they think cost of removal or gross salvage may be.

Our change is -- primarily, we still use the same formula, except for net salvage we use zero, and you are actually using the actual net salvage incurred in expensing that.

So would it be fair to say you are taking net salvage out of the depreciation calculation and instead providing recovery of net salvage cost through an accounting adjustment?

- A. Yes.
- Q. Okay. And let me go back to the way it used to be. Would you agree -- and I think I do understand this -- that the way they used to do it is -- and the way the staff used to do it and all the utilities used to do it up until recently is, based on historic information, you would develop a net salvage percentage of original cost, a percentage that compared the net salvage cost of a particular item or class of property to its original cost, and you develop a percentage from that; is that true?
 - A. I believe so.
- Q. And then you would apply that percentage to the balances in -- the current balances in those plant accounts, and that's how you would come up with net salvage. Is that your understanding? If you don't know, don't hesitate to say you don't know.
- A. No. The net salvage would be estimated. At least at the Missouri Commission we use Gannett-Fleming -- used to use Gannett-Fleming in estimating cost of removal and gross salvage in trying to project an estimation of what that would be.
- Q. When you say, "use Gannett-Fleming," you mean the computer model, the Gannett-Fleming computer model.
 - A. Yes.
 - Q. But doesn't the estimation of future net salvage

1 that the Gannett-Fleming computer model does, isn't that 2 based on the historic relationship between salvage -- net 3 salvage cost and original cost of each account, if you know? Α. I don't know. 5 Okay. Okay. And your calculation -- well, and 6 you are not -- as I understand it, you are not sponsoring 7 the net salvage -- the accounting adjustment that puts 8 current net salvage into rates; is that true? Α. Someone else within this rate case testified to 10 that. 11 Okay. You are just saying it shouldn't be in the 12 depreciation rates. 13 Α. Right. 14 Q. Do you know who is sponsoring the accounting 15 adjustment? 16 Α. It was Jim Schwieterman. 17 Ο. But he is retired. 18 He is retired.: Α. 19 Ο. Do you know who is sponsoring it now? 20 I guess I could say Greq Meyer. Α. I think he's still got a few more years to go 21 22 before he retires. Do you know how -- do you know how the 23 allowance that the staff proposes for net salvage in this 24 case was calculated?

I think a ten year average was done.

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1	Q. Do you know if that's consistent with the way the
2	staff has calculated that adjustment in other cases?
3	A. I do not know.
4	Q. Do you know why ten years was selected, and I
5	understand it is not your adjustment, but do you just happer
6	to know why ten years was selected?
7	A. No, I do not.
8	Q. So you are not providing any support for the
9	selection of ten years as opposed to some other as
10	opposed to test year or three year average or five year
11	average.
12	A. Right.
13	Q. You are not supporting anything. That would be
14	Mr. Meyer, I guess, now.
15	A. Yes.
16	Q. Okay. Let me ask you this. Don't most
17	depreciation professionals treat net salvage as a part of
18	the depreciation formula?
19	A. There are a lot that do.
20	Q. Do you know if most of them do?
21	A. I don't know.
22	Q. Let me ask you what advantage is there in making
23	this change, what advantages there are in removing net
24	salvage from the depreciation formula?
25	A. You are ensuring that the company is recovering

actual net salvage expense that has occurred as opposed to a projected number that may or may not come true.

- Q. Would it be fair to say that the salvage cost actually incurred in the test year or in the past ten years averaged in any historical period might deviate significantly from net salvage cost which could be expected to be incurred in the future?
 - A. No.

- Q. You are saying they -- you are saying no to that they might deviate significantly from net salvage cost that could be expected to be incurred in the future.
- A. I am saying because there has been a significant increase in cost of removal over the past, probably, 10 to 20 years or more, the company has recovered that amount, and so there wouldn't be any -- if the company was to go with actual net salvage, I don't think that the company would be suffering.
- Q. Well, let me give you some examples and see if you would agree that in these examples current net salvage might be significantly different than net salvage that would be expected to be incurred in the future.

The first example is what if you had a brand new utility that was just starting service and they built an electric plant and built a transmission and distribution system, and they had only been in operation a year, and so

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1	probably hardly any of their equipment would be retired; is
2	that fair to say?
3	A. Yes.
4	(Wherein, Lena Mantle left the deposition.)
5	Q. And if you applied staff's methodology to that
6	utility, you would have wouldn't it be fair to say that
7	the net salvage that brand new company a year old had
8	actually experienced would be significantly different than
9	the net salvage that that company could expect to incur in
10	the future when their current plant is retired?
11	A. Well, you probably wouldn't have net salvage
12	within a year.
13	Q. So under your methodology, then, they would get
14	zero allowance for net salvage; is that right?
15	A. Well, I mean, if the plant has only been there a
16	year, you are not going to have, probably, any retirement,
17	so you wouldn't have a need to have gross salvage or you
18	wouldn't have a cost of removal issue.
19	Q. So the staff allowance would be zero in rates for
20	net salvage; is that right?
21	A. Yes, but that would probably be zero anywhere for
22	just one year.
23	Q. But, I mean, not if you did it under the
24	traditional methodology?
25	A. Well, I am just saying a year into plant, you are

not going to have a lot of plant that you are going to be 1 selling back that's retired that -- within just one year of 2 3 the plant starting that you are going to have a cost of 4 removal or a gross salvage. Right. But that's -- but the point I am trying to Q. 6 make is isn't that zero actual retirement that you would have significantly different than the net salvage cost that 7 8 a person could reasonably expect that utility to incur when 9 it retires its currently existing plant in the future? 10 I would ask you to restate that if you can, but I Α. 11 know you can't. 12 MR. BYRNE: I probably can't. 13 (Wherein, the requested question was read back.) 14 THE WITNESS: I am sorry. I don't understand the question, especially when you say the zero retirement. 15 16 (By Mr. Byrne) Okay. Only probably because it Q. 17 doesn't make that much sense. Let me try it again. 18 Isn't the -- in our example, where there is a new 19 utility, it's only been in business a year or so. We agree 20 that they would have few, if any, retirements in their short 21 history. 22 So for purposes of our example, let's say they had 23 zero retirements, and so under the staff's method, they 2.4 would get zero allowance for net salvage in their rates; is 25 that true?

1 Α. That's true, but they would also get zero 2 allowance if it was 50 years later. They would still get 3 allowance for actual net salvage expense. 4 0. Right. And in my example, that actual net salvage 5 expense would be zero, because they haven't retired 6 anything. 7 Α. Okay. 8 Now, isn't that zero significantly different than Q. 9 the amount of net salvage cost that utility can reasonably 10 be expected to incur in the future when they retire all the 11 plant? 12 Α. It can be. 13 And it would be, wouldn't it? Ο. Uh-huh. Yes. 14 Α. 15 Okay. And you know, that's an extreme example, Q. 16 but let's make it a little more realistic for a company like 17 Ameren UE. Let's say you had a category of plant. Let's 18 say you had a new account category of plant and it just 19 recently went into service, and again, there is no history 20 of retirements from that particular account. 21 Again, my understanding is in that case, for that account, the staff allowance for net salvage would be zero; 22 23 is that right?

No. It would be the -- did you say there were

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zero retirements?

1	Q. Yeah.
2	A. Since the inception of the plant?
3	Q. Yeah. Because it is a brand new type of plant
4	that's only been in existence for a year or two, no
5	retirements from that account. So wouldn't it be true that
6	the staff allowance for net salvage would be zero?
7	A. Yes.
8	Q. But again, just like in the example of a new
9	utility, isn't that zero allowance significantly less than
10	the amount that you could reasonably expect the utility to
11	incur when they retire the existing plant from that account?
12	A. Yes.
13	Q. And I guess if you go the other way too in
14	accounts that have a positive necessary salvage, my
15	understanding, and do you agree with me, that in most cases
16	electric utility plant has a negative net salvage. Is that
17	fair to say?
18	A. In a lot of cases, yes. In a lot of accounts.
19	Q. I mean, isn'tait the vast majority of the
20	
	accounts?
21	A. Yes.
22	Q. But there are some like, say you have a
23	vehicle. Now, that would be an example, and Ameren UE does
24	have vehicles. It strikés me that a vehicle would be an
25	example of an account where you would be likely to have a

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1	positive net salvage value; is that right?
2	A. Yes.
3	Q. So in my example if the new account was vehicles
4	and Ameren had bought some vehicles but hadn't retired any
5	of them, the staff adjustment for net salvage would be zero
6	under the method that you're proposing, right?
7	A. If there were no retirements, yes.
8	Q. But at the same time, you could reasonably expect
9	that in the future when the retirement of those vehicles
10	took place, there would be a positive net salvage value; is
11	that right?
12	A. Yes.
13	Q. Okay. Let me ask you this. In previous cases,
14	have you submitted testimony to the Commission supporting
15	the traditional treatment of net salvage?
16	A. Yes.
17	Q. Do you remember which cases you filed such
18	testimony in?
19	A. Some of them are listed in my testimony. I don't
20	recall which particular cases.
21	Q. Do you remember any out of that list where you
22	supported the traditional treatment of net salvage?
23	A. Well, I did not discuss net salvage in all of
24	these cases, but I know that in some of them I may have
25	talked about the whole life formula, which includes net

1	salvage. I don't recall at this time which ones those are.
2	Q. But I can go back and look and see.
3	A. Yes.
4	Q. Some of them you endorse the traditional treatment
5	of net salvage. Is that fair to say?
6	A. Yes.
7	Q. Is this the first case that you've endorsed the
8	new treatment, the expense treatment of net salvage?
9	A. Yes.
10	Q. Why did you change your mind from testimony in
11	previous cases?
12	A. Well, it was a group collaboration that was
13	decided within our department to have a change in
14	methodology of the net salvage, and since that change has
15	been made, this is the first time that I have testified or
16	provided written testimony.
17	Q. Well, would it be fair to say that would it be
18	fair to say, rather than you changed your mind about this
19	issue, the staff changed its position, and you were told to
20	file this testimony or testimony supporting the staff's
21	position?
22	A. No. In discussions with other group members and
23	looking at the history of cost of removal in a lot of
24	utility companies across the State of Missouri, we came to a
25	conclusion as a group that net salvage needed to be

1	expensed.
2	Q. Who was in the group?
3	A. Paul Adam, Rosella Schad and Lisa Kremer, and we
4	also had some input from Bob Schallenburg.
5	Q. Any accounting department people?
6	A. Yes. Greg Meyer I think, probably a few other
7	people from accounting. I don't recall at this time.
8	Q. And when did this group meeting take place?
9	A. Well, there wasn't one big meeting. I mean, this
10	was several discussions throughout the years.
11	Q. Okay. When? Over what period of time did the
12	several discussions take place?
13	A. I would say within the past probably as far
14	back as the end of '99, maybe earlier.
15	Q. And when did you decide that that was a better
16	approach?
17	A. After talking about after having discussions,
18	several discussions on it and that's my answer.
19	Q. Okay. I mean, in 1999, which one did you think
20	was the right approach? Do you remember?
21	A. I don't remember a specific date that I decided.
22	Q. Okay. Was it recently or a long time ago do you
23	think?
24	A. I would have to say end of '99 I guess.
25	O Okay But just so I make sure you were not

1	instructed to take this position because it's staff
2	position. You reached this conclusion on your own. Is that
3	your testimony?
4	A. Yes.
5	Q. What would have happened if you wouldn't have
6	agreed? Would you do you think you would have been
7	allowed to file testimony that retained the old treatment of
8	net salvage?
9	A. I guess I wouldn't know that until I decided to do
10	that.
11	Q. Okay.
12	A. Whatever you know we work as a group, so we
13	wouldn't file one testimony one way and file another
14	testimony another way.
15	Q. So then you probably would it be fair to say
16	you probably wouldn't have been allowed to contradict the
17	staff position?
18	A. I guess that would be fair to say.
19	Q. Did let me ask you this. Was there a single
20	point in time where it became the staff's position? Did a
21	single person make a decision at a point in time where the
22	staff's position changed like a well, or is it more of ar
23	evolution?
24	A. I would say it is an evolution, and then a final

decision was made by our division director that this is the

1	way we will go forward.
2	Q. Okay. That's what I am looking for. Who is the
3	division director?
4	A. Bob Schallenburg.
5	Q. Okay. Do you remember when he made that final
6	decision?
7	A. I think in '99.
8	Q. Maybe when again, I don't want to put words in
9	your mouth, but my recollection and unfortunately, I have
10	a too clear of a recollection. So the first time it was
11	applied was in the Laclede gas company GR-99-315 case. Is
12	that about the time that decision was made?
13	A. I think so.
14	Q. And that's when it would have become difficult to
15	take a contrary position after that decision was made.
16	A. Yes.
17	Q. Did you conduct any net salvage analysis in the
18	course of your depreciation study for this case?
19	A. Yes.
20	Q. And which accounts did you do net salvage analysis
21	on?
22	A. The top I would have to say the ones that I did
23	find a survivor curve fit for primarily.
24	Q. Okay. And are those just generally, let me
25	flip back to your schedule 2.1 and 2.2 and just in the

1	third column from the right on both the chart on 2.1 and
2	2.2, there is a theoretical reserve column. Do you see
3	that?
4	A. Which column are you looking at? Staff's '95
5	theoretical reserve?
6	Q. Yeah.
7	A. Yes.
8	Q. And just for purposes of identifying the accounts
9	that you had a curve for versus those that the model didn't
LO	produce an acceptable curve, would it be fair to say that
1	the where there is a number in that column for that
.2	account, the model produced a curve, and when there is not a
L3	number in that column, the model didn't produce a curve that
4	was acceptable to use?
15	A. Well, they produce curves for all accounts, but a
6	curve that was actually fit.
.7	Q. Yeah. Yeah. That's what I mean, a curve that
18	adequately fit the retirement data. Again, is that is
.9	whether there is a number in that column, is that if I
20	was just trying to see which accounts produced a fitting
21	curve, is it the ones where there is a number in that
22	column?
23	A. Yes.
24	Q. So like almost all the accounts on schedule 2.1,
25	except two of them, which are account 316, miscellaneous

DEPOSITION OF JOLIE MATHIS, 11/27/01 1 power plant equipment, and account 355, poles and fixtures, 2 all the other ones didn't produce a fitting curve. Whereas 3 on schedule 2.2 almost all of them -- I guess all of them except account 366 underground conduit did produce a curve 4 that you used; is that true? 5 Α. 6 Yes. 7 Q. Okay. 8 (Wherein, a brief recess was taken.) 9 (By Mr. Byrne) So before the break I think I was Q. 10 asking you about -- I think you had said you conducted net 11 salvage analysis on the accounts that the Gannett-Fleming 12 model produced a curve -- a curve that reasonably fit. that true? 13 14 Α. Yes. 15 Q. Okay. What kind of analysis did you do? I looked at the past, I believe, the data at, 16

- A. I looked at the past, I believe, the data at, like, the last ten years, and I looked at trends of three years and five years of the net salvage for those past ten years to look and see where the net salvage was at up to end of year 1995.
- Q. Okay. So when you were looking at net salvage, it was -- the only thing you were looking at was the historic net salvage for each account. Is that fair to say?
 - A. Yes.

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Q. You weren't, like, doing the old project into the

1	future what it would be.
2	A. Right.
3	Q. Okay. And why did you do that?
4	A. I did that just to look and see where the net
5	salvage was and to, I guess, consult with our other auditor
6	when he did his analysis, the numbers that I came up with,
7	as far as looking historically.
8	Q. And did you do it to assess the impact of
9	different approaches on Ameren UE's rates?
10	A. Yes.
11	Q. And what did you find do you remember about
12	the impacts of the different periods of time on rates?
13	A. I don't recall the number specifically at this
1.4	time, but I do remember they were comparable to our staff
15	auditor's numbers.
16	Q. Okay. So he and the staff auditor at that
17	point being Jim Schwieterman, was looking at three year,
18	five year, ten year averages of net salvage costs for each
19	account, and then you too were looking at three year, five
20	year, ten year averages for each account.
21	A. I don't know if he looked at three year, five
22	year, ten year. I know that's what I did.
23	Q. Okay. And do you remember if net salvage, as a
24	general rule, was higher or lower whether you used a three
25	or five or ton year average?

1 I don't recall at this time. Α. 2 Q. Okay. But there were differences I quess. that fair to say? 3 Α. Yes. 5 So what did you do then with the results of that 6 Did you give it to Jim Schwieterman or talk to him process? 7 about it? What did you do? How, if at all, did the results of your net salvage analysis show up in this case or affect 8 9 the staff's recommendation in this case? 10 Α. I discussed it and then I included it with the 11 rest of my study. 12 But I guess I still don't understand why you were 13 doing it. If he was going to calculate the salvage 14 allowance, why did you also calculate it? 15 I guess it is just to have an input or an opinion 16 about where we think net salvage should be. So you kind of gave it to him, gave him the 17 Okay. 18 results of your analysis as your input --19 Α. Right. 20 -- on where it should be. Q. 21 Yes. A. 22 And you gave him all the -- I mean you gave him Q. 23 the three year and the five year and the ten year averages. 24 Α. I discussed it. 25 Okay. Discussed all of them with him. Q.

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1	A. Yes.
2	Q. Okay. Did you give him anything or just discuss
3	something with him?
4	A. I remember talking to him about it in his office.
5	I don't recall if he had a copy of what I had or not.
6	Q. I mean, was he interested in what you had to say?
7	A. Sure.
8	Q. And do you think he incorporated that into his
9	analysis?
10	A. I think so.
11	Q. Did you do any calculation to assess the impact on
12	depreciation expense of switching the way net salvage was
13	treated?
14	A. Yes, I did.
15	Q. What did you do exactly for that calculation?
16	A. Well, if you look at schedule 2-2, the column that
17	says right after staff's annual accrual column, it says
18	increase decrease of accrual. That total is 36 million, and
19	the far right column, the total that is listed at
20	approximately 6 million, I subtracted that column
21	represents the change that was due to life. I subtracted
22	that from the 36 million, and that was the impact that was
23	due to salvage, 30 million.
24	Q. So we collect about 30 million dollars less in
25	depreciation rates as a result of the net salvage change.

1	A. Yes.
2	Q. Okay. Let me ask you this. Can you name any
3	depreciation professionals, other than members of the
4	Missouri Public Service Commission staff, that support your
5	treatment of net salvage?
6	A. Outside of the State of Missouri?
7	Q. Outside of the staff members.
8	A. Staff members.
9	Q. In the State of Missouri.
10	A. I know of one name. I cannot think of the name.
11	Q. Who
12	A. I think he is from Blacken Veatch, but I can't
13	really name any at this time.
14	Q. In your testimony you said that you attended a
15	four weeks of formal training from Depreciation Programs,
16	Inc. in Kalamazoo, Michigan; is that right?
17	A. Actually, it was in Grand Rapids, Michigan, but I
18	think that's where their office was located.
19	Q. Okay. The company that put it on, their office is
20	located in Kalamazoon, Michigan, but the seminar you
21	attended was in Grand Rapids, Michigan; is that right?
22	A. Yes.
23	Q. Okay. And you spent four weeks; is that right?
24	A. Well, it wasn't at one time. It was separate
25	courses, one week courses. In fact, one of them was held at

1	the building the well, the Truman building.
2	Q. Okay. And basically, this was just to for you
3	to learn how depreciation accounting was done. Is that fair
4	to say?
5	A. Learn about how to perform an actual depreciation
6	study, the basic concepts of depreciation, life analysis and
7	salvage analysis.
8	Q. And who are people that put this on, this
9	Depreciation Programs, Inc.?
10	A. You have the author of Depreciation Systems, Frank
11	Wolf; the president of Gannett-Fleming, Bill Stout; Ron
12	White; Bob White; Harold Cowles, who is a significant author
13	of actually, he got involved from the beginning of this
14	whole thing. At Iowa State, he was an actual professor at
15	Iowa State that was involved in some of the curves, and
16	Susan Jensen.
17	Q. Would it be fair to say I hate to even say
18	this, but are these, like, maybe the celebrities or the
19	stars of the depreciation world, or is that an
20	overstatement?
21	A. You could say that.
22	Q. Are these people who, in the world of
23	depreciation, are some of the most well respected people?
24	A. Yes.

Q. And what did they have to say about how net

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1	salvage should be treated? Do you remember?
2	A. They probably support the inclusion of net salvage
3	in the whole life formula, but I mean, I haven't talked to
4	them in years. Their perception may have changed. I don't
5	know.
6	Q. And what you were saying is the traditional
7	treatment of depreciation is what they supported at least at
8	the time you were there.
9	A. Yes.
10	Q. And I notice one of the topics you listed in your
11	testimony was forecasting salvage and cost of removal.
12	A. Yes.
13	Q. Was that a was that one of the four week long
14	classes?
15	A. Actually, that was part of a week long class.
16	That wasn't the whole week.
17	Q. And do you remember how many days it was?
18	A. Probably at least two days.
19	Q. And I assume, since it says forecasting salvage
20	and cost of removal, that would be explaining how you do the
21	traditional treatment of net salvage; is that right?
22	A. Yes.
23	Q. I understand this is when did you go? I guess
24	it was early in your career at the Commission. Do you
25	remember what year?

1	A. Yes. '94, '95 and I think '96.
2	Q. Okay. Do you remember what year you did
3	forecasting salvage and cost of removal?
4	A. I don't recall at this time.
5	Q. You mentioned some of those professionals. Well,
6	there has been the passage of time, and even though they
7	supported the traditional treatment of net salvage at that
8	time, it is possible that some of them could have changed
9	their mind since then. Is that a fair statement or at leas
10	a statement of what you testified to?
11	A. It is possible.
12	Q. Okay. But you don't know of any of those people
13	that have changed their mind on this subject, do you?
1.4	A. No.
15	Q. Have you asked any of them?
16	A. No.
17	Q. Are you aware of I guess some of them have
18	surfaced in other Missouri Commission cases, and I was
19	wondering if you were familiar with, for example, Ron
20	White's testimony in the Laclede Gas Company case number
21	GR-99-315? Did you have an occasion to look at that?
22	A. No.
23	Q. Would you be surprised to find out that he still
24	supported the traditional treatment of net salvage in that
25	case?

1	A. No.
2	Q. Bill Stout is another person that you named who
3	has filed testimony on this subject at Missouri, and I
4	believe he filed testimony in the St. Louis County Water
5	Company case. Did you have any are you familiar with
6	that testimony at all?
7	A. Yes.
8	Q. And do you know whether he still supports the
9	traditional treatment or the staff's new methodology?
10	A. I think he I think he supports the traditional
11	Q. Okay. Do you know of any other of those people
12	from the program that you took that still support the
13	traditional treatment of net salvage?
14	A. I don't know whether they do or not.
15	Q. Okay. Can you name any authoritative text on
16	depreciation that supports the staff's treatment of net
17	salvage as opposed to the traditional treatment?
18	A. There is mention of it in the Public Utility
19	Depreciation book.
20	Q. But do you know whether they support the use of
21	that treatment in the Public Utility Depreciation Practices
22	book?
23	A. Because of the fact that they mention it means
24	that they recognize that other commissions are taking
25	different approaches.

- 1 I mean, my understanding -- let me -- disagree with me -- I guess my question is do you agree with this. 2 My understanding is that the approach recommended in Public 3 Utility Depreciation Practices, the NARUC publication in 1996, is the traditional treatment of net salvage. 5 disagree with that? 6 7 Α. Could you restate the question? My understanding is that the approach recommended 8 Ο. in Public Utility Depreciation Practices, the 1996 publication by NARUC, that publication recommends the 10 11 traditional treatment of net salvage as opposed to the 12 staff's treatment of net salvage as an expense. Do you 13 disagree with that? 14 15 16 17
 - The book does not make recommendations. It simply talks about the whole life formula, but it also talks about what some commissions are doing now, which is including net salvage as an expense.
 - And in that publication or that -- is it your understanding they are just neutral? They don't 🚣 they don't -- the authors of that publication don't take a position on what is the appropriate way to do it?

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- Α. I mean, basically, they discussed the theory of depreciation in relation to net salvage.
- And does their view of the theory of depreciation support the traditional treatment of net salvage?

- A. I mean, it just discusses it.
- Q. Okay. So just -- it is just a neutral publication as far as you are able to tell. As far as you are able to tell, it neither recommends one or the other. Is that your testimony?
- A. I mean, it discussed it, like, you know, you attend a class and you read about a particular subject.
- Q. Let me ask it this way. Let's say -- I will give you that they mention that there are other treatments.

 Okay. That's not what I am talking about.

So my question is not whether they mention different treatments, but in that publication, is it the opinion of the authors that it is appropriate to use the traditional treatment of net salvage or not?

- A. There is no wording in that book that says it is appropriate to use that formula.
- Q. Okay. But I mean, I am not -- even if it is not exactly those words, is it your opinion that the publication is neutral and doesn't say whether it is appropriate to use either the traditional treatment or the staff's new treatment of net salvage?
 - A. Well, it is not really neutral.
 - Q. Okay. Why isn't it neutral? Explain.
- A. I mean, the book explains what we are calling the traditional methodology of including net salvage in the

formula, and to that extent, anyone pursuing a career in 1 2 this field would look to this book and recognize, you know, 3 that it is so-called -- well, I don't want to say that. Let me ask you this. Let me ask it this way. Ο. 5 MR. SCHWARZ: She is entitled to finish her 6 answer. MR. BYRNE: Sure. THE WITNESS: Anyone that looks at this subject is 8 9 going to read what is the foundation of the net salvage 10 discussion to have a -- to have background information, but 11 in -- but they also, when looking at that particular 12 subject, should recognize, and it is recognized in the book, 13 that there are different treatments of net salvage. 14 (By Mr. Byrne) Are you done? Q. 15 Α. I am done. 16 Let me ask it this way, and maybe it is the same Q. 17 answer, but to the extent you are using this book, Public 18 Utility Depreciation Practices, published by NARUC, as a --19 to tell you how to do a depreciation study, to the extent 20 you are using it for that purpose, would it tell you to use 21 the traditional treatment? Wouldn't it tell you to use the 22 traditional treatment for net salvage? 23 Α. No. 24 Q. No. 25 Α. I am sorry.

That's okay. No is your answer, though, right? 1 0. 2 It just would not tell you you must use this 3 traditional method. 4 Q. Okay. Have you surveyed any other states to see 5 how net salvage is being handled? Α. No. 6 7 So you don't know how Illinois handles net 0. 8 salvage. 9 Α. No. 10 Q. Or Kansas. 11 Α. No. Or Iowa, home of the famous Iowa curves. 12 O. 13 No. Α. 14 Do you know if any states use the staff's proposed Ο. 15 method? 16 I think in my testimony I talk about Pennsylvania 17 Commission. 1.8 I think that's right. Page 14. 19 Page 14, line 1. The State of Pennsylvania Yes. Α. removed the net salvage rates from depreciation rates. 20 21 And I guess is the -- let me ask you this. Do you 22 know any other states besides Pennsylvania that uses the staff's method? 23 I think Florida does. 24 Α. 25 0. But you don't know for sure.

1	A. No.
2	Q. Any other states?
3	A. No.
4	Q. Okay. And would it be fair to say that the reason
5	Pennsylvania provides that treatment, the staff's treatment
6	of net salvage, is based on the case that you cite in your
7	testimony, which is Penn Sheridan Hotel versus Pennsylvania
8	Public Utility Commission, which is a 1962 case?
9	A. Yes.
10	Q. And is there any similar requirement in Missouri
11	that would require the Missouri Commission to use the
12	staff's method? Any court case or statute or anything that
13	requires the Commission to do that, the Missouri Commission?
14	A. Requires the Commission to do what?
15	Q. To use staff's treatment of net salvage?
16	A. Are you asking about any other rate case?
17	Q. No. I am asking let me start over.
18	Pennsylvania uses treats net salvage as an expense
19	because the Penn Sheridan case requires them to do so; is
20	that correct?
21	A. Yes.
22	Q. Is there anything similar to the Penn Sheridan
23	case, and I guess it could be a case or a statute that would
24	require the Missouri Commission to treat net salvage as an
25	expense?

-	A. I don c know.
2	Q. Have you read the Penn Sheridan case?
3	A. No.
4	Q. Are you aware of let me since you haven't
5	read the Penn Sheridan case, I assume you would have no way
6	of knowing what factors led the court in that case to
7	require Pennsylvania to treat net salvage as an expense.
8	A. No.
9	Q. Okay. Are you aware of Financial Accounting
10	Standards Board number 143? Have you ever heard of that
11	before?
12	A. No.
13	Q. I think it's I think the title is Accounting
14	for Asset Retirement Obligations. That doesn't ring a bell?
15	A. No.
16	Q. Would you agree with the general principal that
17	rate payers ought to be required to pay a fair share of the
18	net salvage cost of capital items used to provide service to
19	them?
20	A. Yes.
21	Q. I was asking you some questions earlier. I was
22	giving you some examples where I think the salvage cost
23	experienced in the past for a certain account or in the case
24	of a new company for a whole company might be zero, and you
25	might expect the future salvage cost associated with a plant

that's currently in service to be some higher number. 1 2 you recall those questions? 3 Α. Yes. Ο. Would that same effect happen if the amount of property in a particular account is increasing or 5 decreasing? In other words -- well, let's take the example 6 of decreasing. 7 8 Let's say, for whatever reason, you had an account where the amount of property in that account was decreasing 10 over time. Okay. And wouldn't it be true in that case that 11 the amount of net salvage in the past would not be representative of the amount of net salvage that could be 12 13 expected to be incurred by the company in the future related 14 to plant that's currently in service? Because you have plant that's decreasing doesn't 15 16 mean that you would have an increase in cost of removal. 17 Q. I am saying wouldn't the net salvage cost 18 experienced in the past be greater than the net salvage cost 19 you would expect to incur in the future because the amount 20 of property in the account is declining? 21 Α. Well, I would have to know why the property was 22 declining and --23 Q. Okay. Let me give you an example. Let's say you 24 had a class of property, a particular account of property

that was being completely retired from service, and in the

years leading up to a rate case or a case where a depreciation study is done -- I guess it would have to be a rate case.

Let's say in the years leading up to the rate case the company takes plant out of service until there is very little plant left in the account still to be retired, because they are eventually going to eliminate it.

So let's say 90 percent of the plant -- over the last 10 years 90 percent of the plant has been taken out of service, and there is only 10 percent left to be retired.

Well, under those circumstances, wouldn't it be true that a ten year average of the salvage cost -- net salvage cost would not be representative of the net salvage cost that the company could be expected to incur in the future with respect to the remaining items in that account?

- A. I mean, if a ten year average wouldn't be -- then there is really no way you can really predict the future.
- Q. Well, I mean, first answer the question, if you don't mind. You know, would it be representative or not or can't you tell in the example that I gave you?

Would the ten year average of net salvage cost be representative of net salvage cost the company could be expected to incur in the future with respect to the remaining items in that account?

A. I don't know.

1	Q. Okay. Because the future is unpredictable?
2	A. Yes.
3	Q. Let me ask you this. Doesn't the establishment of
4	depreciation rates require you to predict average service
5	lives long into the future?
6	A. Yes. That's true, but when you net salvage is
7	something that is still measurable year by year and can be
8	expensed.
9	Q. I guess investment in plant is something that's
10	measurable year by year that could be expensed as well,
11	couldn't it?
12	A. I think when you're talking about using a ten year
13	average, I think you need to probably I don't know how
14	much I can testify to that issue, because I did not make
15	that final decision.
16	Q. What final decision are you talking about?
17	A. On using a ten year average.
18	Q. Okay. But I am what I was asking in the
19	question is you said net salvage is something that can be
20	measured year by year and be expensed, and I agree with you.
21	That's true. But couldn, t isn't it also equally possible
22	to measure the company's investment in capital assets? It
23	is new capital assets that go into service year by year, and
24	by the same token you could expense those too, couldn't you?
25	A. That's true.

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1	Q. I mean, what is the difference?
2	A. The difference is over the past years net salvage
3	has been expensed well, cost of removal has been so high
4	that it's created large negative net salvage numbers that
5	the company has recovered, and the company has not always
6	met those numbers. The company is accruing more than what
7	it should in cost of removal.
8	Q. Well, it is accruing more than it has incurred in
9	the historical past for net salvage; isn't that true?
10	A. Yes.
11	Q. But you are not saying it is incurring more than
12	it will incur in the future. You are not you don't have
13	an opinion on that, do you?
14	A. I don't know what it will incur in the future.
15	Q. Okay. Do you know if Ameren UE's overall plant
16	has been increasing or decreasing in recent years?
17	A. I think it's been increasing due to additions.
18	Q. Do you know by how much?
19	A. I don't know by how much.
20	Q. I would like to talk a little bit about inflation
21	and your opinion of it. I guess the first question I have
22	is would it be fair to say that the cost of retiring plant
23	in the future is likely to be higher than the cost of
24	retiring plant today?
25	A. Yes. That's another reason why we feel that net

salvage should be expensed. 1 2 So it doesn't reflect those higher costs that will 3 be incurred in the future? Because it is hard to predict. Today's dollar 4 Α. 5 will be different from tomorrow's dollar, so it is hard to 6 predict, due to inflation, what type of gross salvage you may get. 8 Q. Okay. But even if you can't predict exactly the amount of inflation, and I agree with you we can't, would 10 you agree with me that inflation exists, and therefore, to 11 some degree, it is going to be more expensive to retire 12 plant in the future than it is to retire the same plant 13 today? 14 Α. Yes. 15 Okay. And if the plant is in service for a 16 relatively long period of time, say 20 or 30 years, would it 17 be fair to say that the cost of retiring it is likely to be 18 much higher than it is today? 19 It is fair to say the cost of removal will be much Α. 20 higher. Yes. 21 And it could even be multiples of what it would cost to retire it today; is that fair to say, two or three 22 23 times maybe? 24 Α. Maybe.

And is it fair to say that the staff's treatment

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1	of net salvage gives no consideration to the effect of
2	inflation between now and a future date that plant that is
3	currently in service will be retired?
4	A. I guess if you were doing it in the traditional
5	method, you would try to consider that, but however, there
6	is really no way to predict that. So that's why one of
7	the reasons why we chose to take net salvage out of the
8	whole life depreciation rate.
9	Q. I mean, because it doesn't give any consideration
10	to the effect of inflation; is that true?
11	A. No. I mean
12	Q. Or does it give effect or does it take into
13	account the effect of inflation?
14	A. There is really no way you can predict inflation,
15	what it is going to be.
16	Q. Okay. So there is no factor in the staff's net
17	salvage cost that they allow to account for inflation,
18	because you can't predict it; is that true?
19	A. That's true.
20	Q. Are there any circumstances that you would
21	recommend the traditional treatment of net salvage cost as a
22	component of depreciation expense?
23	A. No.
24	Q. It is my understanding that in some Commission
25	cases recently the Commission has adopted the staff's

1	approach to net salvage, and in at least one case, which is
2	the St. Louis County Water Company case, it didn't. Is tha
3	your understanding as well?
4	A. Yes, but that was that particular company had
5	an infrastructure problem, and it was looked at differently
6	Q. Okay. And if you well, you just told me that
7	there were no circumstances that you would recommend the
8	traditional treatment of net salvage.
9	So if you were confronted with the St. Louis
10	County Water Company case again and you were to make the
11	recommendation, would you recommend the traditional
12	treatment of net salvage, or would you still recommend the
13	new expensing of net salvage?
14	A. I would recommend the same recommendation I made
15	for this case.
16	Q. But your understanding of why the Commission did
17	was because of St. Louis County's need for infrastructure
18	enhancement.
19	A. Yes.
20	Q. And I guess there were no in the Laclede case
21	again, I don't know. Are you familiar with the Laclede
22	GR-99-315 decision?
23	A. Yes.
24	Q. I guess there wasn't the same kind of evidence
25	about infrastructure replacement in the Laclede case. Is

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1	that fair to say?
2	A. That's correct.
3	Q. Let me ask you about another subject. Can you
4	explain to me your understanding of what the life span
5	approach to depreciation is?
6	A. Yes. The life span method is associated with the
7	plant that has large units, and during the life of that
8	property, there are interim retirements at the end of at
9	the end of the life of that plant, there is a final
10	retirement where everything associated with that is retired
11	at one time.
12	Q. Okay. And is the reason that you would use a life
13	span approach because the characteristics of a large unit of
14	property like that are different from mass property like
15	wires or poles?
16	A. Yes.
17	Q. Okay. And specifically what kind of assets would
18	you apply a life span approach to?
19	A. Building, gas holders.
20	Q. What about an electric plant? That leaps to my
21	mind.
22	A. A building would apply to an electric plant.
23	Q. Look on page 11 of your testimony. Maybe that
24	will help.
25	A. Power plants.

Any other ones? 1 0. I can't think of any other right now. 2 Α. Okay. Can you explain how the -- tell me how that Ο. works again. Maybe you just did, but how interim retirements work under a life span approach. 5 Well, like you have a building, you know, that you 6 7 may have a roof that needs to be replaced every ten years, and you know that it's got, like, 100 year life. So the 8 interim retirements would be retirement of that roof every 10 ten years. 11 Okay. But then you would know at the end of the 0. 100 years, the building and all of its contents are retired; 12 is that right? 13 14 Α. Yes. So let's say you had, you know, a furnace in a 15 Ο. 16 building that lasts 100 years and the furnace lasts 70 17 years. So after 70 years, you put in a new furnace, and in theory, the furnace could last 70 years, but is it fair to 18 19 say that because you know the building is going to be torn 20 down after the 100 years that second furnace has to be 21 depreciated over just the 30 years of remaining life of the 22 building? Is that true, or have I misunderstood? 23 I think you can say that. Α. 24 Q. Okay. Are you recommending the life span approach

in this case for Ameren UE's power plants?

1	A. Yes, for those life span accounts except for the
2	mass property accounts.
3	Q. Okay.
4	A. Well, when you say life span method, part of that
5	includes estimating a final retirement date, and we are not
6	estimating final retirement dates on property.
7	Q. Why not?
8	A. Because there is every time we talk to company
9	personnel, they don't say that, you know, in 20 years, this
10	place is going to be gone. There never really is talk of,
11	well, this whole place is gone in 10, 20 years. There never
12	is a finite date. So it is kind of hard to predict.
13	Q. Did you ask for a finite date?
14	A. I didn't ask for a specific date, but I asked how
15	much longer you think that a certain part of the plant may
16	last.
17	Q. Well, how do you know how can you then how
18	are you let me start over.
19	How are you depreciating the original cost of
20	those plants, the fossil fuel plants?
21	A. By determining the average service life and taking
22	the original well, one over the average service life
23	which gives you the depreciation rate.
24	Q. Okay. So couldn't you use that as the life for
25	purposes of the life span approach?
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1	A. Yes.
2	Q. And again, let me see if I understand how you are
3	handling interim retirements on the power plants. Maybe you
4	could explain that to me.
5	A. Well, I think you should understand that with life
6	span accounts, when trying to estimate the final retirement,
7	that would be done not the estimating of the final
8	retirement date, but when the final when the plant is
9	finally going to be demolished or green field or what have
10	you, depreciation engineers would then look at the net
11	salvage cost at that time.
12	Q. Okay. Let's forget for the moment forget about
13	the demolition cost or the decommission cost of those
1.4	plants. For purposes of interim retirements, how are you
15	handling the interim retirements on those power plants?
16	A. When you mean "handling," how am I determining the
17	depreciation rate?
18	Q. Yeah.
19	A. Like I said earlier, one over the average service
20	life.
21	Q. That's for the original cost of the plant, right?
22	A. Correct.
23	Q. I am talking about what if they retire a boiler or
24	retire make an interim retirement of some component of

that plant? How do you determine the depreciation effect of

1 | that?

- A. Well, as far as net salvage, I mean, that's -whatever cost of removal and gross salvage associated with
 that retirement at that time would be expensed, but it would
 have the same average service life.
- Q. Okay. Let me give you an example. We're not communicating right. It is because I don't understand this stuff that well, but say you got a power plant, and your average service life is 40 years for that power plant, and you've got a boiler in that power plant, and the average service life of the boiler is 30 years. Okay.

Now, at the end of 30 years, the boiler is replaced, and now, what is the depreciation you use for that new boiler? Do you use the 10 years of life that the plant has left, or do you use 30 years of life for the boiler?

- A. You use the 30 year life, and more than likely, at the end of the 30 years, because they make so many additions to that, it will probably last longer than 30 years.
- Q. But not if they tear down the plant at the end of 40 years.
 - A. Right.
- Q. And that's the assumption that's implicitly built into depreciating the original cost of the plant, isn't it?
 - A. That's the assumption?
 - Q. Yes. That's why it is depreciated over, in my

1 example, 40 years.

- A. I guess I don't understand what you are asking.
- Q. Well, if you depreciate the original cost of the plant over 40 years, isn't the implicit assumption in that that the plant is going to be used for 40 years and not used after that?
- A. That's the assumption, but normally it doesn't happen that way. Well, for your nuclear plant, it's got a 40 year license life. So everything associated with a nuclear plant has a -- currently has a 40 year life, and I did not change that in my recommendation.
- Q. Okay. So if we replace a component of that nuclear plant, and the component -- well, and the component would normally last longer than the 40 year life of the nuclear plant, do you shorten the life of that component to reflect the fact that the life of the nuclear plant is 40 years?
 - A. No.
- Q. Okay. So isn't that an inconsistency? You're depreciating the original cost over 40 years, but these components you are allowing to depreciate beyond the 40 year period.
- A. No. Every individual piece of equipment would have the 40 year life, and at the end of the 40 year, if they decide to decommission the plant, then everything would